



القيادة العامة للقوات المسلحة الأردنية - الجيش العربي
مديرية الخدمات الطبية الملكية
شعبة المشتريات المركزية

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تحية وبعد ،،،

الإشارة : العطاء رقم ش. ٥٠٠/٢٠٢٥/٦٠
(لشراء التجهيزات الطبية لمستشفى معان) والممول من منحة صندوق أبو ظبي للتنمية

- يرجى العمل على إرسال مندوبكم المفوض بكتاب رسمي لإستلام التعديلات على المواصفات الخاصة والشروط الخاصة والعامة و الملحق (و) رداً على استفساراتكم ، علماً بأنه تم إضافة هذه التعديلات على الموقع الالكتروني للخدمات الطبية الملكية www.jrms.jaf.mil.jo .

واقبلوا فائق الاحترام،،،،،

ع / العميد الطبيب
مدير عام الخدمات الطبية الملكية
العقيد الصيدلاني طارق محمد الجبوري



Annex 1: Laboratory Equipment

Item no.	Item description	Specification no.	Original specification	Specification amendment
9	Centrifuge, Blood Bag	4	Generates not less than 6000g 4500 rpm	لا تعديل
		10	Microprocessor controlled operation with touch keypad	تعديل لتصحيح: Microprocessor controlled operation with touch or button keypad
11	Bench-top General purpose centrifuge	5	2 buckets each holds five to eight approximately 16x110 mm collection tubes without adaptors or fittings.	لا تعديل
		6	2 buckets each holds seven to ten approximately 12x75 mm collection tubes without adaptors or fittings.	لا تعديل
		10	Programmable speed at least 5000 rpm. Or a wider range.	تعديل لتصحيح: Programmable speed at least 4000 rpm. Or a wider range.
12	Deep Freezer, (-30)	2	Temperate up to – 20 C°.	تعديل لتصحيح: Temperate up to – 30 C°.
14	Platelets agitator and Incubator	7	Agitator Capacity not less than 100 Random Bags	تعديل لتصحيح: Agitator Capacity not less than 90 Random Bags
18	ELISA Reader	6	5 - 6 Standard filters with easy access position filter wheel including at least the following wavelengths: a.(405) nm. b.(450) nm. c.(492) nm. d.(570) nm. e.(620) nm.	تعديل لتصحيح: 5 Standard filters with easy access position filter wheel including at least the following wavelengths: a.(405) nm b.(450) nm c.(492)nm or (490)nm d.(570) nm. e.(620) nm or (630) nm
		7	Internal printer	لا تعديل
		11	Start-up kit.	تلغى المواصفة



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19	ELISA Washer	7	Large color clear display and keypad for easy	تعديل لتصحيح: Large color clear display and keypad for easy or touchscreen
		10	Able to be interfaced with HIS: RS-232 serial port.	تعديل لتصحيح: Able to be interfaced with HIS: RS-232 serial port.or USB
20	Blood Gas Analyser	2	Must NOT use one-single pack reagent, long (shelf life and expired date).	تلغى المواصفة
		5	Non-cartridge type reagents.	تعديل لتصحيح: Cartridge based reagents.
		6	For measuring pH, PO ₂ , PCO ₂ and derivative parameters. Electrolytes (Na ⁺ , K ⁺ , Ca ²⁺ , Cl ⁻)/Haematocrit, Metabolites Glu/Lac/Bilirubin	تعديل لتصحيح: For measuring pH, PO ₂ , PCO ₂ and derivative parameters. Electrolytes (Na ⁺ , K ⁺ , Ca ²⁺ , Cl ⁻)/Haematocrit, Metabolites Glu/Lac
		19	Start-up kit for, All the running requirements for the system including reagents, consumables, electrodes and maintenance kits sufficient for 100 consecutive days at a rate of 20 FULL blood gas samples per day. Requirements must be listed in a clear and itemized manner.	تعديل لتصحيح: Start-up kit for, All the running requirements for the system including reagents, consumables, electrodes and maintenance kits sufficient for 3 months for 40 samples/day full (blood gas, electrolytes and metabolites) for each instrument.
23	Ordinary Light Microscope	2	6-fold revolving objective nosepiece, rear facing.	لا تعديل
26	Refrigerator, Laboratory	14	4 heavy duty castors, with swivel and brakes and adjustable levelling feet.	لا تعديل
30	Fully Automated Immunoassay System (Hormone)	9	Electrochemiluminescent detection technology.	تعديل لتصحيح: Electrochemiluminescent or Chemiluminescent detection technology.
		20	All the running requirements for the system including reagents, consumables, electrodes , full quality control daily ,calibration and maintenance kits sufficient 6000 tests for the whole quantity (FT4, ,TSH, FER and	لا تعديل



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			B12), 2000 tests (FSH, PRO, LH and VIT D) , 3000 tests (FOL, and BHCG) , 1000 tests (FT3 and Testosterone) and 400 tests (PSA, Cortisol and Estradiol)	
31	Fully Automated Clinical Chemistry Analyser High Range	10	Sample volume range: 2 - 70 µl	تعديل لتصحيح: Sample volume range: 2 - 100 µl
		11	Reagent volume should not be more than 2 - 400 µl on board	تعديل لتصحيح: Reagent volume should not be more than 400 µl on board
32	Fully Automated clinical chemistry Analyser Mid-Range	10	Wide variety of automatic selection of not less than 12 visible wavelengths: 340-700nm.	لا تعديل
33	Fully automated 5 part diff Haematology Analyser	7	The possibility to count platelets by more than one method to differentiate them from fragmented red blood cells, and automatic correction of WBC and differential counts.	لا تعديل
34	Haematology Analyser 3-part diff	10	Built-in printer using thermal paper	لا تعديل
35	Automated Coagulation Analyser (mid-range)	6	at least 25 on board reagents with 15 in cooling area and 5 stirred position	تعديل لتصحيح: at least 25 on board reagents with 15 in cooling area and 5 with or without stirred position
		10	It should have at least one reagent storage position with one pipette well.	تلغى المواصفة
38	Fully Automated Bench Top Slide Stainer	2	Fully automated heavy-duty liner slide Stainer to be programmed for H&E routine stain or other special stain.	تعديل لتصحيح: Fully automatic walk away system heavy duty linear slide stainer to be programmed for H&E routine stain or other special stain
		3	Multi staining capability with load and unload mode drawers system that can perform H&E, PAP and special staining protocols,	تعديل لتصحيح: Multi staining capability with continuous load and unload mode, drawers system that can perform H&E, PAP and special staining protocols in same run



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			alone or in combination.	
		4	At least 26 processing stations with at least 20 staining Station.	تعديل لتصبح: At least 40 processing stations with at least 30 staining Station.
		5	At least 450mL Reagent container volume	تعديل لتصبح : Not more than 400 mL Reagent container volume
40	Fully Automated Immunoassay System and Blood Bank Screening	9	Electrochemiluminescent detection technology.	تعديل لتصبح: Electrochemiluminescent or chemiluminescent detection technology.
		20	All the running requirements for the system including reagents, consumables, electrodes , full quality control daily ,calibration and maintenance kits sufficient 1200 tests for the whole quantity (HBsAg, ,Tbcore total, HCV-Ab, HIV-Ab and Syphilis)	تعديل لتصبح: All the running requirements for the system including reagents, consumables, electrodes , full quality control daily ,calibration and maintenance kits sufficient 1200 tests for each of the following : (HBsAg, ,Tbcore total, HCV-Ab, HIV-Ab and Syphilis)
لا تعديل على الشروط الخاصة				



Annex 2: Mobile Equipment

Item no.	Item description	Specification no.	Original specification	Specification amendment
1	Adult / Paediatric ICU Ventilator			
		2.A	Minimum 15 inch swivable TFT colour touch-screen mounted above the trolley	لا تعديل
		2.B	Application: ICU, Adult & paediatric, Invasive & non-invasive Neonate option should be available and quoted separately (if not included)	لا تعديل
		2.C	Should operate on central gas sources (oxygen and medical air)	لا تعديل
		2.H	Open system for patient circuits	لا تعديل
		2.K	Gas hoses (Air and Oxygen): - Original make - Colour coded - Fitted with British Standard probes	لا تعديل
		2.M	Medical grade compressor: - Qty. (9) of the total quantity and to be priced separately - Should operate automatically when the pressure of the central air line is decreased below a specific level - Should be mounted on the same trolley of the ventilator	لا تعديل



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		3.G	Bi-level and high flow ventilation modes should be quoted separately (if not included)	تعديل لتصبح: Bi –level / BIPAP mode to be priced separately (if not included)
		3.H	Adaptive ventilation mode: please specify function	لا تعديل
		4.K	Nebulizer: built-in	لا تعديل
		5.E	Expiratory minute volume	تعديل لتصبح: Expiratory minute volume or minute volume
		5.H	Flow	لا تعديل
		6.A	Low / high FiO2	لا تعديل
		6	Patient Alarms Audible and visual alarms for monitored parameters (user adjustable)	لا تعديل
		7.C	Ventilator inoperative	لا تعديل
		7.F	Continuous audible alarm for at least one minute in case of mains power failure even when the battery is depleted	لا تعديل
2	Transport Ventilator, Adult, Paediatric & Neonatal	2-K	Display: Min 8 inches, TFT full colour, touchscreen	لا تعديل
		4-A	Tidal Volume (ml): - minimum range for adult/ pediatric: (50-2000) ml - minimum range for neonates: (5-200) ml	تعديل لتصبح: Tidal Volume (ml): - minimum range for adult/ pediatric: (50-2000) ml - minimum range for neonates: (5-100) ml or better
		6-A	Low / high inspiratory pressure	لا تعديل
3	Combined Conventional Neonatal ICU & High Frequency Ventilator		Backup Battery: - Back-up time for settings and operation not less than 30 minutes. - Batteries should be easy replaceable - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is	لا تعديل



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			available in the local market; if else it price of the battery should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period Any required battery conditioner should be included	
		B -10	Patient circuit: bidder should state clearly if the machine is closed or open system for the patient circuits and if they are disposable or reusable	لا تعديل
		D -6	Respiratory rate: 1 - 100 b/min	تعديل لتصبح: Respiratory rate: 4 - 100 b/min or better
		D -7	Inspiratory pressure: 5 – 80 mbar or better	تعديل لتصبح: Inspiratory pressure: 5 – 80 cmH2O or better
		E	Patient alarms Audible and visual user adjustable alarms for monitored parameters displayed on main screen	لا تعديل
		J	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its' running cost (flow sensors, oxygen cells, patient circuits etc....) over a period of seven years as per special terms (Total cost of owner ship)	تعديل لتصبح: All running required consumables should be listed and priced separately . The purchasing committee has the right to evaluate and compare the offers based on running cost as per special terms.
		E.1.C	Size: ≥ 12 inches	تعديل لتصبح: Size: ≥ 15 inches
		F.2	Low / high minute volume and tidal volume	لا تعديل
		F.4	High PEEP	لا تعديل
		G .4	Low battery	لا تعديل



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		G.5	Continuous audible alarm for at least one minute in case of mains power failure even when the battery is depleted	لا تعديل
4	BIPAP (Bi-level Positive Airway Pressure)	C .1	Proportional Assist Ventilation (PAV)	تعديل لتصبح: Proportional Assist Ventilation (PAV) or (PPV) or equivalent
6	High Flow Nasal Cannula Machine	4	Temperature control: 34-42 °C ± 1 °C	تعديل لتصبح: Temperature control: 34 -39 °C ± 1 °C at least
7	Spirometer (Pulmonary Function Analyser), Portable	1	Compact, lightweight portable type with durable case.	تعديل لتصبح: Compact, lightweight portable type with durable case (durable case locally supplied accepted)
		4	Volume range, L: Approx. 0-15.	تعديل لتصبح: Volume range, L: Approx. 0-10 or better
11	Haemodialysis Machine			تعديل مواصفة الجهاز كاملة كما هو مبين اسفل هذا الجدول وتبقى المواصفة (open system)
12	Volumetric Infusion Pump			
		2-a	Flow rate setting: 0.1-1200 ml/hr or better	تعديل لتصبح: Flow rate setting: 0.1-1000 ml/hr or better
		2.d	KVO (keep vein open) rate: adjustable 0.1-10 ml/hr or better	تعديل لتصبح: KVO (keep vein open) rate: adjustable 0.1-3 ml/hr or better
		5.c	Time remaining	تلغى المواصفة
		5.e	Pressure level	تلغى المواصفة
		5.f	Bolus delivery	تلغى المواصفة
		8	Built in maintenance free rechargeable battery that is easy accessible with capacity not less than 6 hours operation at 25 ml/h flow rate when fully charged.	تعديل لتصبح: Built in maintenance free rechargeable battery that is easy accessible with capacity not less than 4 hours operation at 25 ml/h flow rate when fully charged.
13	Syringe Pump			
		2-f	Accuracy ± 2% (or better) of displayed flow rate and volume	تعديل لتصبح: Accuracy ± 3% (or better) of displayed flow rate and volume



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		3	Pump Mechanism: Syringe driver	لا تعديل
		5.C	Time remaining	لا تعديل
14	Syringe Pump, Anaesthesia	2.e	Drug dose rate calculation function	لا تعديل
		2.l	Accuracy $\pm 2\%$ (or better) of displayed flow rate and volume	تعديل لتصبح: Accuracy $\pm 3\%$ (or better) of displayed flow rate and volume
		3	Pump Mechanism: Syringe driver	لا تعديل
		5	Medication database: pre-programmed drug protocols	لا تعديل
		6.c	Time remaining	لا تعديل
		6.g	Medication name and settings	لا تعديل
15	Defibrillator /Monitor	5	Arrhythmia ECG monitoring capability through 3, 5 ECG lead sets and through external paddles.	تعديل لتصبح: Arrhythmia ECG monitoring capability through 3, 4 or 5 or 6 ECG lead sets and through external paddles.
		6	Synchronisation capability through front panel button	تعديل لتصبح: Synchronisation capability through front panel button Or LCD touch screen
		11	Charging time: less than 7 seconds to reach 200 Joules energy level using new fully charged batteries.`	تعديل لتصبح: Charging time: ≤ 7 seconds to reach 200 Joules energy level using new fully charged batteries.
		12	Discharge Time: must be specified, preference will be given to shorter time	لا تعديل
		13	Patient Impedance Range: Should compensate on patient impedance of range not less than: 25 to 200 Ω	تعديل لتصبح: Patient Impedance Range: Should compensate on patient impedance of range not less than: 25 to 175 Ω
		22	Defibrillation protection proof (patient isolation) type BF to external paddles and disposables pads.	لا تعديل
		23.A	3 lead ECG cable Additional cable and trunk should be priced separately	لا تعديل
		24.A	5 Lead ECG cable	تعديل لتصبح: 4 or 5 or 6 lead ECG cable



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16	Blood Warmer	3	Temperature setting range 37° C - 41° C in ≤ 0.5 increments.	لا تعديل
		8	Heated sleeve to avoid blood cooling from warmer to patient	لا تعديل
20	Patient Radiant Warmer, Adult & Paediatric	4	Fast heat operation with durable long life heating elements and protective cover to prevent hand burns	لا تعديل
		6	Timer for setting of heating duration.	لا تعديل
23	ICU Patient Monitor			
		A .4	Ability to display 8 waveforms simultaneously	لا تعديل
		A .7	Configuration: modular type with a minimum of three slots for three plug-in modules that can be fitted simultaneously on a module rack/ slots. Or One slot/ docking station for one removable module that is capable to measure all parameters mentioned in (8 & 9 & 10) in addition to BIS and cardiac output in all monitors without the need to add any hardware or software on the future	تعديل لتصبح: Configuration: modular type with a minimum of three slots for three plug-in modules that can be fitted simultaneously on a module rack/ slots. Or One slot/ docking station for one removable module that is capable to measure all parameters mentioned in (8 & 9 & 10) in all monitors without the need to add any hardware or software on the future
		A .8	Multi parameter module to measure the following parameters: ECG, Respiration rate, NIBP, Body temperature, SPO2 (Masimo technology) & IBP	تعديل لتصبح: Multi parameter module to measure the following parameters: ECG, Respiration rate, NIBP, Body temperature, SPO2 (Masimo technology or equivalent technology that can measure SPO2 during low perfusion and reject motion artifact) & IBP
		A .10	End tidal CO2 (side stream), priced separately Qty.(9)	تعديل لتصبح: End tidal CO2 (side stream or main stream), priced separately Qty.(9)
		A -12	ST Histogram	تعديل لتصبح: ST analysis or Histogram
		A -16	Escalating level audio visual alarm that cannot be	لا تعديل



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			permanently silenced	
		A .17.b	Reusable SpO2 sensors (adult), 3 meters long, Masimo technology, Finger clip type	تعديل لتصحيح: Reusable SpO2 sensors (adult), 3 meters long , Finger clip type (with or without extension cord)
		A .17.c	Reusable SPO2 sensors (Paediatric), 3 meters long, Masimo technology, Finger clip type	تعديل لتصحيح: Reusable SPO2 sensors (Paediatric), 3 meters long (with or without extension cord) Finger clip type
		A .17.d	Reusable SPO2 sensors (Neonate), 3 meters long, Masimo technology	تعديل لتصحيح: Reusable SPO2 sensors (Neonate), 3 meters long (with or without extension cord)
		A -25	Small modular portable monitors (Qty.6) should be quoted; with built in rechargeable battery , multi-parameter module. Module should be compatible with the bed side monitor and should have the capability to store all critical patient information during transportation	لا تعديل
		B -9	Memory for alarm events to provide a minimum of 10 seconds before the event, and 15 seconds after the event.	تعديل لتصحيح: Memory for alarm events to provide a minimum of 9 seconds before the event, and 9 seconds after the event.
		22	Trend storage capability to store patient data for at least 72 hours	لا تعديل
24	Patient Monitor, Preconfigured	5.e	SPO2 (Masimo technology)	تعديل لتصحيح: SPO2 (Masimo technology or equivalent technology that can measure SPO2 during low perfusion and reject motion artifact)
		5.g	CO2, side-stream (Quoted separately)	تعديل لتصحيح: CO2, side-stream or main stream (Quoted separately)
		6.b	Reusable SpO2 sensors (adult), 3 meters long, Masimo technology, Finger clip type	تعديل لتصحيح: Reusable SPO2 sensors (adult), 3 meters long, Finger clip type



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				(with or without extension cable)
		6.c	Reusable SPO2 sensors (Paediatric), 3 meters long, Masimo technology, Finger clip type	تعديل لتصحيح: Reusable SPO2 sensors (Paediatric), 3 meters long, Finger clip type (with or without extension cable)
		7	Mounting Accessories: a- Qty. (5) of the total quantity mounted on original trolley with accessories basket b- Qty. (33) of the total quantity with wall mount and accessories basket (supplied by the same manufacturer)	تعديل لتصحيح: Mounting Accessories: a- Qty. (7) of the total quantity mounted on original trolley with accessories basket b- b. Qty. (34) of the total quantity with wall mount and accessories basket (supplied by the same manufacturer or approved by manufacturer)
		9	The latest high end 12.1-inch colour TFT LCD screen patient monitor of resolution not less than 800 x 600 pixels	لا تعديل
		10	Backup Battery: - Back-up time for settings and operation: minimum of 90 min	تعديل لتصحيح: Backup Battery: - Back-up time for settings and operation: minimum of 3 hours
		11	Escalating level audio visual alarm that <u>cannot be permanently silenced</u>	لا تعديل
		13	Ability to display 4 waveforms simultaneously	لا تعديل
		17-13-C	Clinical review software	لا تعديل



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			capable of generating full documented report.	
25	Spot-Check Vital Signs Monitor	3	LCD display of size not less 5.5 inches	لا تعديل
		6	HL7 License or DICOM (Compatible with Hakeem Hospital Information System without any extra cost)	لا تعديل
		7	Original heavy duty mounting trolley on five castors and accessories basket	تعديل لتصبح: Original heavy duty mounting trolley on at least four castors and accessories basket
30	Pulse Oximeter, Desktop	11	Patient cable length ≥ 3 meters	تعديل لتصبح: Patient cable length ≥ 3 meters with extension cable
		14	Direct AC power supply (no external power supply).	لا تعديل
		15.a	Extension cable 3 meters approximately	تعديل لتصبح: Extension cable ≥ 2.5 meters
37	Examination Light, Mobile	5	Lamp service life at least 30,000 working hours	لا تعديل
		6	Illumination at 0.5 meter not less than 20,000 Lux	لا تعديل
		7	Mobile stand: Sturdy, stable that is not easy to be tilted and easy to manoeuvre with at least 50 cm diameter base and 5 heavy duty castors	تعديل لتصبح: Mobile stand: Sturdy, stable that is not easy to be tilted and easy to manoeuvre with a stable base and at least 4 heavy castors
38	Diagnostic Set	3	A hard-shell well-padded protective case.	لا تعديل
		5	Batteries and light bulbs should be commonly available from several known manufacturers.	لا تعديل
		6	Kindly quote for regular and/or rechargeable battery types.	لا تعديل
		11	Wall mounted option should be quoted	لا تعديل
39	ECG Recorder System	4.a	Size: At least 5.7 inch LCD screen	لا تعديل
		10	Original heavy-duty mobile cart with articulated arm to hold ECG cable and at least	تعديل لتصبح: Original heavy-duty mobile cart with articulated arm to hold



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			one drawer	ECG cable and at least one drawer, or equivalent storage compartment (shelf, basket....)
46	Operation Table, General Surgery, ENT, Ophthalmic & Orthopedic	7	Override touch control panel with all remote control basic functions to be included and located on the table column for easy access.	لا تعديل
		8	Safe working load without any restrictions on all table 4 sections ≥ 300 kg	تعديل لتصحيح: Safe working load without restrictions on all table 4 sections to be ≥ 280 kg
		9	Approximate total length of the operating table-top with all of its sections: ~ 2000 mm approximately.	لا تعديل
		11	Height (without mattress): $\sim \leq 60$ to ≥ 1000 mm.	لا تعديل
		14	Back plate (up / down): $+80^\circ / -40^\circ$ or better	تعديل لتصحيح: Back plate (up / down): $+70^\circ / -40^\circ$ or better
		15	Leg plate (up / down): $+30^\circ / -100^\circ$ with abduction movement	تعديل لتصحيح: Leg plate (up / down): $+30^\circ / -90^\circ$ or better with abduction movement
		16	Motorized Longitudinal shift of at least 400 mm and should be controlled from the remote control	تعديل لتصحيح: Motorized Longitudinal shift of at least 38 cm or approximate full body C-arm imaging capability and should be controlled from the remote control
		17	Table orientation: to work on normal and reverse orientations	لا تعديل
		19	European side rail	لا تعديل
		21	Four double antistatic swivel castors of at least 8 cm diameter with central braking system.	تعديل لتصحيح: Three or Four double antistatic swivel castors of at least 8 cm diameter with central braking system.



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		23	Mattresses (complete set: head, upper back, lower back, pelvis, leg sections, arm boards) to be with at least the following specifications: a- Thickness at least 80 mm b- Anti-microbial c- Solution resistant d- Seamless (cover should be full-welded) e- Waterproof	لا تعديل
47	Anaesthesia Machine with Ventilator & Patient Monitor	7	Oxygen-flush range: up to 50 L/min	لا تعديل
		14	Ventilator:	تضاف المواصفة التالية بالترقيم (14.5): Piston or Ascending bellow type ventilator
		15.c	Low/ High Tidal Volume	تعديل لتصبح: Low/ High Tidal Volume or minute volume
		18.d	HL7 License (compatible with Hakeem hospital information system)	لا تعديل
		18.h	ST Histogram	تعديل لتصبح: ST Histogram or analysis
		18.j	Escalating level alarm that cannot be permanently silenced	لا تعديل
50	Cabinet, Warming, Dual, Floor	1	Dual heating chambers for warming of linens, blankets, IV fluids	تعني المواصفة: Overall capacity $\geq$ 400 litres
		3	Capacity $\geq$ 400 litres	
51	Convention al Electrosurg ical Unit	2	Application: should be suitable for wide range of major surgeries (At least General, Orthopaedic, Laparoscopic & Caesarean & ENT surgeries)	لا تعديل
		12.c	Patient plate, adult, reusable	تلغى المواصفة



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			Qty. (1)	
		12.d	Patient plate, paediatric, reusable Qty. (1)	تلقى المواصفة
53	Laparoscopic Surgical Unit	B	Camera system (4k Resolution): Provides electronic shutter function, automatic brightness control and optical zoom	تعديل لتصبح: Camera system (4k Resolution): Provides electronic shutter function, automatic brightness control and zoom function
		B -1	Resolution 4K	لا تعديل
		B -8	Camera controller 4K	لا تعديل
		B-9	Picture in picture mode	لا تعديل
		C	Light Source	تعديل لتصبح: Light source: either external desktop type or built in CCU
		F	LCD / LED Colour Monitor	المطلوب كمية (1) مع كل tower
		F-1	Medical grade type that is supplied by the same manufacturer	لا تعديل
		F-2	At least of 32 inch size that is mounted on the mobile cart	لا تعديل
		H	Ability to record images and videos on Medical grade DVD recorder or USB flash memory	لا تعديل
		I	Telescopes, 4 K Resolution, Qty. 1 each with each tower	توضيح (working length): المطلوب: Working length: 30 cm approximately
54	Gynaecology & Hysteroscopy Surgical Laparoscopic Tower	B	camera system 4K	لا تعديل
		B -1	Resolution 4K	لا تعديل
		B -8	Camera controller 4K	لا تعديل
		C	Light Source	تعديل لتصبح: Light source: either external desktop type or built in CCU
		F-2	At least of 32 inch size that is mounted on the mobile cart	لا تعديل
		H	Ability to record images and videos on Medical grade DVD recorder or USB flash memory	لا تعديل
55	Orthopedic Large Bone Drill &	D	All accessories including burrs and blades for drilling and cutting blades are to be listed	لا تعديل



Annex 2: Mobile Equipment

	Saw, Battery Type		and priced separately.	
56	Fetal Monitor (CTG)	2.d	The fetal monitor shall provide digital values and graphical trends for FHR and UA on an LCD touchscreen of size not less than 6"	تعديل لتصحيح: The fetal monitor shall provide digital values and graphical trends for FHR and UA on an LCD touchscreen of size not less than 5 inch
		3.b	Central station must be supplied by the same manufacturer of the patient monitor, locally supplied central stations will be considered as non-conforming.	لا تعديل
57	Infant Incubator	2	Clear digital TFT-LCD colour screen to display numerical information of all parameters including skin temperature, air temperature, humidity level, error codes, alarms etc...., screen should be external and over the bed with trend capability.	تعديل لتصحيح: Clear digital TFT-LCD colour screen to display numerical information of all parameters including skin temperature, air temperature, humidity level, error codes, alarms etc.....
		3.i	Servo controlled	تعديل لتصحيح: Skin temperature mode
		3.iv	Temperature measurement accuracy $\pm 0.5^\circ$ or better	تعديل لتصحيح: Temperature measurement accuracy $\pm 0.8^\circ$ or better
		4.iii	Temperature measurement accuracy $\pm 0.5^\circ$ or better	تعديل لتصحيح: Temperature measurement accuracy $\pm 0.8^\circ$ or better
		5.ii	Set parameter value: 40% to 95% RH or better	لا تعديل
		12	Electrically adjustable height through foot pedal, height is adjusted up to 30 cm or more	تعديل لتصحيح: Electrically adjustable height through foot pedal, height is adjusted up to 20 cm or more
		13	Noise level ≤ 50 dB	لا تعديل
58	Transport Infant Incubator	18	Integrated collapsible trolley with medical grade antistatic, swivel type, non-marking castors with brakes and a minimum diameter of 12 cm. The trolley must be suitable for safe ambulance fixation.	تعديل لتصحيح: Integrated collapsible trolley with medical grade heavy duty antistatic, swivel type, non-marking castors with brakes The trolley must be suitable for safe ambulance fixation.
59	Infant Resuscitator	4	Integrated, large, variable tilt bassinet not less than approx. 65x45 cm	لا تعديل



Annex 2: Mobile Equipment

		6	X-ray cassette holder.	لا تعديل
		8	Integrated oxygen and medical air flow meters with blender	لا تعديل
		17	Alarm mute for 1- 3 minutes with automatic reactivation.	تعديل لتصبح: Alarm mute with automatic reactivation.
		19	Medical grade antistatic, non-marking castors with minimum diameter 12 cm, swivel type, two equipped with brakes.	تعديل لتصبح: Medical grade antistatic, non-marking castors heavy duty swivel type, two equipped with brakes.
		20	Pre-warm function with automatic warming up	لا تعديل
		22	Outlets for manual bagging and T-piece resuscitation with adjustable PIP up to 30 cmH ₂ O or better, PEEP up to 15 cmH ₂ O or better	تعديل لتصبح: Outlets for manual bagging and T-piece resuscitation with adjustable PIP up to 30 cmH ₂ O or better, PEEP up to 14 cmH ₂ O or better
60	Single Surface Phototherapy Unit	2	Irradiance level at 30 cm: Low level > 20 μ W/cm ² /nm High level > 30 μ W/cm ² /nm	لا تعديل
		4	Effective area: > 1000 cm ² or better.	تعديل لتصبح: Effective area: $\geq$ 600 cm ²
		5	Noise level during normal operation $\leq$ 40dB(A)	لا تعديل
		8	Bandwidth: 420 to 500 nm	تعديل لتصبح: Bandwidth: 400 to 550 nm
		10	Safety goggles should be priced separately	تعديل لتصبح: Safety goggles or phototherapy eye mask should be priced separately
61	Phototherapy Unit, Double	1	Double hoods that covers at least 1 m ²	لا تعديل
63	Patient Radiant Warmer, Neonate	4	Durable long life heating elements	لا تعديل
		8	Timer for setting of heating duration.	لا تعديل
		10	Swivelling heating hood	لا تعديل
		11	Non-conductive heat protective cover to prevent hand burns	تعديل لتصبح: Non-conductive and thermally safe heater design to prevent



Annex 2: Mobile Equipment

				hand burns
66	Total Body Cool Machine combined with EEG			• لا تعديل على وصف المادة • تضاف المواصفة التالية الى مواصفات الجهاز: Integrated EEG continues monitoring
		2	Bench top model that can be mounted on a trolley	لا تعديل
		9	Wrap around mattress with approximate size 30*40 cm to be priced separately.	لا تعديل
67	Diagnostic Hysteroscopy Tower	A-2	Light Source	تعديل لتصحيح: Light source: either external desktop type or built in CCU
		A -5-a	Forward oblique telescope 30°, diameter, approx. 2.7-2.9 mm length 24-30 cm, autoclavable with suitable sheath	تعديل لتصحيح: Forward oblique telescope 30°, diameter, approx. 2.7-2.9 mm length 24-30 cm approximately , autoclavable with suitable sheath
		A -5-b	Mini fibre telescope 30°, diameter approximately 2 mm length 26-27 cm, autoclavable with suitable sheath	لا تعديل
70	Digital Mobile Endoscopy Workstation	70-B-2-iii	Observation range: (2 - 100) mm or better	تعديل لتصحيح: Observation range: (3 - 100) mm or better
		70-B-3-i	insertion tube diameter: (9–9.3) mm	لا تعديل
		70-B-4	One working channel with a diameter: 2.8 mm or more	لا تعديل
71	Endoscope High Level Disinfector	A -16	Must operate without external air supply	لا تعديل
		B	Original consumables (detergents & filters) needed to run the equipment for (500 cycles for each unit) should be included, all consumables should be compatible with endoscopes and bronchoscopes from the following manufacturers: Pentax, Fujinon & Olympus, shelf life of the consumables should be stated clearly	لا تعديل



Annex 2: Mobile Equipment

		C	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its' running cost (consumables) over a period of seven years Original consumables (all detergents & filters) needed to run the equipment for 7 years (40 cycles/ month) should be quoted separately Consumables should be from the same manufacturer of the unit & should be specified clearly in tabular form including: - All detergents needed to operate the unit - Size of containers (detergents' containers) - Price of each container Consumption of each detergent per/ cycle	لا تعديل
72	Electrosurgical Unit, Endoscopy			تضاف المواصفة التالية للمواصفات المطلوبة للجهاز: 17.leakage current ≤ 20 mA
		7	Maximum COAGULATION output power 80 watt	لا تعديل
		8	Operating panel with touch buttons to select modes and adjust power levels.	لا تعديل
73	Electroencephalograph (EEG)	7	CMRR > 105 db.	لا تعديل
78	Microscope, Dermatology	2	Semi-Apochromatic infinity objectives (or equivalent); 4x , 10x, 20x, 40x , (60x or 63x) and (100x). All objective to be of the same class for use with up to 23mm field of view	تعدل لتصبح: Semi-Apochromatic infinity objectives (or equivalent); 4x , 10x, 20x, 40x and (100x). All objective to be of the same class for use with up to 23mm field of view
80	Low Temperature H₂O₂/ Plasma Sterilizer	2.4	Can be stored safely in room temperature	لا تعديل
		30	Required Consumables:	لا تعديل



Annex 2: Mobile Equipment

			1- H ₂ O ₂ sufficient to sterilize 50,000 litres 2- Plasma/ H ₂ O ₂ reel: 25 cm x 70 m Qty. (4 Rolls) 3- Plasma/ H ₂ O ₂ reel: 35 cm x 70 m Qty. (4 Rolls) 4- Plasma/ H ₂ O ₂ Pouch: 150 mm x 320 mm Qty. (600) 5- Plasma/ H ₂ O ₂ : 250 mm x 600 mm Qty. (600) 6- Plasma/ H ₂ O ₂ sheet 50 x 50 Qty.(3000) 7- Plasma/ H ₂ O ₂ sheet 90 x 90 Qty.(3000) 8- Plasma/ H ₂ O ₂ sheet 120 x 120 Qty.(2500) 9- Plasma/ H ₂ O ₂ sheet 100 x 140 Qty.(2500) 10- Plasma/ H ₂ O ₂ Seal secure tape Qty. (30) 11- Plasma/ H ₂ O ₂ Chemical indicator Qty.(25 box of 250) 12- Plasma/ H ₂ O ₂ Biological indicator Qty.(30) All consumables should have at least 2/3 of its shelf life.	
		32	For the final list of offers having	لا تعديل



Annex 2: Mobile Equipment

			a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its' running cost (<u>Total Cost of Ownership</u>) over a period of <u>seven years</u> from the date of installation and commissioning (as per special terms); this shall include: - a- Machine Price with all requirements mentioned above - b- H₂O₂ sufficient to sterilize 80,000 litre/year - c- Biological indicators Qty. (60/ year) - d- Preventive Maintenance Kits Bidders should fill the table below (Table 1)	
لا تعديل على الشروط الخاصة				



Annex 2: Mobile Equipment

Item 11	Haemodialysis Machine	Qty. (9)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Haemodialysis (HD), Haemofiltration (HF) & Haemodiafiltration (HDF) therapies		
2	Online priming, bolus and reinfusion		
3	Same blood line for all treatments		
4	At least 2 blood pumps on each machine with handle for manual operation		
5	Dialysate flow rate from (300 - 800) mL/m		
6	Double endotoxin filters should be mounted on each machine at the same time		
7	Acetate and bicarbonate (dry and solution) modes		
8	Clear alarm indicators (audio & visible)		
9	Touch screen LCD display		
10	Chemical, hot chemical disinfection modes		
11	Automatic priming and rinse disinfection		
12	Kt/v, <u>measured</u>		



Annex 2: Mobile Equipment

13	Heparin pump with both bolus function and programmable delivery time		
14	Non-invasive blood pressure measurement and display on the same LCD of the dialysis machine		
15	Compatibility to variety of dialysers and blood lines (open system) An official letter from the manufacturer should state clearly whether the offered model is compatible or not with variety of blood lines (open or closed system)		
16	The offered model should be the latest open system model (an official letter from the manufacturer should be submitted)		
17	Built in dialyser connectors		
18	Built in backup battery		
19	Double needle dialysis		
20	Bidder should submit a list of consumables including at least the following (original from the same manufacturer): - Bicarbonate powder cartridge - Bicarbonate solutions - Blood line - Endotoxin filter - Disinfection detergents - Dialyzers - R.O filters <u>Prices should be fixed as per special terms</u>		
21	The system should be compatible with HAKEEM hospital information system; all licenses, software and hardware needed should be included		
22	All electronic and electrical parts should be completely and well isolated and protected from any liquids leakage.		
23	Endotoxin filters (at least 1 m ²) Qty. (4) with each machine should be included		
24	Original blood line made by the same manufacturer of the dialysis machines (quoted separately); Qty. (300) line/ machine		
25	Full PPM kit for each unit (according to the manufacturer instructions), prices should be fixed as per special terms		



Annex 2: Mobile Equipment

26	One set of full calibration and maintenance kit (to measure conductivity, temperature and pressure) supplied and approved by the same manufacturer of the haemodialysis machines. An official letter from the manufacturer (of the dialysis machines) should be endorsed stating that the offered/ supplied kit meets all required international standards and all requirements needed from the manufacturer dedicated for this purpose.		
27	<u>Reverse Osmosis Water Treatment Unit :</u> - Two independent R.O units or one double stage unit with output flow rate not less than 500 l/hr at 15° C (for each R.O unit or each stage) - Units should be installed in a way that guarantees the supply of treated water to the machines even if one unit/ stage is failed. - Made or supplied by the same manufacturer of the dialysis machine or from another company (recommended by the manufacturing company of the dialysis machines based upon a written official letter) to supply reverse osmosis (R.O) water with treated level as required by the manufacturer of the dialysis machines (with haemodiafiltration therapy). - Offered R.O unit should be classified as medical grade and holds an MDR certificate. - Any collection tank (if required) should not exceed 1000 litre volume - All required consumables should be mentioned and quoted separately with its lifetime, prices should be fixed as per special terms		
28	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item, required consumables and it's running cost (consumables) over a period of seven years (total cost of ownership) Original consumables (endotoxin filter from the same manufacturer of the dialysis machines $\geq 1 \text{ m}^2$, PPM kits (as per manufacturer's recommendation) & R.O consumables) needed to run the equipment for 5 years (4000 hours/ year per haemodialysis machine) should be quoted separately), Endotoxin and R.O filters working hours should be mentioned clearly in the offered catalogue.		
29	Abroad service training for (1) biomedical engineer/ technician		

Annex 3:

Item 1	MRI 1.5	QTY(1)
رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
*	General Description of the Required System: Whole-body top of the line, 1.5 Tesla Magnetic Resonance Imaging systems with AI technology, for diagnostic purposes is required for the Radiology Department of Ma'an Military Hospital to be used for all types of clinical applications such as Neurology, Cardiology, Oncology, Vascular, Musculoskeletal, and Breast.... etc. The required Scanner has to be of the latest model and design, heavy duty, and top of the line.	General Description of the Required System: Whole-body top of the line, 1.5 Tesla Magnetic Resonance Imaging systems with AI technology, for diagnostic purposes is required for the Radiology Department of Ma'an Military Hospital to be used for all General types of clinical applications such as Vascular, Musculoskeletal, and Breast.... etc. The required Scanner has to be of the latest model and design, heavy duty, and top of the line.
A.4	Shimming: Active	Shimming: Active and/or Passive
A.12	2 LCD display on both side of Gantry (Both side magnet screen (preferred touch screen) it should allow the user to position the patient to the ISO center of the scanner, guide and tips for fast and efficient exam preparation show and modify patient information).	2 LCD display on both side of Gantry (Both side magnet screen (preferred touch screen) it should allow the user to position the patient to the ISO center of the scanner, guide and tips for fast and efficient exam preparation show and patient information).
B.6	Scan range ≥ 200 cm whole body exam without patient repositioning	Scan range ≥ 180 cm whole body exam without patient repositioning
F.7	Motion Correction	Motion Correction 2D and 3D
F.9	Dixon technique for fat fraction quantification	Dixon technique for fat fraction quantification spin echo and gradient echo
F.11	AI technology based deep learning techniques to accelerate the scanning and reconstruction speed for neuro, spine, MSK and whole body.	Latest Artificial Intelligence reconstruction based on deep learning to enhance the clinical outcomes as well as reducing the scan times in 2D and 3D sequences such as (Deep Resolve Sharp & Gain, Deep Resolve Boost, AIR Recon DL & Sonic DL, & Sonic DL for 3D & SmartSpeed Precise)
J.7	Maximum Pressure: ~ 325 psi	Maximum Pressure: ~ 300 psi
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 2	Computed Tomography Scanner, 64 Slice, with Injector	QTY(2)

رقم المواصفة *	المواصفة قبل التعديل	المواصفة بعد التعديل
	A multi-slice spiral CT scanner with AI technology is required for all types of CT examinations including head, spine, chest, abdomen and pelvis in addition to cardiovascular applications in a general hospital. The system must meet or transcend the minimum requirements listed below.	A multi-slice spiral CT scanner with AI technology is required for all types of CT examinations including head, spine, chest, abdomen and pelvis in addition to cardiovascular applications and Prospective ECG gating in a general hospital. The system must meet or transcend the minimum requirements listed below.
A.4	Shortest rotation time, sec, 360°: ≤ 0.4	Shortest rotation time, sec, 360°: ≤ 0.35
E.1	Spatial Resolution 0% MTF(Z axis), lp/cm: ≥ ~ 16	Spatial Resolution 2% MTF(Z axis), lp/cm: ≥ ~ 15
F.2	Longitudinal movement, cm: ≥ 175	Longitudinal movement, cm: ≥ 200
F.3	Scannable range, cm: ≥ 175	Scannable range, cm: ≥ 200
G.2	Prospective ECG gating	Full cardiac package with Prospective ECG gating
H.6		تضاف المواصفة التالية: Comprehensive cardiac package with all needed software and algorithm to reduce motion artifact in coronary vessels, heart rate predictive algorithm during CCTA, prospective ECG modulation-volume rendering, coronary angiography and cardiac functional analysis.
J.2	HDD storage: ≥ 250000 image (5122)	HDD storage: ≥ 250000 image (512)
L.4	CD/DVD/USP Archiving	CD/DVD/ USB Archiving
L.6		تضاف المواصفة التالية: Post processing cardiac option
M.7	Maximum Pressure: ~ 325 psi	Maximum Pressure: ~ 300 psi
N.2	Integrated UPS For Console at least 5 KVA	Integrated UPS For Console at least 5 KVA, or as recommended by manufacturer to power the console for at least 15 minutes.
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 3	Digital Mobile X-Ray with Wireless Flat Panel Detector	QTY(3)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
*	X-ray tube & FPD should be made in one of the countries mentioned as per special term 3.a	تحذف المواصفة
14	Minimum SID from Focal point to floor, 65 cm.	Minimum SID from Focal point to floor, 65 cm (Approximately).
16.C	To work with broad range of frequencies & bands (2.4 GHz and 5 GHz).	To work with broad range of frequencies & bands (2.4 GHz or 5 GHz).
17.II	Dual Focal spot: II. Large ≤ 1.3 mm	Dual Focal spot: II. Large ≤ 1.5 mm
I	Anti-scatter grid to be included	Anti-scatter grid or equivalent (such as virtual grid) to be included
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 4	Radiographic/ Fluoroscopic System	QTY (1)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
A.5	X-ray tube & FPD should be made in one of the countries mentioned as per special term 3.a	تُحذف المواصفة
D.2	Pulse rate: ~ 0-30	Continuous fluoroscopy pulse rate: ~ 20 images/s
J.1	Two overhead color LCD monitors: ≥ 18"	Two overhead color LCD monitors: ≥ 18" or one LCD monitor: ≥ 32"
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 5	Mammogram Qty.	QTY (1)

رقم المواصفة *	المواصفة قبل التعديل	المواصفة بعد التعديل
	A Digital Radiographic Mammography system with AI technology is required to provide excellent image quality for screening, and diagnostic mammography exams and upgradeable to tomosynthesis technology. The system must meet or transcend the minimum requirements listed below.	A Digital Radiographic Mammography system with Automation technology is required to provide excellent image quality for screening, and diagnostic mammography exams and upgradeable to tomosynthesis technology. The system must meet or transcend the minimum requirements listed below.
B.4	Target/filter combinations: Mo/Mo, Mo/Rh	Target/filter combinations: Mo/Mo, Mo/Rh, W/Rh, W/AG
E.2	Automatic Force, N: Up to 200, variable	Automatic Force, N: Up to 178, variable
G.7	AI contrast enhancement mammography to enhance image quality with low dose.	Contrast enhancement mammography or equivalent algorithm to enhance image quality with low dose.
H	CAD option should be priced separately: Following accessories to be included 1) low routine paddle: 18x24 & 24x30 2) - high routine paddle: 18x24 & 24x30 6) Magnification paddle III. Magnification compression plate, 16 cm x 20 cm approx. IV. Mag spot compression plate, 9 cm x 9 cm approx. 7) Wall holder for paddles QTY (2)	CAD option should be priced separately: Following accessories to be included 1) low routine paddle: 18x24 & 24x30 (Approximately) 2) - high routine paddle: 18x24 & 24x30 (Approximately) 6) Magnification paddle III. Magnification compression plate, 16 cm x 20 cm (Approximately). IV. Mag spot compression plate, 9 cm x 9 cm (Approximately). 7) Wall holder for all paddles.
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 6	Bone Densitometer (DXA)	QTY (1)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
B.3	Tube current: 0.05 - 1.50 mA	Tube current to be specified
E.6		تضاف المواصفة التالية: Additional applications for paediatric and neonatal should be priced separately.
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 7	Radiographic System, General Purpose	QTY (3)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
B.2	Vertical movement, cm : ≥ 30 Motorized	Vertical movement, cm : ≥ 30 (Approximately), Motorized
B.3	Longitudinal movement, cm: $\pm$ 50 cm or better	Longitudinal movement, cm: $\pm$ 40 cm (Approximately), or better
E.2	HDD storage: $\geq$ 500 GB	HDD storage: $\geq$ 480 GB
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 8	C-ARM	QTY (2)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
2	Physical Configuration: Two wheeled units with smooth manual steering system: one supporting the C-Arm and console and the other supporting monitors, image processing, recording devices etc	Physical Configuration: Two wheeled units or all in one unit (system) with smooth manual steering system: one supporting the C-Arm and console and the other supporting monitors, image processing, recording devices etc
6.c	AEC	AEC or equivalent
6.d	- mA range: ~ 0.2 to 8 mA	mA range: ~ 2 to 8 mA
6.d	- Fluoroscopic Mode: Pulsed fluoroscopy: ~ 1 to 25 pulses per sec.	Fluoroscopic Mode: Pulsed fluoroscopy: ~ 1 to 15 pulses per sec.
7.a	Size not less than (21 cm × 21 cm) .	Size not less than (20 cm × 20 cm) .
7.b	CMOS flat panel detector type	CMOS/CSI flat panel detector type
8.b +8.c	8.b- Flat panel monitors mounted on an articulating arm. 8.c- Monitor size: ≥ 18".	Dual 18" monitors or one 32" mounted on an articulating arm on the monitor cart.
9.b	Collimation: Dual Leaf and Iris type.	Collimation: Dual Leaf and/or Shutter and/or Iris type.
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 9	Ultrasound, General, Mid-Range	QTY (3)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
B.5	Storage for transducer cables	Storage for transducer cables or hocks
B.9	Adjustable monitor position: up/down, rotate, swivel, & tilt	Adjustable monitor position: rotate, & tilt
C.4	Acquisition frame rate: ≥ 1000 fps	Acquisition frame rate: ≥ 1500 fps
C.6	No. of digitally processed channels: ≥ 300000	No. of digitally processed channels: ≥ 1000000 (1 Million)
C.7	Input dynamic range: ≥ 230 dB	Input dynamic range: ≥ 260 dB
D.1	Capacity of stored images HDD: ≥ 300 GB	Capacity of stored images HDD: ≥ 300 GB (Approximately)
E.2	Curved Array: 2-6 MHz approximately	Curved Array: 2-5 MHz (Approximately)
E.3	Linear Array: 3-8 MHz for vascular application approximately	Linear Array: 4-8 MHz (Approximately) for vascular application
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 10	Ultrasound, General, High-Range	QTY (1)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
B.5	Storage for transducer cables	Storage for transducer cables or hocks
C.5	Acquisition frame rate: ≥ 1900 fps	Acquisition frame rate: ≥ 3000 fps
C.7	No. of digitally processed channels: ≥ 3 Millions	No. of digitally processed channels: ≥ 9 Millions
C.8	Input dynamic range: ≥ 280 dB	Input dynamic range: ≥ 360 dB
C.17		تضاف المواصفة التالية: Imaging depth to be at least from (1 – 40) cm or higher.
D.2	Removable Storage: CD/DVD, USB	Removable Storage: CD/DVD, USB and Printer (Black & White)
E.1	Linear Array: 5-12 MHz approximately with biopsy guides	Linear Array: 5-12 MHz (approximately), with biopsy guides, (Matrix technology or equivalent).
E.3	Micro convex for Pediatric applications 4-8 MHz approximately	Micro convex: 5-8 MHz approximately, for Pediatric applications
H.		تضاف المواصفة التالية: Shear wave elastography (Liver and Breast) should be priced separately.
I.		تضاف المواصفة التالية: Fusion and Navigation application (Software and Hardware) should be priced separately.
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 11	Cardiac Color Doppler Ultrasound System, Mid-Range	QTY (3)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
A.2	Paediatric echocardiography	Paediatric echocardiography and Neonatal echocardiography.
A.4	Trans Esophageal echo cardiography to support adult and paediatric applications (optional to be priced separately)	Trans Esophageal echo cardiography to support adult and paediatric applications, including TEE prob for adult, and TEE prob for paediatric (should to be priced separately)
B.2	Frame rate of not less than ≥1000 fps.	Frame rate of not less than ≥1200 fps.
B.20	Number of digital processing channels: ≥ 300000	Number of digital processing channels: ≥ 900000
G.1	Broadband phased array for adult transducer with approximate 1-5 MHz bandwidth	Broadband phased array for adult transducer with approximate 1-5 MHz bandwidth, Single crystal technology or equivalent.
G.3		تضاف المواصفة التالية: Phased array transducer for Neonates with approximate 4-12 MHz bandwidth
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 12	Ultrasound, Gynecology, High Range	QTY (1)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
B.3	Full control keyboard	Full control keyboard or equivalent
B.5	Storage for transducer cables	Storage for transducer cables or hocks
B.9	Adjustable control panel: up/down & rotate	Adjustable control panel: up/down
B.10	Adjustable monitor position: up/down, rotate, swivel, & tilt	Adjustable monitor position: rotate, & tilt
E.3	Trans- Vaginal: 4-8MHz with 15 cm min. depth approximately	4 D Trans- Vaginal: 4-8MHz with 15 cm min. depth approximately
F.4	4D HD LIVE	4D HD LIVE or equivalent
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 13	Ultrasound, Gynecology, MID Range	QTY (5)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
A.5	Storage for transducer cables	Storage for transducer cables or hocks
A.9	Adjustable monitor position: up/down, rotate, swivel, & tilt	Adjustable monitor position: rotate, & tilt
B.6	No. of digitally processed channels: ≥ 300000	No. of digitally processed channels: ≥ 3000000 (3 Millions)
B.7	Input dynamic range: ≥ 230 dB	Input dynamic range: ≥ 260 dB
C.1	Capacity of stored images HDD: ≥ 300 GB	Capacity of stored images HDD: ≥ 300 GB (Approximately)
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		

Annex 3:

Item 14	Ultrasound Machine, Portable (Laptop Design)	QTY (2)

رقم المواصفة	المواصفة قبل التعديل	المواصفة بعد التعديل
B.2	Four full swivel castors with brakes	Four full swivel castors with brakes for two castors.
B.3	High-resolution LCD: $\geq 12''$	High-resolution LCD: $\geq 15''$
B.4	Storage for transducer cables	Storage for transducer cables or hocks
لا تعديل على باقي المواصفات لا تعديل على الشروط الخاصة		



Annex 4: Physiotherapy Equipment

Item no.	Item description	Specification no.	Original specification	Specification amendment
Item 1	Shockwave	5	Piezoelectric Shockwave probe output should be ≥ 4 million pulses, and regarding the electromagnetic probe, vendor must provide number of probes capable to deliver min. 4 million pulses (to be priced separately)	تعديل لتصبح: Vendor must provide a number of piezoelectric or electromagnetic shockwave probes capable to deliver a total of ≥ 4 million pulses
		8	User friendly operation system with Single mode and continuous mode application	تلغى المواصفة
Item 8	Hydro Collator Heating Unit	3	Tank capacity approximately 90 litres or larger	لا تعديل
		4	Electronic adjustable temperature control 35°C to 80°C or better	لا تعديل
		6	Digital temperature display	لا تعديل
Item 12	Tilting Table	6	Lifting capacity: at least 175 kg	تعديل لتصبح: Lifting capacity: at least 150 kg
Item 18	Exercise Bicycle	9	Movable with castors and brakes	لا تعديل
		10-b	With back support	لا تعديل
		10-e	Swivable 180°	لا تعديل
Item 19	Cross Trainer	1	Can be used as either a cross trainer or exercise cycle, and is easily switchable between the two	تعديل لتصبح: Can be used as cross trainer for both the upper and lower extremities
Item 24	Quadriceps Exercise Bench (N.K Table)	4	Adjustable backrest	لا تعديل
Item 25	Shoulder Wheel	6	Wall mounted on hardwood frame.	تعديل لتصبح: Wall mounted on heavy duty wooden or steel frame
Item 31	Rehabilitation Training Ladder	1	Made from heavy duty wooden material	تعديل لتصبح: Made from heavy duty epoxy coated steel or wooden material
		4	Left and right side bars made from stainless steel	تعديل لتصبح: Left and right side bars made from stainless steel or epoxy coated
لا تعديل على الشروط الخاصة				



Annex 4: Physiotherapy Equipment



Annex 5: Dental & ENT & Ophthalmology

Item no.	Item description	Specification no.	Original specification	Specification amendment
A -1	Dental Unit			تضاف المواصفات التالية الى مواصفات الجهاز: o- Vacuum pump with sound-insulated cabinet with at least the following specifications: Qty.(2) with the whole quantity: 1. Dry unit type 2. Must be sufficient for at least 4 dental units 3. Three phase 4. Flow rate 3000 L/min at 160 mbar p- Medical Air compressors with the following specifications: Qty.(2) with the whole quantity: 1. To supply Dental medical grade air. 2. Built in dryer. 3. Oil free. Continuous duty operation (100% duty cycle) 4. Flow rate $\geq 500 \text{ N l/min @ 5 bar pressure}$ 5. Three phase
A -2	Intraoral X-ray Unit	4	Focal spot: 0.4 mm or smaller.	تعديل لتصبح: Focal spot: 0.7 mm or smaller
A -9	Digital X-ray Panorama & Intraoral Digital Sensor	B -5	Compatible with X-ray generators DC types with kv range between 50-70 kv from different manufacturers.	تعديل لتصبح: Compatible with X-ray generators DC types with kv range between 60-70 kv from different manufacturers.
A-22	Dental Surgical Drill and Saw Unit	2.a.3	The unit must include multiple outlets for different saws and drills.	تعديل لتصبح: One or multiple outlets for different saws and drills.



Annex 5: Dental & ENT & Ophthalmology

		2.f	Original trolley with drawers <u>quoted separately</u>	تعديل لتصحيح: Original trolley with at least one drawer or shelf to be quoted separately
B -1	Surgical Microscope, Ophthalmic	14	Motorized Fundus viewing system with lenses: (60° or 90°) and 120° or better. (optional and must be prices separately)	تعديل لتصحيح: Motorized Fundus viewing system with lenses: (60° or 90°) and 120° or better. (optional and must be priced separately) or fundus viewing system with integrated inverter
B -5	Slit Lamp (LED)	1	A steam sterilizer to be used to sterilize ophthalmic surgical tools and sets	تلغى المواصفة
B-13	Green Laser, Multi-Spot	3	Laser wave length :Green 532nm.	لا تعديل
		4	Power: 50 – 1500 mw or better	لا تعديل
		10	Micro pulse technology or equivalent	تعديل لتصحيح: Micro pulse technology or equivalent (optional)
		11	Control throw joystick and footswitch	تعديل لتصحيح: Control throw footswitch
		12	Footswitch	تلغى المواصفة
B -14	Yag Laser, SLT	5	One-Touch Lock	تلغى المواصفة
		10	Pulse duration : YAG: 3ns (nanoseconds) SLT: 3ns (nanoseconds)	تعديل لتصحيح: Pulse duration : YAG: 3ns (nanoseconds) SLT: 3ns (nanoseconds) Or better
B -15	Optical Biometer	2	8'' LCD touch screen or better	لا تعديل
B -16	OCT Angio			
		7	Anterior OCT segment measurment that show the layers and thickness of the cornea	تعديل لتصحيح: Anterior OCT segment to be included ,measurment that show the layers and thickness of the cornea (optional)
		9	Auto rescans.	تلغى المواصفة
		10	Auto focus.	لا تعديل
		13	Light source: dual beam	تعديل لتصحيح:



Annex 5: Dental & ENT & Ophthalmology

			scanning system or super luminescent diode light	Light source: dual beam scanning system or super luminescent diode light or swept source wavelength variable laser
B -17	Wide Field Fundus Camera	15	Auto rescan or equivalent	تلقى المواصفة
		16	fully automatic alignment and focusing or equivalent	لا تعديل
B -20	Bio Microscope Ultrasound (High Frequency)			يعدل وصف الجهاز ليصبح: Ophthalmic ultrasound (10-20) MHZ
		6	Ultrasound bio microscopy (UBM):	تلقى المواصفة (6) كاملة
B-23	Green laser for operation	3	Laser wave length 532nm approximately.	لا تعديل
		4	Power: 50 – 1500 mw or better	تعديل لتصبح: Power: 50 – 1000 mw or better
		6	Monospot and Multi-spot included	تعديل لتصبح: Single spot included
		8	Many Treatment mode.	المطلوب هو: Contineous single mode
		12	Endo probe Delivery system: Qty.(10)	تعديل لتصبح: Endo probe Delivery system: Qty.(10) (from the same manufacturer or equivalent manufacturer)
B -26	Ophthalmic Perimeter	8	Retinal tracking or auto focus (no need for trial lens).	لا تعديل
C-2	ENT Surgical Microscope	11	LED lamp module or Xenon cold light illumination system that provides minimum of 300 watt with integrated emergency lamp\ Replacing lamps and modules should be easy and simple.	لا تعديل
		12	Compatible high-resolution 1-chip CCD camera or better	تعديل لتصبح: Compatible high-resolution 1-chip CCD or CMOS camera or better



Annex 5: Dental & ENT & Ophthalmology

		14	High resolution DVD Recorder	تعديل لتصبح: High resolution DVD or USB Recorder
C-3	ENT Sinuscopy Surgical Tower	B	Camera system (4k Resolution) : Provides electronic shutter function, automatic brightness control and optical zoom	تعديل لتصبح: Camera system (4k Resolution) : Provides electronic shutter function, automatic brightness control and zoom function
		B-9	Camera controller (4k resolution) • Clear function buttons and indicators • Hygienic • <u>Provides colour bas test signal</u> • HDMI and DVI output connection	تعديل لتصبح: Camera controller (4k resolution) • Clear function buttons and indicators • Hygienic • <u>Automatic white balance</u> • <u>HDMI and DVI output connection</u>
		C	Light Source	تعديل لتصبح: Light source: either external desktop type or built in CCU
		D -1	Medical grade type that is supplied by the same manufacturer	لا تعديل
		D -2	At least of 32 inch size that is mounted on the mobile cart	لا تعديل
		D-4	HDMI and DVI compatible.	تعديل لتصبح: HDMI or DVI compatible.
		F	Medical Grade DVD Recorder	تعديل لتصبح: Medical grade DVD recorder or USB flash memory
		H	Rigid ear telescope (4k Resolution) with the following specifications: 1) Zero degree 2) 4 mm inner diameter 3) Working length approx. 6cm	تعديل لتصبح: Rigid ear telescope (4k Resolution) with the following specifications: 1) Zero degree 2) 4 mm inner diameter 3) Working length approx. 17cm
C-4	ENT Sinuscopy Diagnostic Tower	A	Camera system (Full HD) : Provides electronic shutter function, automatic brightness control and optical zoom	تعديل لتصبح: Camera system (Full HD) : Provides electronic shutter function, automatic brightness control and zoom function



Annex 5: Dental & ENT & Ophthalmology

		A-9	Camera controller (Full HD resolution) • Clear function buttons and indicators • Hygienic • <u>Provides colour bas test signal</u> • <u>HDMI and DVI output connection</u>	تعديل لتصبح: Camera controller (Full HD resolution) • Clear function buttons and indicators • Hygienic • <u>Automatic white balance</u> • <u>HDMI or DVI output connection</u>
		B	Light Source	تعديل لتصبح: Light source : either external desktop type or built in CCU
		C -1	Medical grade type that is supplied by the same manufacturer	لا تعديل
		G	Rigid ear telescope with the following specifications: 1) Zero degree 2) 4 mm inner diameter 3) Working length approx. 6cm	تعديل لتصبح: Rigid ear telescope with the following specifications: 1) 0° degree 2) 4 mm inner diameter 3) Working length approx. 17cm
C -5	High speed Otologic Surgical Drill	3.e	Integrated irrigation pump	تعديل لتصبح: Integrated combined irrigation pump , control of the pump should be from the main control drive
C-11	Otoacoustic Emission	1.C	Spontaneous OAE	لا تعديل
C-13	Portable Pediatric Audiometer	2-E	Narrow band Noise	لا تعديل
لا تعديل على الشروط الخاصة				



Annex 6: Medical Furniture

Item no.	Item description	Specification no.	Original specification	Specification amendment
Item 1	Haemodialysis Electric Chair	4	Over all dimensions (Length X Width X Height) 230 x 90 x 60 cm approximately	لا تعديل
Item 2	Medical/ Surgical Ward Bed, Electrical	A -3	The dimensions of the sleeping surface platform to be minimum of (87*200) cm	تعديل لتصبح: The dimensions of the sleeping surface platform to be minimum of (86*200) cm
		A -13	Backrest (head of head) angle display	تعديل لتصبح: Backrest (head of head) angle indicator
		A -16	Four heavy-duty medical grade electro-conductive, non-marking castors of not less than 15 cm diameter.	تعديل لتصبح: Four heavy-duty medical grade, non-marking castors of not less than 15 cm diameter, with at least one electro-conductive castor.
		A -18	Four original protective revolving rubber bumpers: Two of which should be located at the corners of the bed end, the other two should be located at the head of the bed.	تعديل لتصبح: Four original protective revolving bumpers: Two of which should be located at the corners of the bed end, the other two should be located at the head of the bed.
		22-G	Complete with non-latex, fluid resistant and washable cover, welded or with concealed zip	تعديل لتصبح: Complete with non-latex, fluid resistant and washable cover
Item 3	ICU Patient Bed, Electric			
		A -4	The dimensions of the sleeping surface platform to be a minimum of (87 x 200) cm (without bed extension).	تعديل لتصبح: The dimensions of the sleeping surface platform to be a minimum of (86 x 200) cm (without bed extension).
		A .10.d	Foot: 0° to ≥20°	تعديل لتصبح: Foot: 0° to ≥18°
		A-11	Zero clearance between mattress and headboard	تعديل لتصبح: Approximate zero clearance between mattress and headboard
		A .13	Clearance between dropped-down side rails and the floor on bed's lowest position (under bed clearance) should be at least 10 cm	لا تعديل
		A-15	Liquid spill proof of IPX 4 degree or higher	لا تعديل



Annex 6: Medical Furniture

		A .21.6	Side rails must cover at least $\frac{2}{3}$ of the sleeping platform and at the same time does not cover the whole sleeping surface to facilitate patient exit in emergency cases (stuck side rails).	لا تعديل
		A-21	Maximum height of side rail above the sleep surface platform ≥ 40 cm to prevent patient fall	تعديل لتصحيح: Maximum height of side rail above the sleep surface platform ≥ 38 cm to prevent patient fall
		A -23	Four heavy-duty medical grade electro-conductive, non-marking castors of not less than 14 cm diameter.	تعديل لتصحيح: Four heavy-duty medical grade, non-marking castors of not less than 14 cm diameter, with at least one electro-conductive castor.
Item 5	Transport Stretcher, Mobile, Hospital	10.a	Height range adjustment (foot operated): Low ≤ 60 cm High ≥ 85 cm.	لا تعديل
		10.c	Trendelenburg and reverse Trendelenburg (hands-free control): $\geq \pm 15^\circ$.	لا تعديل
		14	Rubber bumpers	تعديل لتصحيح: bumpers
		18	Large (min ≈ 20 cm diameter) swivel/steerable medical grade antistatic castors with brakes.	تعديل لتصحيح: Large (min ≈ 20 cm diameter) swivel/steerable medical grade with brakes. At least one antistatic castor
Item 6	Wheel Chair, Adult	B .2	The wheelchair should have some type of armrest, and these armrests shall be adjustable in height and pivoting or removable for ease of transfers.	لا تعديل
		B .4	The wheelchair should have anti-tip devices and should not tip on inclines with slopes of up to 15° .	لا تعديل
		B .6	Approximate overall dimensions (w x L x h): 65 x 95 x 80 cm.	لا تعديل
Item 7	Wheel Chair,	B .2	The wheelchair should have	لا تعديل



Annex 6: Medical Furniture

	Pediatric		some type of armrest, and these armrests shall be adjustable in height and pivoting or removable for ease of transfers.	
		B .4	The wheelchair should have anti-tip devices and should not tip on inclines with slopes of up to 15°.	لا تعديل
		B .6	Approximate overall dimensions (w x L x h): 50 x 75 x 80 cm.	لا تعديل
Item 8	Bassinet (Baby Cot)	5	The bassinet shall have front and back handgrips.	تعديل لتصبح:
		9	Four swivel castors of at least 70 mm diameter, at least 2 with brakes	تعديل لتصبح:
Item 9	Resuscitation Cart (Crash Cart)	8	All-round or corner bumpers	لا تعديل
Item 12	Examination Couch	3	Stainless steel or epoxy-coated steel frame	لا تعديل
Item 13	Gynaecology Examination Table	2	Height adjustable (electric or hydraulic): ≤60 cm to ≥ 95 cm or better	تعديل لتصبح:
		3	It shall have adjustable, spring assisted backrest (0°-65° or better) with self-locking mechanism	تعديل لتصبح:
		5	The surface shall be 5 cm thick, padded and upholstered with wear-resistant and disinfectant tolerant material.	تعديل لتصبح:
		6	Approximate overall dimensions of the mattress: 140 * 60 cm	تعديل لتصبح:
		7	Safe working load ≥ 200 kg	تعديل لتصبح:
Item 15	Intravenous Pole, Mobile			Safe working load ≥ 200 kg ±5



Annex 6: Medical Furniture

	Stand			
Item 21	Cabinet, Instrument, Operation Theatres	3	Two double hinged doors: stainless steel frame with glass window	لا تعديل
Item 28	Mayo Table	4	Height adjustable by of foot operated hydraulic pump from 950 up to 1200 mm or more with damping mechanism when lowering the table	تعديل لتصبح: Height adjustable by of foot operated hydraulic pump approximately from 950 up to 1200 mm or more with damping mechanism when lowering the table
Item 29	Table, Instrument	9	Approximate dimensions (L*W*H): 90*50*100 cm	تعديل لتصبح: Approximate dimensions (L*W): 90*50 cm With height within range of (80-100) cm
Item 36	Stainless Steel Wire Basket, 1 STU	2	STU size: 28*28*58 cm approximately	لا تعديل
لا تعديل على الشروط الخاصة				



Annex 7: Surgical Instruments

Item no.	Item description	Specification no.	Original specification	Specification amendment
C -1	Total Abdominal Hysterectomy Set (TAH)	18	5 inches CVD.(Curved)	لا تعديل
		19	7 inches STR. (Straight)	لا تعديل
		20	9 inches STR. (Straight)	لا تعديل
		21	Heavy kochers STR	لا تعديل
		22	Heavy kochers CVD	لا تعديل
		23	Papchoch FCP	لا تعديل
		24	Tenaculum	لا تعديل
		31	Self-retaining Retractor, Large, Round, Wide tips	لا تعديل
C -2	TVH (Total Vaginal Hysterectomy Set)	22	5 inches CVD.	لا تعديل
		23	7 inches STR.	لا تعديل
		24	9 inches STR.	لا تعديل
C -3	Caesarean Section set	2	Scalpel Handle	لا تعديل
		9	Scissors Curved	لا تعديل
		10	Suction	لا تعديل
		11	Artery Forceps	لا تعديل
C -4	Episiotomy	6	Needle holder	لا تعديل
C -7	Laparotomy set	7	Tc metzenbaum scissors cvd	لا تعديل
		8	Tc metzenbaum scissors cvd	لا تعديل
		9	Tc metzenbaum scissors cvd	لا تعديل
		10	Tc metzenbaum scissors cvd	لا تعديل
		11	Tc metzenbaum scissors cvd	لا تعديل
		12	Tc metzenbaum scissors cvd	لا تعديل
		13	Tc suture scissors	لا تعديل
		14	Tc suture scissors	لا تعديل
		16	Probe buttoned 1 mm	لا تعديل
C -9	Minor Set, Gynecology	4	STANDARD scissors, sh/sh, 115 mm, curved	لا تعديل
C -11	Miscellaneous Instruments Set For Gynaecology	4	Vaginal Retractor, curved, large	لا تعديل
		5	Vaginal Retractor, curved,	لا تعديل



Annex 7: Surgical Instruments

			medium	
		6	Vaginal Retractor, curved, small	لا تعديل
C -12	Gynaecology Laparoscopic Set	1	Trocar, size 11 mm	لا تعديل
		2	Trocar, size 6 mm	لا تعديل
		4	Thread sleeve, for trocar size 6 mm	لا تعديل
		5	Thread sleeve, for trocar size 11 mm	لا تعديل
		6	Uterine grasping forceps, blunt jaws, with length 24 cm	لا تعديل
		8	Grasping forceps, rotating, with multiple teeth, with manhes style ratchet, with connector pin for unipolar coagulation	لا تعديل
		9	Dissecting and grasping forceps, Rotating, atraumatic, with connector pin for unipolar coagulation	لا تعديل
		11	Grasping forceps, atraumatic, dismantling, u-spring handle, with connector pin for unipolar coagulation	لا تعديل
		24	T needle holder curved right, straight handle, without ratchet	لا تعديل
		25	Needle holder and suture grasper, with automatic back spring straight , size 5 mm	لا تعديل
		26	Endo loop ligature, with roeder knot, with absorbable synthetic thread, for single use, sterile, package of 12	لا تعديل
C -13	Gynaecology Office Hysteroscopy Set	6	Polypectomy loop, unipolar, 5 fr, length 34cm	لا تعديل



Annex 7: Surgical Instruments

		7	Needle electrode, unipolar, 5 fr, length 34 cm	لا تعديل
		12	Needle electrode 5 fr., 34 cm	لا تعديل
		13	Polypectomy loop unipolar 5 fr., 34 cm	لا تعديل
D -1	Major Basic Set	10	STANDARD SCISSORS BL-SH CVD	المطلوب هو: Scissor surgical dissection
		30	ROUX RETRACTOR FIG. 1	المطلوب هو: Far above retractor
D -5	Thyroid Instrument Set	6	HEISS HAEMOST FORCEPS FIG 2	تعديل لتصحيح: HEISS HAEMOST FORCEPS
		7	HEISS HAEMOST FORCEPS FIG 3	تعديل لتصحيح: HEISS HAEMOST FORCEPS
D -6	Laparotomy Set	7	TC METZENBAUM SCISSORS CVD	تعديل لتصحيح: Scissor surgical dissection (11 cm)
		8	TC METZENBAUM SCISSORS CVD	تعديل لتصحيح: Scissor surgical dissection (12 cm)
		9	TC METZENBAUM SCISSORS CVD	تعديل لتصحيح: Scissor surgical dissection (14 cm)
		10	TC METZENBAUM SCISSORS CVD	تعديل لتصحيح: Scissor surgical dissection (23 cm)
		11	TC METZENBAUM SCISSORS CVD	تعديل لتصحيح: Scissor surgical dissection (24 cm)
		12	TC METZENBAUM SCISSORS CVD	تعديل لتصحيح: Scissor surgical dissection (19 cm)
		13	TC SUTURE SCISSORS	تعديل لتصحيح: Scissor surgical dissection (22 cm)
		14	TC SUTURE SCISSORS	تعديل لتصحيح: Scissor surgical dissection (23 cm)
		38	MIXTER HAEMOST FORCEPS FIG 1	تعديل لتصحيح: MIXTER HAEMOST FORCEPS
		46	ROUX RETRACTOR FIG. 1	المطلوب هو: Far above retractor diff. sizes
		47	ROUX RETRACTOR FIG 2	
		48	ROUX RETRACTOR FIG 3	
D -7	Vascular Set	40	Fraizer suction FG.6/FG.8/FG.10	تعديل لتصحيح: Canulasuction



Annex 7: Surgical Instruments

D -13	Adult Laparoscopic Surgical Set	5	TROCAR PYRAMIDAL TIP for trocar sleeves diameter 13 mm, working length 100-150 mm	تعديل لتصحيح: Reusable fixation cannula 5mm & 12mm
		8	Atrumatic fenestrated Grasping single jaw action, with horizontal serration, 20 mm jaw length, WL 330-360 mm	تعديل لتصحيح: single action jaw
		12	Retraction grasper with two teeth 5mm WL= 330-360 mm	تعديل لتصحيح: Click line grasping forceps with teeth 2.0 mm, working length 30 cm
		14	Tooth 2/3 claws grasping forceps 10 mm, single jaw action WL =335-360 mm	تعديل لتصحيح: Forceps click line
		15	Grasper 5mm Wl 330-360 mm	تعديل لتصحيح: Forceps click line
F -2	Direct Laryngoscopy Set For Adults	28	Bracket · for high frequency cables · 22,5 cm	تلغى المواصفة
لا تعديل على الشروط الخاصة				

الملحق (و)

على الرغم مما ورد في أي جزء آخر من وثائق العطاء، تطبق الشروط والأحكام الواردة في هذا الملحق على مشاركة الشركات الإماراتية والأجنبية والمحلية في هذا العطاء، وذلك التزاماً بمتطلبات الجهة المانحة (صندوق أبو ظبي للتنمية) وبما يضمن التنفيذ الكامل والدقيق لجميع الالتزامات التعاقدية والفنية.

المادة: (1) أهلية الشركات الإماراتية وشروط المشاركة

يُسمح للشركات الإماراتية المرخصة والمؤهلة بالدخول في المنافسة، شريطة توافر جميع المتطلبات التالية:

- A. أن تكون الشركة مختصة في مجال الأجهزة والمعدات الطبية ومسجلة أصولياً داخل دولة الإمارات العربية المتحدة.
- B. أن تكون الشركة مسموح لها ببيع الأجهزة والمعدات الطبية داخل دولة الإمارات.
- C. تقديم صورة عن السجل التجاري صادرة عن الجهات الرسمية في دولة الإمارات العربية المتحدة، مصدقة حسب الأصول. على أن يوضح السجل أن نشاط الشركة يشمل صراحة "تجارة الأجهزة والمعدات الطبية" أو "توريد الأجهزة والمعدات الطبية"، أو ما يعادلها من أنشطة ذات صلة مباشرة.
- D. تقديم صورة عن ترخيص وزارة الصحة في دولة الإمارات العربية المتحدة لذات المنشأة مصدقة حسب الأصول.
- E. ألا يقل عمر الشركة عن عشر سنوات من تاريخ التقدم للعطاء.
- F. أن تكون الشركة لها سابقة أعمال في تجهيز وتوريد الأجهزة الطبية للمستشفيات داخل دولة الإمارات العربية المتحدة أو خارجها.
- G. يجب أن تكون كافة الأجهزة والمعدات الطبية المقدمة في العطاء من شركات صانعة معروفة.

المادة: (2) آليات التقدم للعطاء وشروطها الإلزامية للشركات الإماراتية

يسمح للشركات الإماراتية المستوفية لمتطلبات المادة (1) بالتقدم من خلال إحدى الطرق التالية حصراً. ويُعد عدم تقديم أي من الوثائق المطلوبة سبباً مباشراً لاعتبار العرض غير مقبول شكلاً:

A. التقدم بشكل منفرد:

تلتزم الشركة الإماراتية الراغبة بالتقدم منفردة بتقديم ضمن عرضها الفني إثبات التمثيل القانوني والفني في الأردن عبر مايلي:

1. فرع تشغيلي للشركة في الاردن: ان يكون للشركة الاماراتية فرع تشغيلي أو شركة في الأردن مملوكة لنفس المالك للشركة الاماراتية المتقدمة بالعرض لمتابعة اعمال التوريد والتركيب والتشغيل إضافة لتنفيذ التعهدات المطلوبة من الشركات حسب وثائق وشروط العطاء ويتم اثبات ذلك حسب الاتي:

- A. تقديم صورة حديثة عن شهادة السجل التجاري للفرع صادرة عن وزارة الصناعة والتجارة الأردنية.
- B. رخصة مهن سارية المفعول.

2. وكيل خدمات فنية من خلال شركة اردنية:

A. تقديم اتفاقية وكالة خدمات فنية ، مصدقة من كاتب العدل في الأردن، مرفقاً بها شهادة تسجيل ورخصة مهن سارية للوكيل الأردني ، كما يعتبر وكيل الخدمات الفنية مسؤول قانونياً أمام القوات المسلحة الاردنية-الجيش العربي / الخدمات الطبية الملكية عن جميع أعمال الصيانة وعقود الصيانة وتوفر قطع الغيار والمستهلكات والاكسسوارات حسب الشروط الخاصة بالعطاء حتى الانتهاء من كافة التزامات العطاء ويطبق بحقه كافة الشروط الواردة في العطاء.

B. يقوم وكيل خدمات فنية بكافة الخدمات الفنية المنصوص عليها باتفاقية وكالة الخدمات الفنية الحصرية وما يترتب عليها من كفالات وضمائم وكما ورد بدعوة العطاء والملاحق التابعة لها .

C. أن يكون وكيل الخدمات مؤهل فنياً وكما جاء بالشروط الخاصة بالعطاء.

* في الحالتين (1 , 2) يتم شراء دعوة العطاء عن طريق الشركة الاماراتية وذلك بموجب كتاب رسمي موقع من الشركة الاماراتية بالتفويض بشراء نسخة من دعوة العطاء . يتم تقديم عروض الشركات الاماراتية ومتابعة معاملاتها من قبل شخص مفوض بكتاب رسمي صادر وموقع من الشركة الاماراتية .

B. التقدم من خلال ائتلاف مع شركة (أو شركات) اردنية:

يجوز للشركة الإماراتية التقدم من خلال ائتلاف مع شركة (أو شركات) أردنية ووفقاً للأحكام التفصيلية في المادة (4) على ان تكون الشركة الأردنية مستوفية للشروط المنصوص عليها في دعوة العطاء.

المادة (3): منح الأفضلية السعرية

تُمنح أفضلية سعرية بنسبة (10%) في مرحلة التقييم المالي للعروض التي تحقق أحد الشرطين الآتيين:

- A. عرض المقدم من شركة إماراتية منفردة ومستوفية لمتطلبات المادة.(2.A)
- B. العرض المقدم من ائتلاف تزيد فيه حصة الشركة الإماراتية عن (51%) من إجمالي حصص الائتلاف، وذلك بموجب اتفاقية الائتلاف أو كتاب/ رسالة النوايا.

المادة (4): الأحكام التفصيلية للائلافات

A. القواعد العامة للائتلاف

1. يسمح بتقديم المناقصات على شكل ائتلاف وحسب الشرط الوارد بالمادة (2B).
2. يجب على أعضاء الائتلاف تسمية رئيس للائتلاف ليكون مسؤولاً عن متابعة إجراءات العملية الشرائية.
3. يعتبر أعضاء الائتلاف جميعهم مسؤولين بالتضامن والتكافل عن تنفيذ العقد.

B. إثبات الائتلاف ووثائقه: يجب على الشركات الراغبة في التقدم للعطاء ضمن ائتلاف إثبات ذلك من خلال أحد الطرق التالية، وتقديم الوثائق المطلوبة:

طريقة الإثبات	الوثائق المطلوبة
اتفاقية ائتلاف مصدقة	1. تقديم اتفاقية ائتلاف مصدقة أصولياً لدى كاتب العدل في الأردن 2. يجب أن تحدد الاتفاقية أسماء الشركات المشاركة، الأدوار والمسؤوليات، والية التمثيل القانوني للائتلاف، ونسبة كل عضو من أعضاء الائتلاف.

كتاب/رسالة نوايا	1. تقديم كتاب / رسالة نوايا (كتاب ائتلاف) موقع ومختوم من جميع أعضاء الائتلاف. 2. يجب أن يتضمن الكتاب التزام أعضاء الائتلاف بالتعاون في تنفيذ العطاء، وتحديد مسؤوليات كل طرف، ونسبة كل عضو، وتعيين ممثل للائتلاف خلال مرحلة دراسة العروض.

C. الكفالات والضمانات للائتلاف :

يجب أن تكون الكفالات المطلوبة للعطاء صادرة أو معتمدة بشكل رسمي من بنك أردني معتمد لدى البنك المركزي الأردني أو بنك إماراتي معتمد لدى البنك الاماراتي المركزي ، وتصدر على النحو التالي :

1. في حال تقديم اتفاقية ائتلاف مصدقة :يجب أن تكون جميع الكفالات صادرة باسم الائتلاف .
2. في حال تقديم كتاب/ رسالة نوايا :يجوز أن تكون كفالة دخول العطاء صادرة باسم أي عضو من الشركات المكونة للائتلاف على أن تكون باقي الكفالات صادرة باسم الإئتلاف .
3. في حال تقديم العرض من شركة إماراتية منفردة تكون الشركة مسؤولة عن الكفالات والضمانات منفردة .

D. الإجراءات في حال فوز الائتلاف بالعطاء:

1. في حال تقديم اتفاقية ائتلاف مصدقة عند الدخول بالعطاء: تعتمد الاتفاقية المقدمة
 2. في حال تقديم كتاب نوايا عند الدخول بالعطاء:
- يجب تقديم اتفاقية ائتلاف مصدقة لدى كاتب العدل في الأردن خلال (30) يوماً عمل من تاريخ تبليغ الائتلاف بكتاب رسمي من الخدمات الطبية الملكية بالإحالة المبدئية للعطاء. وفي حال عدم تقديم الاتفاقية المصدقة خلال المدة المحددة، يتم اتخاذ الإجراءات التالية: إلغاء الإحالة النهائية، ومصادرة كفالة دخول العطاء.

E. المراسلات والتوقيع:

1. في حال تقديم اتفاقية ائتلاف مصدقة: يتم تعيين ممثل رسمي للائتلاف وفقاً لما تحدده الاتفاقية، ليكون مسؤولاً عن جميع المراسلات والتوقيع على الوثائق الرسمية.
2. في حال تقديم كتاب/رسالة نوايا: يجب أن تحدد الشركات في الكتاب ممثلاً معتمداً للائتلاف خلال فترة دراسة العروض، ويجب أن يكون التوقيع على المستندات باسم العضو الذي قدم كفالة دخول العطاء لضمان المسؤولية القانونية.

F. تقديم عروض الأسعار :

1. يجوز لأي إئتلاف أن يتقدم بعرض أساسي وعرض بديل واحد لنفس المادة للمواد الواردة في العطاء بشكل منفرد ، إما من نفس الشركة المصنعة أو شركات أخرى تماثلها في الجودة والكفاءة.
2. يجوز التقدم بأكثر من عرض بموجب إئتلافات مختلفة شريطة أن لا يكون لنفس المادة وعلى أن يتم شراء دعوة العطاء لكل عرض على حده وكذلك تقديم الكفالات المطلوبة لكل عرض على حده وبالعكس ذلك يتم استبعاد كافة العروض المقدمة من الإئتلاف المخالف.

G. شراء نسخة العطاء:

1. يجوز لأي عضو من الشركات المكونة للائتلاف شراء نسخة العطاء، على أن يعتبر ذلك شراء لصالح الائتلاف ككل مع تزويد مديرية الخدمات الطبية الملكية بكتاب رسمي موقع من الائتلاف بالتفويض بشراء نسخة العطاء لصالح الائتلاف.
2. عند تقديم العرض، يجب أن يتم إثبات أن النسخة التي تم شراؤها استخدمت لتمثيل الائتلاف رسمياً وأن تكون مختومة من قبل جميع أعضاء الائتلاف.

المادة رقم (5) : العملات المسموح بها :

- يسمح بالتقديم للعروض المحلية بالدينار الأردني أما العروض الأجنبية والأنتلافات بالدينار الأردني أو الدولار الأمريكي فقط.

المادة رقم (6) : العروض المحلية والأجنبية :

1. يجوز لأي شركة أن تتقدم بعرض أساسي وعرض بديل واحد لنفس المادة للمواد الواردة في العطاء بشكل منفرد , إما من نفس الشركة المصنعة أو شركات أخرى تماثلها في الجودة والكفاءة.

2. يجوز التقدم بعرض محلي بالدينار الأردني وعرض أجنبي بالدولار الأمريكي على ورق الشركة الصانعة شريطة أن لا يكون لنفس المادة وعلى أن يتم شراء دعوة العطاء لكل عرض على حده وكذلك تقديم الكفالات المطلوبة لكل عرض على حده وبالعكس ذلك يتم استبعاد كافة العروض المقدمة من الشركة المخالفة.

المادة رقم (7): الكفالات والضمانات لكافة العروض :

- جميع الكفالات والضمانات لعروض الشركات الاردنية والاماراتية والاجنبية يجب أن تكون صادرة أو معتمدة من بنك أردني معتمد لدى البنك المركزي الأردني أو بنك إماراتي معتمد لدى البنك الاماراتي المركزي.



القيادة العامة للقوات المسلحة الأردنية - الجيش العربي
مديرية الخدمات الطبية الملكية
شعبة المشتريات المركزية

الرقم : ش ٥٠٠/٢٠٢٥/٦٠ / ٥٢-٩
التاريخ : ٠٥ / جمادى الآخرة ١٤٤٧ /
٢٠٢٥ / تشرين الثاني / ٢٦

السادة : المناقصون
الموضوع : تمديد إغلاق عطاء

تحية طيبة وبعد ،،،

الإشارة : العطاء رقم ش ٥٠٠/٢٠٢٥/٦٠
(لشراء التجهيزات الطبية لمستشفى معان) والممول من منحة صندوق أبو ظبي للتنمية

١ - يرجى العلم بأنه تمديد إغلاق العطاء اعلاه ليصبح الساعة الواحدة من بعد ظهر يوم الثلاثاء الموافق ٢٠٢٦/١/٢٠.

٢ - يتم بيع دعوة العطاء يومياً ولغاية الساعة (الثالثة) من بعد ظهر كل يوم باستثناء أيام العطل الرسمية ويكون يوم (الاثنين) الموافق ١٩ / ١ / ٢٠٢٦ الساعة (الواحدة) ظهراً آخر موعد لبيع المناقصات .

٣ - لإجراء اكم علماً بأن الموعد النهائي لتقديم الاعتراضات من قبلكم على المواصفات الساعه الثالثة من بعد ظهر يوم الأحد الموافق ٢٠٢٥/١٢/٧ ولن يتم قبول أى اعتراض بعد هذا الموعد.

واقبلوا فائق الاحترام،،،،،

ع / العميد الطبيب
مدير عام الخدمات الطبية الملكية
العقيد الصيدلاني طارق محمد الجبوري

- نسخة إلى:

مديرية الصيدلة والتزويد الطبي / شعبة تزويد وصرف الاجهزة الطبية والعدد والقطع الاحتياطية - للعلم لطفاً.



هـام جداً

الرقم : ش. ٦٠/٢٠٢٥/٥٠٠ / ٢٧ / ٤٩
التاريخ : ١٤٤٧ / جمادى الأولى / ١٢
: ٢٠٢٥ / تشرين الثاني / ٣

السادة : المناقصون
الموضوع : دعوة العطاء

تحية طيبة وبعد ،،،

١. يرجى الالتزام بتقديم (COMPLIANCE SHEET) لجميع الأجهزة والعدد المقدمة من قبلكم يتضمن وجود المواصفة المطلوبة (Yes, No) وبيان موقعها برقم صفحة الكتالوج والعرض الفني (محددة بلون فسفوري) وبالشكل التالي وبغير ذلك سيتم إهمال العرض المقدم وغير ملتزم بالجدول :-

ITEM NO. () NAME () MODEL NO. ()

المواصفة المطلوبة	YES OR NO	رقم صفحة الكتالوج (تحديدها بلون فسفوري)	ملاحظات
		<u>(مهم جداً)</u>	

٢. يرجى الالتزام بتقديم عرضين منفصلين مالي وفني .

٣. أن تكون كفالة دخول العطاء مرفقة بالعرض المالي أو بمغلف منفصل .

٤. يرجى تقديم أي استفسار لديكم على المواصفة خلال النصف الأول من تاريخ الطرح ولن ينظر في أي استفسار يصل بعد ذلك التاريخ .

واقبلوا فائق الاحترام،،،،،

ع / العميد الطبيب
مدير عام الخدمات الطبية الملكية
العقيد الصيدلاني طارق محمد الجبوري



القيادة العامة للقوات المسلحة الأردنية - الجيش العربي
مديرية الخدمات الطبية الملكية
شعبة المشتريات المركزية

الرقم : ش. ٦٠/٢٠٢٥/٥٠٠
التاريخ : ١٤٤٧ / جمادى الأولى / ١٩
: ٣ / تشرين الثاني / ٢٠٢٥

السادة : المناقصون
الموضوع : عطاء رقم ش. ٦٠/٢٠٢٥/٥٠٠

تحية وبعد ،،،

الإشارة : العطاء رقم ش. ٦٠/٢٠٢٥/٥٠٠
(لشراء التجهيزات الطبية لمستشفى معان)

- يرجى تزويدنا بكشف مفصل يبين أرقام المواد المعروضة من قبلكم ولكل Annex على حده حسب النموذج التالي وتوضيح إذا كان هناك بدائل لنفس المادة، وإرفاق النموذج مع العرض الفني والعرض المالي .

Annex No.	Item No.	Manuf.	Model	Origin

واقبلوا فائق الاحترام،،،،،

ع / العميد الطبيب
مدير عام الخدمات الطبية الملكية
العقيد الصيدلاني طارق محمد الجبوري

*** الملحق (و) : ملحق خاص بالعطاءات الممولة من منحة صندوق أبو ظبي للتنمية.**

- على الرغم مما ورد في الملاحق (أ، ب) تطبق الشروط التالية الصادرة عن الجهة المانحة (صندوق أبو ظبي للتنمية) :

١. السماح للشركات الامارتية المرخصة والمؤهلة ذات الخبرة بالدخول للمنافسة للعطاء وحسب الشروط التالية:

• عطاء الاجهزة والمعدات الطبية

- ان تكون الشركة مختصة بالاجهزة الطبية مسجلة أصوليا داخل دولة الامارات العربية المتحدة
- ان تكون الشركة مسموح لها بالبيع داخل دولة الامارات العربية المتحدة.
- صورة عن السجل التجاري صادر عن الجهات الرسمية ذات العلاقة في دولة الامارات العربية المتحدة ومصدقة حسب الاصول.
- صورة عن ترخيص وزارة الصحة في دولة الامارات العربية المتحدة لذات المنشأة مصدقة حسب الاصول.
- ان لا يقل عمر الشركة عن ثلاث سنوات من تاريخ التقدم للعطاء
- ان تكون الشركة مختصة بنفس نوعية الاجهزة الطبية التي ستتقدم بها للعطاء

• عطاء الاثاث واللوازم غير الطبية

- ان تكون الشركة مختصة بالاثاث واللوازم غير الطبية مسجلة أصوليا داخل دولة الامارات العربية المتحدة
- ان تكون الشركة مسموح لها بالبيع داخل دولة الامارات العربية المتحدة.
- صورة عن السجل التجاري صادر عن الجهات الرسمية ذات العلاقة في دولة الامارات العربية المتحدة ومصدقة حسب الاصول.
- صورة عن ترخيص الجهات الرسمية في دولة الامارات العربية المتحدة لذات المنشأة ومصدقة حسب الاصول
- ان لا يقل عمر الشركة عن ثلاث سنوات من تاريخ التقدم للعطاء
- ان تكون الشركة مختصة بنفس نوعية الاثاث واللوازم التي ستتقدم بها للعطاء

٢. عند التقييم المالي لعروض الشركات المتقدمة للعطاء تُعطى الشركات الإماراتية أفضلية بنسبة ١٠ % مقارنة بالشركات الأخرى.

٣. تبقى الشروط المرجعية في مناقصة العطاء مدار البحث أعلاه وفي المناقصات القادمة لمشاريع الخدمات الطبية الملكية الممولة من صندوق أبو ظبي للتنمية كما هي بدون تعديل، وإنما يتم إضافة التعديلات المذكورة أعلاه كبنود إليها.



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Annex 1: Laboratory Equipment

Item 1	Bio-safety Cabinet, Class II-B2	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Class II – B2		
2	Certified according to NSF/ANSI 49 Standard		
3	Capacity: Not less than 4 foot Interior Dimension not less than: 117cm width, 58cm depth, 70cm height		
4	Provide all types of protections: Personnel, Product, and Environment Protection.		
5	Robust cabinet construction		
6	Nominal inflow velocity Not less than 100 ft/min (0.51 m/sec).		
7	External material are powder coated galvanized steel		
8	Internal materials are stainless steel AISI 304.		
9	Stainless steel work tray (single piece) with front and rear grills.		
10	Typically down-flow velocity is 50-80ft/min (0.25-0.4 m/sec)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
11	Exhaust 100% of total air into the atmosphere after filtration without recirculation in the cabinet or return to the laboratory room air.		
12	Angled (sloped), sliding and sealed front view screen (safety glass sash) with integrated sash height alarm, fully closing with not less than 29" of viewing height and with 8 inches nominal working access opening height.		
13	All contaminated ducts and plenums are under negative pressure or surrounding by negative pressure.		
14	Have Two HEPA/ULPA filters: Downflow and Exhaust HEPA/ULPA filters with efficiency not less than 99.999% MPPS		
15	The air is flow into the cabinet from the Front due to the roof blower and from the Top due to the VFD cabinet blower.		
16	Curved inlet grille to provide a comfortable surface for forearms resting on it		
17	Microprocessor control with a display to show all safety parameters and alarms.		
18	Self-Adjusting airflow to maintains precise air flow for filter loading.		
19	System should contain a negative pressure grills on both interior sides of the work area to prevent loss of containment at the top of the sash		
20	Bright, LED or fluorescent lighting.		
21	Ultraviolet Lamp (UV)		
22	Base Stand (powder coated galvanized steel) with leg leveller, ergonomic adjustable footrest and a Castors with brakes.		
23	Not less than Two factory installed electrical outlets with protective covers 230V,50/60Hz		



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Annex 1: Laboratory Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
24	Stainless steel IV Bar		
25	Right and Left Service Valves		
26	Offer must include a suitable Roof Vacuum Blower (Remote Exhaust Fan) and installing a Dedicated circular steel hard Duct (10 inches diameter or more) with a balancing damper from the Cabinet To the Roof. (Site visit recommended)		
27	Audible and Visual Airflow and automatic shut-off system called the airflow monitor warns when the exhaust airflow decreases.		
28	A list of standard accessories for the offered model		



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Item 2	Automated System For Identification & Susceptibility	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Bench top model		
3	The applications are automated microbial detection & susceptibility system that can detect wide range of gram negative & fastidious organisms		
4	The capacity should be 30 sample /day		
5	The results should be obtained in max 24 hours for identification & susceptibility		
6	Software abilities: a) Expert system for susceptibility results. b) MIC results report. c) Regular updates for CLSI results.		
7	Inoculation and standardization of inoculum included		
8	Printer should be included		
9	Bar code scanner and reader should be included		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
10	The control is PC with original software CD with large data management included		
11	Start-up kit for, All the running requirements for the system including reagents, consumables, electrodes and maintenance kits sufficient for 100 consecutive days at a rate of 10 samples per day. Requirements must be listed in a clear and itemized manner.		
12	Any reagents, kits, calibrations, controls, accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately. Prices fixed for a period of five years from the date of installation, any essential item not listed will be considered free of charge.		
13	Alarm system		



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Annex 1: Laboratory Equipment

Item 3	Automated Microbiological Detection System	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Bench top model		
3	The system can be used to perform following test on the sample platform: a) Blood culture. b) Sterile body fluid culturing. c) Bacterial growth detection.		
4	The capacity not less than 120 bottles		
5	Bottles suitable for adults samples and paediatrics samples		
6	Expandable design enables to add additional module		
7	LCD touch screen		
8	Printer should be included		
9	Power supply 220V/50Hz, UPS should be included		
10	Alarm system		



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Annex 1: Laboratory Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
11	Bar code scanner should be included		
12	The control software consists of PC; include original CD with patient data, managements and LIS compatible.		
13	Start-up kit for, All the running requirements for the system including reagents, consumables, electrodes and maintenance kits sufficient for 100 consecutive days at a rate of 10 samples per day. Requirements must be listed in a clear and itemized manner.		
14	Any reagents, kits, calibrations, controls, accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately. Prices fixed for a period of five years from the date of installation, any essential item not listed will be considered free of charge.		



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Annex 1: Laboratory Equipment

Item 4	CO2 Incubator	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Automatic monitoring and regulation of CO2 content.		
3	Enamel stainless steel cabinet.		
4	Double doors with heat resistant safety transparent glass inner door and outer steel door.		
5	Capacity not less than approximately 170 Lt.		
6	Microprocessor controlled.		
7	Temperature range raise from approximately 5 C° above ambient temperature up to 50C°.		
8	Temperature control adjustment +/- 0.1 C°		
9	Temperature stability +/- 0.1 C° or better		
10	Digital temperature display of set and actual temperature, CO2 concentration, time and humidity.		
11	Infrared CO2 sensor		
12	CO2 concentration range 0.5-10%		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
13	4 stainless steel shelves		
14	Visual and audible alarm for over temperature and over CO2 concentration		
15	A list of standard accessories for the offered model (optional).		



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Item 5	Blood Bank Refrigerator with temperature recorder	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Not less than 5 shelves or drawers. Each drawer divides to chambers ,each chamber suitable for blood bag 500ml		
3	Vertical 1-2. Double glazes door.		
4	Volume not less than 600 litres.		
5	To accommodate not less than 150 blood bag units.		
6	Equipped with alarm system to maintain inside temp 2-6C°.		
7	A list of standard accessories for the offered model (optional).		
8	Temperature monitoring, chart recording and alarm system when temp. Out of range.		
9	4 heavy duty castors, with swivel and brakes and adjustable levelling feet.		



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Annex 1: Laboratory Equipment

Item 6	Blood Drawing Chair	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Chairs should be designated specially for the drawing blood samples from patients.		
3	Durable, powder-coated welded steel tube frame		
4	Bacteriological, chemical and fungal resistant materials		
5	Loading capacity: not less than 150kg.		
6	Two standard add-on work surfaces to accommodate prep materials		
7	The optional drawer easily attaches to either side of the chair		
8	A list of standard accessories for the offered model (optional).		



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Annex 1: Laboratory Equipment

Item 7	Blood Donors Chairs	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Chairs should be designated specially for the collection of blood from blood donors.		
3	Loading capacity: not less than 150kg.		
4	Can be electrically movable to different position.		
5	The chair should be designed for patient safety & comfort.		
6	The chair should be equipped with fully adjustable armrests which should look at the desired distance.		
7	The chair should have adjustable footrest.		
8	The chair should be constructed from a hygienic material which can be easily cleaned.		
9	A list of standard accessories for the offered model (optional).		



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Annex 1: Laboratory Equipment

Item 8	Manual Plasma Extractor	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Blood Components Extractor, Separation of plasma from centrifuged whole blood units.		
3	Compatible with all types of blood bags T&T or T&B ,double ,triple and quadruple bags		



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Annex 1: Laboratory Equipment

Item 9	Centrifuge, Blood Bag	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Refrigerated centrifuge		
3	Floor standing model.		
4	Generates not less than 6000g 4500 rpm		
5	Equipped with; tachometer, thermistor, timer and brake		
6	At least 4 selectable programs (Programmable speed, temperature and acceleration / deceleration)		
7	Rotor to accommodate not less than (12) filled (500ml) blood bags		
8	Brushless drive motor		
9	Magnetic rotor identification		
10	Microprocessor controlled operation with touch keypad		



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Item 10	Centrifuge, Blood Cell Washing	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Application: To be used for automated coomb's test.		
3	The centrifuge and the saline pump are contained in one cabinet.		
4	Built-in with microprocessor controlling a front panel with sensor-touch controls and digital timer for the wash cycle.		
5	Rotational speed: Wash, mix. rpm: ≥ 2500		
6	Decant rpm: ≥ 400		
7	Maximum, RCF, gm: $\geq 780g$		
8	Alert indicators: Audible and visual alarms for lid open, empty wash reservoir, rotor imbalance, electric problem and end of the cycle.		
9	Control: Automatic and manual.		
10	Noise level, dB: ≤ 65		
11	Digital display and microprocessor-controlled operation		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
	with touch keypad		
12	Rotor head and rotor vessels: High quality, Heavy duty		
13	Rotor capacity 24 standard tube (10*75 mm or 12*75mm)		



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Item 11	Bench-top General purpose centrifuge	Qty. (8)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Digital display and microprocessor-controlled operation		
3	Brushless motor		
4	Swing-out rotor		
5	2 buckets each holds five to eight approximately 16x110 mm collection tubes without adaptors or fittings.		
6	2 buckets each holds seven to ten approximately 12x75 mm collection tubes without adaptors or fittings.		
7	No adaptors or inserts in the buckets		
8	Automatic lid lock and interlock with open lid indication light		
9	Built-in digital timer 99 minutes.		
10	Programmable speed at least 5000 rpm. Or a wider range.		
11	A list of standard accessories for the offered model (optional).		



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Annex 1: Laboratory Equipment

Item 12	Deep Freezer, (-30)	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Temperature up to – 20 C°.		
3	For Medical Purposes.		
4	Complete with digital set and actual temperature display and alarm system.		
5	Capacity not less than 650 liters		
6	Standard accessories list.		
7	Temperature monitoring, chart recording and alarm system when temp. Out of range.		
8	4 heavy duty castors, with swivel and brakes and adjustable levelling feet.		
9	Not less than 5 shelves or drawers.		



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Annex 1: Laboratory Equipment

Item 13	Deep Freezer, (-80)	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Temperature up to – 86 C°.		
3	For Medical Purposes.		
4	Complete with digital set and actual temperature display and alarm system.		
5	Capacity not less than 650 liters		
6	Standard accessories list.		
7	Temperature monitoring, chart recording and alarm system when temp. Out of range.		
8	4 heavy duty castors, with swivel and brakes and adjustable levelling feet.		
9	Not less than 5 shelves or drawers.		



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Annex 1: Laboratory Equipment

Item 14	Platelets agitator and Incubator	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Bench top models.		
3	The instrument should maintain inside temperature between 20-24C° and provided with at least one elliptical platelet agitator.		
4	LCD digital display		
5	Incubator provided in outlet power supply.		
6	The agitator completely into incubator side.		
7	Agitator Capacity not less than 100 Random Bags		
8	Microprocessor temperature controller with built-in alarm/monitor and chart recorder		
9	Forced-air circulation maintains chamber uniformity of +/-1°C		
10	Not less than 5 Pull-out Drawers with Label holders		



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Annex 1: Laboratory Equipment

Item 15	Balance Shaker	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	To be used in the collection of blood from blood donors.		
3	Capable of continuous shaking of collected blood.		
4	Displays the collected volume continuously, volume pre-selections from 0-1000 ml.		
5	Automatic switching off with buzzer alarm.		
6	A list of standard accessories for the offered model (optional).		
7	Three dimension movement		
8	Digital display and microprocessor controlled		
9	Suitable for all bag in the market		
10	Easy to clean ,easy removal tray		
11	Standardized blood volume collect by automatic close clamp if max volume time limits reached		



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Annex 1: Laboratory Equipment

Item 16	Water Bath	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Stainless steel tank well insulated.		
2	Heater and temperature sensors mounted underneath the tank and low water level sensor		
3	Corrosion resistant and easy to clean with drain system		
4	Complete with bath cover and handles		
5	Capacity: not less than 15 litres		
6	Adjustable temperature from +25 C° to + 99 C°		
7	Water proof control panel and digital display		
8	Tube racks to hold 12x75mm and 16x100mm tubes, 30-50 tubes, 30-50 tubes/rack		
9	Temperature to be adjusted in increments of 1°C		



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Item 17	Sealer, Tube	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Capable of single thermal head sealer blood bags tubing.		
3	Bench top.		
4	Electrical type heat sealing		



Item 18	ELISA Reader	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Micro plate absorbance reader, to read all types of 96 well plates (8x12 well strip plates).		
3	Capability of self-testing and automatic calibration before each run.		
4	Wave length range to include 400 – 750 nm.		
5	Plate shaking capability.		
6	5 - 6 Standard filters with easy access position filter wheel including at least the following wavelengths: a- (405) nm. b- (450) nm. c- (492) nm. d- (570) nm. e- (620) nm.		
7	Internal printer		
8	Able to measure range (0.000 – 4.000) O.D.		
9	Able to select single or dual wavelength read.		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
10	Able to be interfaced with HIS: RS-232 serial port or USB		
11	Start-up kit.		
12	A list of standard accessories for the offered model (optional).		



Item 19	ELISA Washer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Micro plate ELISA washer, to wash all types of 96 well plates.		
3	Easy-to-use software and Automatic prime feature		
4	Wash heads 8 needles		
5	Wash/Waste Bottle Capacity not less than 2L for wash and waste .		
6	Wash volume 50 to 1000µL		
7	Large color clear display and keypad for easy		
8	Liquid level sensors are present in both wash and waste bottle.		
9	A list of standard accessories for the offered model (optional).		
10	Able to be interfaced with HIS: RS-232 serial port.		



Item 20	Blood Gas Analyser	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Must NOT use one-single pack reagent, long (shelf life and expired date).		
3	Must not use gas cylinders.		
4	Standard accessories list.		
5	Non-cartridge type reagents.		
6	For measuring pH, PO ₂ , PCO ₂ and derivative parameters. Electrolytes (Na ⁺ , K ⁺ , Ca ²⁺ , Cl ⁻)/Haematocrit, Metabolites Glu/Lac/Bilirubin		
7	Co-oximetry (tHb, O ₂ Hb, HHb, COHb, MetHb, SO ₂)		
8	Automatic Calculating HCO ₃ , BE, O ₂ Sat, TCO ₂ .		
9	Maintenance free system		
10	Fully automatic calibrations		
11	Fully automatic clean routine		
12	Built in thermal printer		
13	To accepts syringe and capillary samples		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
14	Samples throughput not less than 30 samples per hour		
15	Temperature controls, clear error messages.		
16	User friendly software		
17	It should support the connection to an internal LAN system or host computer as part of Hospital Information System or Laboratory Information System.		
18	A list of standard accessories for the offered model (optional).		
19	Start-up kit for, All the running requirements for the system including reagents, consumables, electrodes and maintenance kits sufficient for 100 consecutive days at a rate of 20 FULL blood gas samples per day. Requirements must be listed in a clear and itemized manner.		
20	Any reagents, kits, calibrations, controls, accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately. Prices fixed for a period of five years from the date of installation, any essential item not listed will be considered free of charge.		



Item 21	Lab Incubator	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Enamel stainless steel cabinet.		
3	Double doors with heat resistant safety transparent glass inner door and outer steel door.		
4	To include shelves and automatic decontamination cycle.		
5	Capacity not less than 170 Lt.		
6	Microprocessor controlled.		
7	Temperature from approximately ambient to 70°C.		
8	Digital temperature display.		
9	Incorporated backup temperature regulation system.		
10	Visual and audible over temperature alarms		
11	A list of standard accessories for the offered model (optional).		



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Item 22	Dry Air oven, Table top	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Well insulated.		
3	capacity: approximately 150 liter		
4	2 or more shelves.		
5	Stainless steel constructed.		
6	Temperature to be adjusted from 30-130 C°.		
7	Accuracy of 1 C° with temperature faults alarm system.		
8	A list of standard accessories for the offered model (optional).		



Item 23	Ordinary Light Microscope	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	6-fold revolving objective nosepiece, rear facing.		
3	Semi-Apochromatic infinity objectives; 4x, 10x, 20x, 40x and (100x). All objective to be of the same class for use with up to 22mm field of view.		
4	Ergonomic binocular tube, F.O.V. 22mm,		
5	Pair of adjustable eyepieces 10x/22mm. With IPD adjustment.		
6	Transmitted light illumination with collector and halogen lamp not less 30W or LED illumination.		
7	Coaxial double knob focusing and adjustable height stop		
8	Condenser: Swing-out with aperture iris diaphragm with variable Koehler illumination.		
9	Mechanical stage with wide scanning area not less than 75 x 50mm with slide holder for up to two slides.		
10	Simple polarizing set		
11	Filters: Standard set of filter		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
12	Adjustable light intensity		
13	All necessary standard accessories and spares to be included.		
14	A list of additional accessories for the offered model (optional)		



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Item 24	Mixer, Vortex	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Robust single-handed operation.		
2	Vibrating nitrite rubber cup accommodating a variety of sizes of test tubes.		
3	Variable speed control.		



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Item 25	Adjustable Auto Pipettes	Qty. (25 as below)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Incorporated ejector mechanism.		
2	Smooth running piston.		
3	Autoclavable lower parts.		
4	Simple calibration procedure.		
5	Ergonomic hand grip design.		
6	Rotary selector knob with clear volume display window.		
7	To be used with tips from all well-known manufacturers		
8	Volumes range:		
	a- 10 - 100 µl Qty. (5)		
	b- Range: 20 - 200 µl Qty. (5)		
	c- 8 channel Range: 50 -300µl Qty. (5)		
	d- Range: 2 – 20 µl Qty. (5)		
	e- Range: 100-1000 µl Qty. (5)		



Item 26	Refrigerator, Laboratory	Qty. (8)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	The laboratory refrigerator shall store critical products that demand constant temperature such as cultures, media, serum and specimens.		
3	Uniform cabinet temperature range at least +2°C to + 8°C.		
4	Forced-air cooling with automatic off cycle defrost.		
5	Digital temperature display with alarm when out of range.		
6	Heated glass door.		
7	Automatic condensate evaporator.		
8	CFC free compressor.		
9	Stainless steel interior.		
10	Illuminated interior.		
11	Door latches with key lock security and self-closing.		
12	Adjustable shelves.		
13	Temperature monitoring, chart recording and alarm system when temp. Out of range.		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
14	4 heavy duty castors, with swivel and brakes and adjustable levelling feet.		
15	Capacity: not less than 650 Liters.		
16	Standard accessories list		



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Item 27	Semi-Automated Urine Analyser	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Strip samples.		
3	Built-in thermal printer or external.		
4	Throughput not less than approximately 60 strip/ hour.		
5	To measure glucose, protein, Bilirubin, urobilinogen, pH, specific gravity, ketonebody, occult blood (RBCs)(WBCs leukocytes).		
6	Data storage: to store not less than the results of approximately 100 patients.		
7	It should have the ability to be connected to the Hospital Information System and Laboratory Information System.		
8	A list of standard accessories for the offered model (optional		



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Item 28	Electronic Balance	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Range: to weigh 0 up to 1 kg		
3	LCD digital display.		
4	Gross, tare and net functions.		
5	Automatic re-zeroing.		
6	Large stainless- steel weighing platform.		
7	Levelling feet and level indicator.		
8	Automatic self-calibration when ambient conditions change.		
9	Response time: not more than 2 seconds.		
10	Waterproof touch keypad.		
11	Power rating: DC Voltage via an original transformers which works on 220Va.c 50 Hz main electric supply		



Item 29	Lab. Autoclave (Steam Sterilizer)	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Standalone unit on four castors		
3	Top Loading type		
4	Manual hinged door (swing up) with safety locking mechanism		
5	To include at least one pre-set cycle for liquid culture media preparation.		
6	One warming cycle should be included		
7	Effective capacity approximately 50 litres; 8 flasks (1 litre)		
8	Chamber should be made of high quality stainless steel 304 or 316		
9	Digital display of phase, temperature and time.		
10	Manual gauge for pressure monitoring		
11	Minimum installation requirements; no need for external water supply or domestic drain		
12	To include at least one stainless steel wire basket		



Item 30	Fully Automated Immunoassay System (Hormone)	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Brand new Fully Automated Random access immunoassay system and continuous system operation with STAT mode.		
2	Rapid Throughput Up to 80 tests per hour		
3	Wide range of test menu of approximately 18 resident assays to allow any test to be run at any time, round the day		
4	Continuous sample loading no need to stop the system		
5	Reagent On Board Stability 10 days		
6	Sample Capacity not less than 50 samples		
7	Integrated reagent packs with all necessary assay-specific reagents with self-reeling bar-coded packs. (No reagent preparation)		
8	On-board primary pipetting, mixing for both sample and reagents with built-in level detection, and probes cleaning.		
9	Electrochemiluminescent detection technology.		
10	Automatic on board waste disposal		
11	Over 50 available immunoassay diagnostic assays		
12	Sample Types Serum, Plasma, and Urine		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
13	Bar-coded, liquid, ready-to-use reagents – no reagent preparation		
14	Liquid level detection and clot detection		
15	Loading/unloading of samples at any time without interrupting system operation		
16	The reagent disk consists of a minimum of 15 refrigerator reagent positions.		
17	High quality brand name Laser printer (local supplied printers are accepted)		
18	A list of standard accessories for the offered model		
19	Completely built in cooling unit inside the main unit.		
20	All the running requirements for the system including reagents, consumables, electrodes , full quality control daily ,calibration and maintenance kits sufficient 6000 tests for the whole quantity (FT4, TSH, FER and B12), 2000 tests (FSH, PRO, LH and VIT D) , 3000 tests(FOL, and BHCG) , 1000 tests (FT3and Testosterone) and 400 tests (PSA,Cortisol and Estradiol)		
21	Pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include any civil work, R.O. Water system, electrical work and UPS or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s) if required .		
22	It should support the connection to an internal LAN system or host computer as part of Hospital Information System or Laboratory Information System		
23	Service training for 1 biomedical engineer/ technician as per special terms		



Item 31	Fully Automated Clinical Chemistry Analyser High Range	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Brand new Fully automated heavy-duty clinical chemistry analyser floor standing		
2	Discrete and random access processing for routine analysis with stat facility.		
3	Continuous sample loading .no need to stop the system		
4	Accepts sample material of serum, plasma, urine,whole blood ,body fluids and CSF		
5	The system should consist of minimum 50 patient sample positions and stat position should be available and not less than 25 tests available on board for each sample,		
6	The reagent disk consists of reagent position for minimum 25 parameters completely at same time		
7	Ready to use reagents , no need to preparation		
8	No manual pre-treatment of whole blood samples		
9	A minimum throughput of 500 tests/hour without ISE		
10	Sample volume range: 2 - 70 µl		
11	Reagent volume should be not more than 2 - 400 µl on board		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
12	Stability of reagents up to 3 months.		
13	The instrument should have sample and reagent detection, and automatic dilution.		
14	Computer interface and LCD screen and friendly software.		
15	High quality brand name Laser printer (local supplied printers are accepted)		
16	A list of standard accessories for the offered model		
17	Complete with built in refrigerated compartment (Colling unit not external separate unit).		
18	All the running requirements for the system including reagents, consumables, electrodes, full quality control daily, calibration and maintenance kits sufficient as annex. (A).		
19	Pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include any civil work, R.O. Water system, electrical work and UPS or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new systems if required.		
20	It should support the connection to an internal LAN system or host computer as part of Hospital Information System or Laboratory Information System		
21	Bidirectional communication for Hospital Information System or Laboratory Information System		
22	ISO requirements (reagents, documents, calculation, procedures and reference range) must be included upon request		
23	Service training for one (biomedical engineer or biomedical technician) as per special terms.		



Item 32	Fully Automated clinical chemistry Analyser Mid-Range	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Brand new Random Access, fully automated floor standing		
2	A list of standard accessories for the offered model (optional).		
3	A minimum throughput Not less than 300 tests per hour without ISE continuous loading		
4	Continuous sample loading. no need to stop the system		
5	Not less than 25 on-board chemistries		
6	Ready to use reagents , no need to preparation		
7	No manual pre-treatment of whole blood samples		
8	Complete with built-in refrigerated compartment (Cooling unit not external separate unit).		
9	Sample and reagent level detection		
10	Wide variety of automatic selection of not less than 12 visible wavelengths: 340-700nm.		
11	Automatic dilution of abnormal readings		
12	Instrument to be attached to intra-net interface system		
13	Real time of reagent/sample tray reaction status		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
14	Stat sample priority not less than 5 samples		
15	High quality brand name Laser printer (local supplied printers are accepted).		
16	Computer interface and LCD screen.		
17	All the running requirements for the system including reagents, consumables, electrodes, full quality control daily, calibration and maintenance kits sufficient as annex. (A).		
18	Pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include any civil work, R.O. Water system, electrical work and UPS or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new systems if required.		
19	It should support the connection to an internal LAN system or host computer as part of Hospital Information System or Laboratory Information System		
20	Bidirectional communication for Hospital Information System or Laboratory Information System		
21	ISO requirements(reagents, documents, calculation, procedures and reference range) must be included upon request		
22	Service training for 1 biomedical engineer/ technician as per special terms		



Item 33	Fully automated 5 part diff Haematology Analyser	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Fully automated (sampler mode) walk-away system that uses whole blood.		
3	Cap piercing mechanism.		
4	Cyanide-free reagents.		
5	At least 26 parameters including: WBC, RBC, Hb, PCV, MCV, MCH, MCHC, platelets, reticulocytes and etc...		
6	5-part differential of neutrophils, lymphocytes, monocytes, eosinophil's, basophiles absolute and proportional counts.		
7	The possibility to count platelets by more than one method to differentiate them from fragmented red blood cells, and automatic correction of WBC and differential counts.		
8	Histograms for WBC, RBC, platelets and reticulocytes.		
9	Throughput: Not less than 60 samples/h performing CBC + Diff.		
10	Sample volume: not more than 240µl closed tube sampling.		
11	Auto-calibration and auto cleaning of the aspiration probe.		
12	Software for QC programs with capability to connect to the main		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
	network.		
13	Bidirectional communication for Hospital Information System or Laboratory Information System		
14	It should support bar-coded data entry.		
15	Prices of all reagents and consumables required to operate the system to be fixed for five years.		
16	Sample abnormalities to be indicated by abnormal marks or flags or displayed as error messages.		
17	External printer locally supplied as per term 15.3 of the special term.		
18	Start-up kit for all the running requirements for the system including reagents, consumables, piercer, electrodes and maintenance kits sufficient for 4000 samples(CBC&Diff). 1000samples (CBC, Diff and RET) and at least one level quality control daily.		
19	Service training for 1 biomedical engineer/ technician as per special terms		



Item 34	Haematology Analyser 3-part diff	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Automated at least 3-part diff haematology analyser that utilizes whole blood. Not less than 20 parameters including WBC, RBC, Hb, PCV, MCV, MCH, MCHC, and platelets with histograms for WBC, RBC and platelets.		
3	Histograms to be displayed on the screen in the main unit and printed out.		
4	Throughput: Not less than 55 samples / hour.		
5	Cyanide-free reagents for haemoglobin and WBC.		
6	Sample size not more than 100 µl.		
7	Touch screen and barcode reader.		
8	A minimum of 3 quality control files (Low, Normal, and High).		
9	Capability to display Levy-Jennings graphs on screen.		
10	Built-in printer using thermal paper		
11	Memory capacity: Not less than 1000 samples with or without histograms.		
12	Reagents to be supplied in single components not in one pack.		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
13	It should support the connection to an internal LAN system or host computer as part of Hospital Information System or Laboratory Information System		
14	Start-up kit for all the running requirements for the system including reagents, consumables, piercer, electrodes and maintenance kits sufficient for 10000 samples and at least one level quality control daily.		



Item 35	Automated Coagulation Analyser (mid-range)	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Automated, walk-away Bench-top computerized blood coagulation analyser for determination of human plasma coagulation time and other parameters using the clot formation method for detection. The offered model must be the highest end.		
2	Coagulation parameters measurement of at least 8 parameters (PT, PTT, Fibrinogen and D-Dimer).		
3	Temperature-controlled system.		
4	Throughput: Not less than 60 test/hour PT/PTT		
5	Automatic monitoring of reagent levels		
6	at least 25 on board reagents with 15 in cooling area and 5 stirred position		
7	Random access sampling with the capability to run a stat sample at any time.		
8	Programmable clotting assays.		
9	Reliable, accurate results on compromised samples - icteric, hemolytic and lipemic		
10	It should have at least one reagent storage position with one pipette well.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
11	It should have a built in printer or external printer.		
12	Methodologies : clotting ,chromogenic and immunological assays		
13	STAT sample ordering at least 5 samples.		
14	Convenient for all tubes including paediatric.		
15	It should have a bar-code reader.		
16	Bidirectional communication for Hospital Information System or Laboratory Information System		
17	Internal printer or External printer locally supplied as per special terms.		
18	Start-up kit for all the running requirements for the system including reagents, consumables, piercer, electrodes and maintenance kits sufficient for 5000 samples (PT and PTT) with quality control daily.		
19	Service training for 1 biomedical engineer/ technician as per special terms		



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Item 36	Microplate Shaker	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Microplate Shaker is designed for shaking/ mixing liquid samples in microplates (96/384 well) and cell culture plates (24, 48 and 96-well).		
2	Speed range : 200 - 1500 rpm		
3	Audible alarm		
4	Platform for 4 microplates supplied as standard		
5	Digital time setting 1min - 60h		
6	Digital display		
7	brushless motor: Maintenance-free, stable and quiet operation		



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Item 37	Roller Mixer	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	At least 9 rollers design for highly efficient, rocking and rolling action to accommodate up to 10 tubes each.		
2	Recommended for mixing blood samples, viscous substances and liquid-solid suspensions where minimum aeration is required.		
3	Digital readout and display.		
4	Variable speed from 5 to 30 rpm.		
5	Built in digital timer from 1 minute to 9 hours		
6	To be used in incubators up to 60C° and humidity up to 80%, or in cold rooms down to 4C°.		



Item 38	Fully Automated Bench Top Slide Stainer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Fully automated heavy-duty liner slide Stainer to be programmed for H&E routine stain or other special stain.		
3	Multi staining capability with load and unload mode drawers system that can perform H&E, PAP and special staining protocols, alone or in combination.		
4	At least 26 processing stations with at least 20 staining Station.		
5	At least 450mL Reagent container volume		
6	At least 30 slide Loading capacity per run		
7	At least 15 program protocol. Programmable staining time		
8	Selectable incubation periods		
9	Dips agitation process.		
10	Throughput 300Slide /hour		
11	Water save feature.		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
12	At least one integrated oven/slide dryer for one rack with 30°C - 65°C		
13	Complete with its necessary accessories and not less than 6 slide racks.		
14	Fume extraction system, integral fume filter for human and environment safety		
15	Walk away system.		



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Item 39	Double Pan Balance	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	



Item 40	Fully Automated Immunoassay System and Blood Bank Screening	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Brand new Fully Automated Random access immunoassay system and continuous system operation with STAT mode.		
2	Rapid Throughput Up to 80 tests per hour		
3	Wide range of test menu of approximately 18 resident assays to allow any test to be run at any time, round the day		
4	Continuous sample loading no need to stop the system		
5	Reagent On Board Stability 10 days		
6	Sample Capacity not less than 50 samples		
7	Integrated reagent packs with all necessary assay-specific reagents with self-reeling bar-coded packs. (No reagent preparation)		
8	On-board primary pipetting, mixing for both sample and reagents with built-in level detection, and probes cleaning.		
9	Electrochemiluminescent detection technology.		
10	Automatic on board waste disposal		
11	Over 50 available immunoassay diagnostic assays		
12	Sample Types Serum, Plasma, and Urine		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
13	Bar-coded, liquid, ready-to-use reagents – no reagent preparation		
14	Liquid level detection and clot detection		
15	Loading/unloading of samples at any time without interrupting system operation		
16	The reagent disk consists of a minimum of 15 refrigerator reagent positions.		
17	High quality brand name Laser printer (local supplied printers are accepted)		
18	A list of standard accessories for the offered model		
19	Completely built in cooling unit inside the main unit.		
20	All the running requirements for the system including reagents, consumables, electrodes , full quality control daily ,calibration and maintenance kits sufficient 1200 tests for the whole quantity (HBsAg, ,Tbcore total, HCV-Ab, HIV-Ab and Syphilis)		
21	Pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include any civil work, R.O. Water system, electrical work and UPS or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s) if required .		
22	It should support the connection to an internal LAN system or host computer as part of Hospital Information System or Laboratory Information System		
23	Service training for 1 biomedical engineer/ technician as per special terms		



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Annex (A)
Start-up Kits required for Items 31 & 32

	Item 31 (1 Machine)	Item 32 (2 Machines)
BUN	7000	14000
GLU	7000	14000
Na, K	7000	14000
Ca	7000	14000
CREA	7000	14000
Bil-T	7000	5000
Bil-D	2000	-
UA	2000	-
CHOL	4000	-
TRIG	4000	-
PHOS	1000	-
TPRO	11000	-
ALB	2000	-
ALP	7000	5000
ALT	7000	5000
AST	7000	5000
HDL	4000	-
LDL	4000	-
CPK	2000	3000
LDH	1000	-
S-Iro	1000	-
CK-MB	400	600
Amylase	1500	500
HbA1C	3000	-
γ-GT	500	-
CRP	-	1500
RF	-	1200
ASOT	-	900



SPECIAL TERMS

- Offers not complying with any of the special terms or the technical specifications shall be considered non-conforming with tender requirements.
 - Any vendor providing FORGED documents shall be disqualified from the current tender and banned from participating in any future RMS tenders.
 - Wherever term “based” is mentioned it refers to the country where the manufacturing company is founded & established.
1. All equipment must be the most recently released model/version which is equal to or higher than the range of the specifications of the required system (low, mid or high) and equal to or higher than the level of technology and required options mentioned in the technical specifications.
 2. Required certificates (must be submitted with the technical offer):
 - 2.1 FDA clearance (510K) for equipment of USA based companies.
 - 2.2 MDR (EU) 2017/745 certificate for equipment of EU (European Union) based companies.
 - 2.3 UKCA certificate For Equipment of Great Britain based companies (England, Scotland, Northern Ireland, and Wales).
 - 2.4 ARTG (Australian Register of Therapeutic Goods) certification or approval for Australian and New Zealand based companies.
 - 2.5 Establishment License with the relevant Device License issued by the Therapeutic Products Directorate for Equipment of Canadian based companies.
 - 2.6 PMDA (Pharmaceuticals and Medical Devices Agency) certification or approval for equipment of Japanese based companies.
 - 2.7 Swissmedic (Swiss agency for therapeutic products) certification or approval for equipment of Swiss based companies.
 - 2.8 Norwegian Medicines Agency certification or approval for equipment of Norwegian based companies.
 - 2.9 Only for class I medical equipment manufactured by companies based in one of the countries mentioned above, submission of either one of the certificates mentioned above or a free sale certificate in any of these countries shall be accepted.

2.10 For the following equipment:



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- All X-ray equipment, MRI, ultrasound, and nuclear medicine systems (regardless where the manufacturing companies are based).
- Where the manufacturing companies are based in other origins than the mentioned in terms 2.1 - 2.8.

The following are required:

- a- At least two of the certificates mentioned above, one of which has to be FDA clearance (510K) (Only for class I medical equipment submission of certificates mentioned in 2.9 shall be accepted).
- b- Evaluation certificate from the Royal Medical Services for the same offered model with at least 80% passing grade.

If the evaluation is not applicable (based on purchasing committee perspective) bidder should submit a list of installation basis of the same offered model and/or previous models in at least two of the following hospitals (King Hussein Cancer Center, National Center for Diabetes Endocrinology and Genetic Diseases, Jordan University Hospital or King Abdullah University Hospital) with at least three years of operation, list should include: Name of hospital, Model installed, Quantity, and date of installation.

The purchasing committee has the right to officially contact any of these hospitals and disqualify any offer where the feedback is negative in operation, after sales service or local agent performance.

2.11 *The vendor is responsible to ensure through official documents that classified medical devices are manufactured in conformity with applicable quality system standards (ISO, IEC); (the international quality systems standard for medical device manufacturing ISO 13485) or ISO9001.*

2.12 *With each offer, bidders must provide a formally endorsed document issued by the manufacturer stating that the bidder is the sole certified agent for the offered item.*

2.13 *In all of the above cases (except 2.12) certificates must be formally endorsed by JFDA.*

2.14 *Any vendor not submitting all required certificates will be eliminated.*

3. *Official website of the manufacturer must be provided. The website must clearly demonstrate the history profile and manufacturing features of the company including the same offered model and its brochure.*

In case of inconsistency between the information on the website with the provided information of the local agent regarding any offered product, the committee has the right to eliminate that product from the awarding process.



4. *Offered items should be from reputable well known manufacturers and excellent experience in the field and shall have multiple installations of the same offered model and/ or previous models in RMS main hospitals with at least two years of operation and excellent experience in operation, after sales service & local agent performance; otherwise the purchasing committee has the right to request any of the following:*

- a) An evaluation certificate as mentioned in term 2.10.b.*
- b) A sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification; any vendor rejects to deliver a sample unit will be eliminated. Evaluation duration will be determined by the purchasing committee.*

Any offered item fail in the evaluation/assessment process will be rejected

- 5. *Vendors must specify the origin of the offered items and accessories in the technical offer.*
- 6. *Bidders must submit their reservations/queries regarding tender specifications and/or special terms within the first half of the tender closing period starting from the tender announcement date. Reservations/queries submitted after the end of this period shall be rejected.*
- 7. *Goods are to be brand new; manufacturing date of the delivered products should not exceed 18 months from the date of the final award.*
- 8. *Delivery period should be mentioned clearly; the purchasing committee has the right to reject any offer with delivery time exceeding 4 months.*
- 9. **Warranty:**

- a- Offers must include a full warranty for a period of a minimum of 24 months from the date of installation or 30 months from the date of receiving the items at the agreed location mentioned in the final order (whichever comes first).*

Warranty must include corrective & preventive maintenance activities as per manufacturer recommendations including:

- Required spare parts (free of charge)*
- Labour*
- Hardware*
- Software*
- Rechargeable batteries*

At the end of the warranty period, The supplier commits to implement final inspection of the submitted goods and submit the reports signed by the site chief engineer stating that the equipment are working properly as well as all preventive maintenance reports during the warranty period.



Warranty & installation are excluded for items mentioned in Attachment no.1 the purchasing committee has the right to exclude any other item not listed in the attachment and does not required installation and warranty.

- b- In the case where a delay in installation has occurred as a result of the supplier's dereliction and has exceeded a period of one month from the date of receiving the items, the approved warranty period will automatically be considered as 24 months from the date of installation.***
- c- If at any time during the warranty period the item becomes inoperative due to a technical fault the item must then be repaired by the supplier /local agent within a period of 5 working days from written notification, warranty will be extended according to downtime period.***
- d- If the delay exceeds 30 days the supplier must replace the item with a new identical functioning one (within the same delivery period mentioned in the final offer). In case the item was replaced by a new one, the warranty period mentioned in 9.a) above will start from the installation and commissioning date of the new item.***
- e- Local agent/ supplier is committed to transport and install any awarded item during the warranty period on free of charge basis to any location inside the country whenever required by Royal Medical Services, this should not include pre-installation requirements in the new site.***

10. All offered items (main unit) should be fully designed, manufactured, and labelled by their real original manufacturer in which all related testing, research, development and approvals went through.

Any relabelled products for the main unit (white-label manufacturing, OEM, or repackaging) are rejected.

11. One set of operation manual(s) and one set of service manual(s) including schematics and a spare-part list must be delivered with each unit, CD/DVD is acceptable. For large tenders, a certain agreed percentage of manuals per item may be agreed upon.

12. Where applicable, pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include removal of old system(s), any civil work, electrical work or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s).



13. **Power requirements:** where applicable either single phase 220V, 50Hz or 3-phase 380V. Systems with external transformers are considered conforming only if clearly stated in the technical specifications.
14. **Technical offers must include clear original technical brochures/catalogues for all offered items.**
15. **Offers must include fully detailed technical offers and compliance sheets as a soft copy (either Microsoft office or Microsoft excel format) in addition to a hard copy, mentioning the exact model/catalogue number and country of origin of the offered item(s), full technical description/specifications and any accessories or options included in the offer.**
- Offer must clearly indicate the origin of the offered item and the country where the manufacturer of the offered items is based.**
16. **Compliance sheets must be as per the tabular format of the technical specifications in the tender documents, listing the required specifications on one column and a Yes or NO response to each point in the adjacent column, with reference to page and line numbers in the relevant technical brochure. Offers not complying with this term shall be rejected.**
17. **Qualifications and after sales service:** The technical bid should contain all the necessary documents (training certificates) to prove the capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specifications of the manufacturer and the ability of the bidders for providing efficient after sales service conducted by authorized certified biomedical service engineers with minimum 2 years experience in the same field.
18. **Accessories and consumables:**
- 18.1 **Any accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately.**
- All offered accessories and consumables must be approved by the manufacturer.**
- 18.2 **Technical offers must include a priced list for all accessories and consumables related to the required equipment as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) with prices fixed for a period of five years from the date of installation and commissioning with a maximum annual increase of 2%, any essential item not listed will be considered free of charge.**
- 18.3 **Accessories and consumables must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.**
- 18.4 **Where applicable, a start-up kit of accessories and consumable items must be provided with each system on a free-of-charge basis.**
19. **Spare Parts:**



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- 19.1 *Technical offers must include a comprehensive and priced list of all spare parts related to the awarded equipment (including rechargeable batteries) as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) valid for a minimum period of five years with a maximum annual increase of 2%, commencing at the end date of the warranty period, any essential item not listed will be considered free of charge.*
- 19.2 *Spare parts must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
- 19.3 *Prices of spare parts should be reasonable and will be taken into consideration during the purchasing process; the purchasing committee has the right to eliminate any offered item with unreasonable high prices of spare parts.*
- 19.4 *Delivery period of required spare parts should not exceed 2 months from the date of the final order.*
20. *Spare parts, consumables and accessories availability must be guaranteed for a minimum period of ten years starting from the date of installation and commissioning.*
21. *Local agent is committed to sign a service contract with Royal Medical Services to perform all relevant maintenance for the awarded equipment (whenever required by DRMS within a period that does not exceed one year from the end date of the warranty period and if mentioned clearly in the specifications) without exceeding the original mentioned cost and as per mentioned terms within minimum required period.*
22. **Tender Awards:**
- 22.1 *For the final list of offers having a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its' running cost (Total Cost of Ownership) over a period of seven years from the date of installation and commissioning. Only offers with the lowest total cost of ownership over a period of seven years from the date of installation and commissioning shall qualify for the award.*
- 22.2 *Running cost includes the value of consumables, accessories needed to operate the system over the same period as well as the cost of any service contract (where applicable).*



23. For PC/Laptop based systems:

- 23.1 Complete restoration medium (CD/DVD/etc.) of the operating system and the application software must be supplied.**
- 23.2 Purchased licenses, software keys & dongles must be provided at any time during and after the warranty period on free of charge basis whenever required by DRMS for a minimum period of ten years starting from the date of installation and commissioning.**
- 23.3 Where locally supplied computers, laptops & printers are offered, the offered model should be from well known manufacturer.**

24. Pricing must include services of sale, shipment, transportation, delivery from port to site or to Main Medical Stores, installation, pre-installation (if needed), training, commissioning, warranty and bringing the equipment into service.

25. Custom clearance of goods shall be the responsibility of the Jordanian Armed Forces (JAF), however, suppliers shall bear all costs incurred by handling charges and any demurrage charges or extra expenses incurred by the port's corporation (including expenses caused by delay in presenting the necessary shipment documents for either clearing or transporting the goods to the required location mentioned in the final order, delivery note issuing charges, unloading charges, local shipping charges etc.). The supplier is also responsible for providing of all relevant shipping documents, together with the delivery order(s).

26. a. DRMS has the right to increase the awarded quantities by a percentage not exceeding 35% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.

b. DRMS has the right to decrease the awarded quantities by a percentage not exceeding 50% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.

27. a. Bidder is not allowed to submit more than one offer for the same item whether that's solely or in coalition or partnership with other bidders.

b. Bidder is allowed to include within their offer optional alternatives for the same offered item from the same manufacturer.

28. The supplier must furnish DRMS with a guarantee stamped and legalized by the Notary Public equals to (115%) of the total value of the awarded equipment valid for twelve months from the date of final acceptance of the equipment by DRMS.



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29. Training:

- 29.1 For items where abroad service training courses are required in technical specifications, offers must include a certified service training program for at least 3 working days at a reputable center abroad recognized by the manufacturer for at least one biomedical engineer or biomedical technician; all costs inclusive, air tickets, , boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.
- 29.2 For items where abroad user training courses are required in technical specifications, offers must include a certified operator training program at a reputable center abroad recognized by the manufacturer for at least one operator; all costs inclusive, air tickets, boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.
- 29.3 The period of the training courses must be according to the manufacturer's program excluding traveling days and must be stated clearly in the technical offer.
- 29.4 Training Programs must conform to the following standards:
- User training must comprise understanding and use of operation manual(s), correct and safe operation of the equipment, as well as user preventive maintenance and calibration.
 - Service training must comprise: theory, understanding and use of service manual(s), calibration, preventive maintenance procedure, and practical troubleshooting and repair exercises, and must be conducted by professional instructors employed or authorized by the system manufacturer.
 - Service training must be conducted on a system of identical make, model, and configuration to that purchased by DRMS, and designated by the manufacturer or the local agent for training purposes.
 - Certificates must be endorsed and officially sealed by the system manufacturer, legally empowering trainees to engage in user and service activities according to operation and service manual(s).
 - Where applicable, offers must include an on-site user and service training.

30. For offers submitted in Jordanian dinars, payment will be either by wire transfer or by cheque after final acceptance of good, any other way of payment will be rejected.



Attachment 1

#	Equipment
1	Adjustable Auto Pipettes
2	Resuscitation Bag
3	Laryngoscope Set
4	Oxygen Flow meter wall type/ single
5	Regulator Suction with canister, wall vacuum outlet
6	Oxygen Regulator for Oxygen Cylinders
7	Pulse Oximeter, Finger type
8	Oxygen Cylinder
9	Doppler, portable
10	Diagnostic set, Portable
11	Direct Ophthalmoscope, Portable
12	Otoscope, Portable
13	Air Mattress System, homecare
14	Stethoscope
15	Aneroid Sphygmomanometer
16	Video Assisted Laryngoscope, portable
17	Scale, Manual
18	Wood's Light
19	Cough Pressure, Normal Saline
20	Rehabilitation Walking Parallel Bars, non-powered
21	Therapy Mat
22	Medical Ball All Size
23	Dumbbells Rack with complete set of dumbbells
24	Crutches
25	Shoulder wheel
26	Mobile Mirror
27	Cuff Weights
28	Walker, different sizes
29	Patient Elbow Stick
30	Rehabilitation Training Ladder
31	Rehabilitation Suspension Frame
32	Exercise Band All Size (Theraband)



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33	<i>Lens trial set</i>
34	<i>Wheel Chair</i>
35	<i>Commode Chair</i>
36	<i>Bassinet (Baby Cot)</i>
37	<i>Resuscitation Cart (Crash Cart)</i>
38	<i>Medication Cart</i>
39	<i>Cart, Drawers</i>
40	<i>Examination Couch, Manual</i>
41	<i>Gynaecology Examination Table, Manual</i>
42	<i>Examination Table, Neonates, Manual</i>
43	<i>Intravenous Pole, Mobile Stand</i>
44	<i>DDA Cabinet</i>
45	<i>Stainless steel Multipurpose Trolley</i>
46	<i>Cabinet, Instrument, Operation Theatres</i>
47	<i>Dressing Cart</i>
48	<i>Stainless steel wire shelving unit</i>
49	<i>Paper Trolley</i>
50	<i>Stainless Steel Sink (Clean up counter)</i>
51	<i>Scopes Cabinet</i>
52	<i>Mayo Table</i>
53	<i>Table, Instrument</i>
54	<i>Stool, Adjustable, Doctor</i>
55	<i>Stool, Adjustable, Operation Theatres</i>
56	<i>Carts, linen/laundry, soiled, Double</i>
57	<i>Closed distribution trolley</i>
58	<i>Step Ladder, Conductive, Double</i>
59	<i>Step, Surgeon, Single</i>
60	<i>Kick Bucket</i>
61	<i>Mobile Stand for Oxygen Cylinder</i>
62	<i>Stainless Steel Wire Basket, 1 STU</i>
63	<i>Cart, Plaster</i>



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Annex 2: Mobile Equipment

Item 1	Adult / Paediatric ICU Ventilator	Qty. (18)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well known manufacturer		
2	General Features		
	a- Minimum 15 inch <u>swivable</u> TFT colour touch-screen <u>mounted above the trolley</u>		
	b- Application: ICU, Adult & paediatric, Invasive & non-invasive Neonate option should be available and quoted separately (if not included)		
	c- Should operate on central gas sources (oxygen and medical air)		
	d- Ergonomically designed		
	e- Construction: robust, corrosion resistant and spill proof		
	f- Flow sensor: Bidder should state clearly if the flow sensor is disposable or reusable; price of the disposable flow sensor should be mentioned in the technical offer and fixed as per special terms		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	g- Oxygen sensor: - Type of oxygen sensor should be stated clearly - Price & lifetime of oxygen cell should be mentioned clearly in the technical offer and fixed as per special terms		
	h- Open system for patient circuits		
	i- Self-test capability		
	j- Trolley: heavy duty stable design with medical grade castors and articulated flexible arm to hold patient circuit		
	k- Gas hoses (Air and Oxygen): - Original make - Colour coded - Fitted with British Standard probes		
	l- Humidifier: - Dual servo controlled type - Heated with automatic water filling - Temperature and fluid level alarms - All required accessories needed to operate the unit should be included		
	m- Medical grade compressor: - Qty. (9) of the total quantity and to be priced separately - Should operate automatically when the pressure of the central air line is decreased below a specific level - Should be mounted on the same trolley of the ventilator		
	n- Upgradability: - Software upgradeable - Hardware upgradeable		
3	Operating Modes		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	a- Assist / Control mode: volume and pressure		
	b- SIMV modes: volume and pressure		
	c- Spontaneous / CPAP mode		
	d- Non Invasive Ventilation: Nasal CPAP or Mask		
	e- Apnea back-up ventilation		
	f- Automatic leak compensation		
	g- Bi-level and high flow ventilation modes should be quoted separately (if not included)		
	h- Adaptive ventilation mode: please specify function		
	i- Additional modes and tools: any additional/ optional modes should be mentioned and quoted		
4	Controls /Settings Ranges		
	a- Tidal volume (ml) range to cover a minimum of 25-2000		
	b- Inspiration time, sec: to cover the range 0.2 -5 or better		
	c- Peak flow (L/m): Minimum range 3-100 or better		
	d- Inspiration pressure (cmH2O): Minimum range 5-80 or better		
	e- Inspiration hold/plateau ≥ 2 sec		
	f- Respiration rate (breaths/minute): Minimum range 5-80 or better		
	g- I:E ratio: 1:8 to 4:1 or better		
	h- FIO2: 21-100%		
	i- PEEP (cmH2O):minimum range 1-30 or better		
	j- Pressure support(cmH2O): Minimum range of 0-50		
	k- Nebulizer: built-in		
	l- Trigger mechanism to be pressure or flow		
5	Monitored / Displayed Parameters		
	a- PEEP pressure		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b- Pressure data: Peak / plateau /mean		
	c- Respiratory rate		
	d- FIO2 %		
	e- Expiratory minute volume		
	f- Tidal volume		
	g- Leak		
	h- Flow		
6	Patient Alarms Audible and visual alarms for monitored parameters (user adjustable) :		
	a- Low / high FiO2		
	b- High/Low minute volume		
	c- High/Low tidal volume		
	d- High airway pressure		
	e- High respiratory rate		
	f- Apnea time		
7	Equipment Alarms		
	a- Gas supply loss		
	b- Mains Power failure		
	c- Ventilator inoperative		
	d- Patient circuit disconnection		
	e- Low battery		
	f- Continuous audible alarm for at least one minute in case of mains power failure even when the battery is depleted		
8	Electric Requirements		
	a- Mains: 220 Volts A.C, frequency 50 Hz		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b- Backup Battery: - Back-up time for settings and operation: minimum of 30 minutes - Batteries should be easy replaceable - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else its price of the battery should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period - Any required battery conditioner should be included		
9	Preventive Maintenance - should be the sole responsibility of the supplier during the warranty period including all required service parts/kits - It should be conducted as recommended by the manufacturer		
10	Standard Accessories List all standard accessories required for commissioning the system and indicate if they are included in the main unit price		
11	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its' running cost (flow sensors, oxygen cells, etc....) over a period of seven years as per special terms (Total cost of ownership)		
12	Optional Accessories List all optional accessories and price them separately including medical grade air compressor		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
13	Gas Analyser: Offer must include one gas analyser (priced separately) - From well-known manufacturer - One compact unit with the ability to measure the following: - a- High & low pressure - b- Flow - c- Ultra low flow - d- Ultra low pressure - e- Oxygen measurement - f- Tidal volume - g- Temperature - h- Humidity - Analyser should be compatible with ventilators from at least the following manufacturers: Hamilton, GE, Draeger, Puritan Bennett Nihon Kohden, Bellavista, Stepahn , Newport & Maquet - All accessories needed to run the analyser should be included		
14	Abroad service training for 2 biomedical engineers/ technicians as per special terms		



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Annex 2: Mobile Equipment

Item 2	Transport Ventilator, Adult, Paediatric & Neonatal	Qty. (5)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well known manufacturer		
2	General Features		
	a- Application: Adult / Paediatric/transport ventilator Qty. (2) of the total quantity should be suitable to neonatal patients		
	b- Microprocessor controlled		
	c- Construction: Spill proof, Robust and corrosion resistant		
	d- Self-test capability		
	e- Trolley: - Stable design to prevent tipping over - Medical grade castors - Fitted with oxygen cylinder tray		
	f- Open system for patient circuits		
	g- Built in durable low noise turbine		
	h- Ability to operate on high pressure sources		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	i- Unit must be easy to dismount from the trolley and carry around, or place on patient stretcher.		
	j- Gas hoses (Oxygen) - Original make - Colour coded - Special hose for connection to oxygen cylinder		
	k- Display: Min 8 inches, TFT full colour, touchscreen		
	l- An upper handle to easily transport the ventilator.		
3	Ventilation Modes and Functions		
	a- Assist / Control mode: volume and pressure		
	b- SIMV		
	c- Spontaneous CPAP		
	d- Pressure support ventilation		
	e- Additional modes: please specify		
4	Controls and Settings		
	a- Tidal Volume (ml): minimum range for adult/ pediatric: (50-2000) ml minimum range for neonates: (5-200) ml		
	b- Inspiratory flow (l/min) minimum range : 10-80 L/min		
	c- Respiration rate (bpm): (5-50) or better		
	d- Inspiratory time: specify		
	e- Pressure control: min range 5-50 cm H ₂ O		
	f- PEEP: min range 0-20 cm H ₂ O		
5	Control Panel for Parameters		
	a- Inspiratory time		
	b- I:E ratio		
	c- PEEP		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	d- Respiration frequency / minute		
	e- FiO ₂		
	f- tidal volume		
6	Patient Alarms		
	Audible and visual user adjustable alarms for :		
	a- Low / high inspiratory pressure		
	b- Low / high FiO ₂		
	c- High/Low tidal volume		
	d- Apnea time		
	e- Breathing circuit disconnection		
7	Equipment Alarms		
	a- Low battery		
	b- Gas supply loss		
	c- Power failure		
	d- Ventilator inoperative		
	e- Continuous audible alarm for at least one minute in case of mains power failure even when the battery is depleted		
8	Electric Requirements		
	a- Mains: - Voltage: 220 V a.c. - Frequency: 50 Hz - Power cable: original British standard cable and plug - Ability to work on ambulance power outlet		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b- Battery: - Back-up time for settings and operation not less than 4 hours - Batteries should be easy replaceable - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else its price should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced on a free of charge basis during the warranty period - Any required battery conditioner should be included		
9	Standard Accessories List all standard accessories required for commissioning the system and indicate if they are included in the main unit price		
10	Optional Accessories List all optional accessories and price them separately including oxygen cylinders		



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Annex 2: Mobile Equipment

Item 3	Combined Conventional Neonatal ICU & High Frequency Ventilator	Qty. (8)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	From a reputable well known manufacturer		
B	General Features		
	1. Application: combined neonatal/Infant ICU Ventilator with high frequency ventilation mode		
	2. Microprocessor controlled		
	3. Self-test capability		
	4. Trolley: a. Stable design b. Fitted with articulated flexible arm to hold patient circuit		
	5. Gas hoses (Air and Oxygen) a. Original make b. Colour coded c. Fitted with British Standard probes		
	6. Heat and Humidification system		
	7. Low noise		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	8. Flow sensor: Bidder should state clearly if the flow sensor is disposable or reusable; price of the disposable flow sensor should be mentioned in the technical offer and fixed as per special terms		
	9. Oxygen sensor: - Type of oxygen sensor should be stated clearly - Price & lifetime of oxygen cell should be mentioned clearly in the technical offer and fixed as per special terms		
	10. Patient circuit: bidder should state clearly if the machine is closed or open system for the patient circuits and if they are disposable or reusable		
C	Ventilation Modes and Functions		
	1- Ability to support patients with weight as small as 400 grams		
	2- High frequency ventilation in the range of 300-900 bpm (5-15 HZ)		
	3- Modes: - a- High frequency oscillation ventilation (HFOV) - b- SIMV - c- CPAP and Nasal CPAP - d- Assist Control - e- Volume guaranteed ventilation for all new-borns		
D	Controls and Settings		
	1- PEEP pressure: 0-30 mbar min range		
	2- Mean airway pressure: 5-30 cm H ₂ O or better		
	3- Oscillatory pressure: 5-60 cm H ₂ O or better		
	4- FiO ₂ : 21% to 100%		
	5- Tidal volume: 4 - 100 ml or better		
	6- Respiratory rate: 1 - 100 b/min		
	7- Inspiratory pressure: 5 – 80 mbar or better		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	Monitored / Displayed Parameters		
E	1- Screen Configuration: - a- Type: colour TFT or colour LCD - b- Medical Grade - c- Size: ≥ 12 inches - d- Display of data and curves		
	2- Pressure data: Peak or Pmax/plateau/mean		
	3- PEEP pressure: graphical and alphanumeric		
	4- Expiratory tidal volume		
	5- Expiratory minute volume		
	6- Respiratory rate		
	7- Fio2		
	Patient Alarms Audible and visual user adjustable alarms for monitored parameters displayed on main screen as follows:		
F	1- Low / high FiO2		
	2- Low / high minute volume and tidal volume		
	3- Low / high pressure		
	4- High PEEP		
	5- Apnea time		
	6- Breathing circuit disconnection		
	Equipment Alarms		
G	1- Ventilator inoperative		
	2- Gas supply loss		
	3- Power failure		
	4- Low battery		
	5- Continuous audible alarm for at least one minute in case of mains power failure even when the battery is depleted		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	Backup Battery: - Back-up time for settings and operation not less than 30 minutes. - Batteries should be easy replaceable - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else its price of the battery should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period - Any required battery conditioner should be included		
H	Spare Parts List List of spare parts should include but not limited to the following: - Back-up battery - Display - Power supply board - O₂ cell - Main control board Prices of spare parts will be taken into consideration during the purchasing process		
I	Standard Accessories List all standard accessories required for commissioning the system and indicate if they are included in the main unit price		
J	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its' running cost (flow sensors, oxygen cells, patient circuits etc....) over a period of seven years as per special terms (Total cost of ownership)		
K	Abroad service training for 1 biomedical engineer/ technician as per special terms		
M			



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Annex 2: Mobile Equipment

Item 4	BIPAP (Bi-level Positive Airway Pressure)	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	From a reputable well known manufacturer		
B	General Features		
	1- Application: Adult & Paediatric		
	2- Dedicated for hospital use		
	3- Microprocessor controlled		
	4- Trolley: a. Stable design to prevent tipping over b. Medical grade castors c. Fitted with articulated flexible arm to hold patient circuit		
	5- Gas hoses a. Original make b. Colour coded c. Fitted with British Standard probes GEM-10		
	6- Heat and Humidification system (open system): Either integrated or with auto filling water chamber		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	7- With built-in turbine		
	8- Display: Min 10 inches, TFT full colour, touchscreen		
	9- Backup Battery: - Back-up time for settings and operation not less than 1 hour - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else it price of the battery should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period - Any required battery conditioner should be included		
C	Ventilation Modes and Functions		
	1- Proportional Assist Ventilation (PAV)		
	2- Spontaneous / Timed Bi-Level ventilation		
	3- CPAP		
D	Controls and Settings		
	1- IPAP: 5-30 cm H ₂ O approximately		
	2- EPAP: 5-25 cm H ₂ O approximately		
	3- CPAP: 4-20 cm H ₂ O		
	4- Respiration rate (bpm): $\geq 4-30$		
	5- Inspiratory time (sec): 0.5-3.0		
E	Special Features		
	1- Adjustable Oxygen concentration up to 100%		
	2- System alarm capability		
	3- System must be able to compensate for leaks up to 60 L		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
F	Equipment Alarms		
	1- Gas supply loss		
	2- Power failure		
	3- Machine inoperative		
G	Accessories & Consumables: All required accessories & consumables needed to run the equipment should be listed priced separately		
H	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its' running cost over a period of seven years as per special terms (Total cost of owner ship)		



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Annex 2: Mobile Equipment

Item 5	Nasal CPAP Ventilator for Neonates (Bubble CPAP)	Qty. (10)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	From a reputable well known manufacturer		
B	General Features:		
	1- Application: Neonatal and premature use		
	2- Trolley: - Stable design to prevent tipping over - Medical grade castors		
	3- Gas hoses (Air and Oxygen) - Original make - Colour coded - Fitted with British Standard probes		
	4- Heat and Humidification system, with auto filling water chamber (humidifier)		
	5- Low noise operation		
	6- Alarm in case of gas supply loss		
C	Ventilation Modes and Functions: Non-invasive nasal CPAP with drive machine or bubble CPAP		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	technique		
D	Controls and Settings:		
	1- Adjustable flow: 0-15 l/m min or better		
	2- CPAP pressure range: adjustable up to 10 cmH ₂ O		
	3- Blending of air/oxygen: 21-100%		
E	Standard Accessories:		
	1- List all standard accessories required for commissioning the system and indicate if they are included in the main unit price		
	2- With each unit the following is required and priced separately: • 3 sets of disposable circuits • Different sizes of nasal prongs and masks to fit various patient sizes • Any other necessary accessories needed to connect and fix the patient to the machine		
F	Optional Accessories: List all optional accessories and price them separately		



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Annex 2: Mobile Equipment

Item 6	High Flow Nasal Cannula Machine	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The unit is dedicated to treat signs and symptoms of respiratory distress including dyspnea, hypoxia and respiratory distress syndrome (R.D.S) in neonates.		
2	Digital display of FiO ₂ , temperature and flow		
3	Integrated blender and humidifier		
4	Temperature control: 34-42 °C ± 1 °C		
5	Oxygen percentage control: 21%- 100%		
6	oxygen inlet (BOC)		
7	Adjustable flow rate up to at least 40 L/min		
8	Audio visual alarms		
9	Mounted on high quality mobile stand		
10	All consumables required for commissioning the system should be listed and priced separately (circuits and nasal cannulas of all sizes and any other consumables)		



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Annex 2: Mobile Equipment

Item 7	Spirometer (Pulmonary Function Analyser), Portable	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Compact, lightweight portable type with durable case.		
2	Paediatric and adult applications.		
3	Measurement device: Bi-directional Pneumatic or Ultrasonic technology.		
4	Volume range, L: Approx. 0-15.		
5	Accuracy: $\pm 3\%$ or better.		
6	Flow range, L/sec: Approx. 0-14.		
7	Large, easy to read LCD screen display of data and graphs.		
8	Displayed data: Flow/volume graph, volume/time graph, flow loop, measurement values table, and trend display.		
9	Plots: Timed spirogram and Flow-volume loop.		
10	Procedures/Parameters evaluated: at least FEV1, FVC, and PEF.		
11	Actual, normal, and % normal report types.		
12	Predictive equations: please specify.		
13	Large, easy to read LCD display of data and graphs.		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
14	Respiratory status/diagnosis.		
15	Effort protocol : AST		
16	Hard copy reporting through built-in printer.		
17	Built-in rechargeable battery to run the unit for approx. 4 hours, Battery should be replaced in free of charge basis during the warranty period		
18	Calibration pump should be included if required		
19	A full set of consumables/accessories to run tests for 100 patients must be quoted separately		
20	A list of standard accessories for the offered model		



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Annex 2: Mobile Equipment



Item 8	Chest Percussor Vibrator	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	For use in respiratory therapy applications to help loosen thick mucus in the lungs.		
2	Variable speed range approximately 20-50cycles / second or better.		
3	Equipped with digital timer .		
4	Digital or graphical display of cycle/sec and time.		
5	Complete with all required applications for mucus removal application.		
6	Mounted on heavy duty sturdy mobile stand .		
7	Any accessories to be listed and priced separately.		



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Annex 2: Mobile Equipment

Item 9	Ultrasonic Nebulizer	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty construction, continuous operation		
2	Electrically powered: without external power supply		
3	Capable of delivering small amounts of drugs.		
4	Autoclavable chambers and patient tubes.		
5	Light weight (maximum 5 kg without trolley)		
6	Automatic fault localization and cut-off.		
7	Digital display of nebulizing time		
8	Flexible arm support (for aerosol hose)		
9	Flat touch panel to power on/off the unit, adjust nebulizing time and intensity.		
10	Antibacterial filter.		
11	Nebulizing capacity adjustable: 0-4.5 ml/min.		
12	Nebulizer chamber capacity: not less than 500 ml		
13	Liquid particle size = 6 µm or smaller		
14	One extra Nebulizer set.		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
15	One heat-able aerosol hose.		
16	Complete with original trolley on 5 castors.		
17	All accessories including adult and paediatric accessories must be included in the offer.		
18	A list of optional accessories for the offered model.		



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Annex 2: Mobile Equipment

Item 10	Resuscitation Bag (different sizes)	Qty. (62 adult) (32 Paediatric) (21 neonatal)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, comfortable and reliable single layer bag		
2	Complete with reservoir bag, pressure relief valve, reservoir one way valve and air cushioned face mask		
3	All parts (mentioned above) should be easily assembled/ disassembled, easy to clean and disinfect and autoclavable at 134° C		
4	All parts mentioned above should be made silicon made and latex free.		
5	100 % O2 concentration (supply delivery) with O2 accumulator.		
6	a- Adult size Qty. (62) b- Paediatric Size Qty. (32) c- Neonatal Size Qty. (21)		
7	All accessories to be mentioned and priced separately.		



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Annex 2: Mobile Equipment

Item 11	Haemodialysis Machine	Qty. (9)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Acetate and bicarbonate (dry and solution) modes		
2	Automatic built in calculations		
3	Automatic self-test.		
4	Venous pressure monitor		
5	Arterial pressure monitor		
6	Blood leak detector		
7	Air bubble detector		
8	Dialyser inlet pressure monitor (preferred)		
9	Clear alarm indicators (audio & visible)		
10	LCD display		
11	Chemical, hot chemical disinfection modes		
12	Automatic priming and rinse disinfection		
13	kt/v		
14	Precise and accurate ultrafiltration dialysis		
15	Hemodiafiltration (HDF) therapy		
16	Continuous ultrafiltration monitoring.		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
17	Blood pump with variable settings for different sizes of blood lines and handle for manual operation.(adult & paediatric)		
18	Variable blood flow rate		
19	Dialysate flow rate from (300 , 500 , 800) mL/m		
20	Heparins pump with both bolus function and programmable delivery time.		
21	Non-invasive blood pressure measurement and display on the same LCD of the dialysis machine		
22	Accurate dialysate fluid conductivity and TMP monitoring.		
23	Adjustable dialysate fluid flow rate with accuracy of + 10% of set value throughout its range.		
24	Compatibility to variety of blood lines and dialysers (open system).		
25	Open system for blood line		
26	IV pole attached to the machine		
27	Built in heat exchanger		
28	Built in dialyser connectors shunt holder		
29	Built in backup battery		
30	Double needle dialysis		
31	Open system for a various types and brands of disinfectants please specify one brand at least from another manufacturer.		
32	Original powder cartridge should be priced and fixed as per special terms		
33	All electronic and electrical parts should be completely and well isolated and protected from any liquids leakage.		
34	Full PPM kit for each unit (according to the manufacture instructions)		
35	One set of full calibration and maintenance kit including conductivity meter & temperature & any software (recommended by manufacturer) to be delivered with the whole tender		
36	Abroad service training for 1 biomedical engineer/ technician as per special terms		



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Annex 2: Mobile Equipment

Item 12	Volumetric Infusion Pump	Qty. (102)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	Performance data:		
	a- Flow rate setting: 0.1-1200 ml/hr or better		
	b- Volume (VTBI) setting 1-9999 ml or better		
	c- Automatic and manual bolus administration that is adjustable in rate and volume		
	d- KVO (keep vein open) rate: adjustable 0.1-10 ml/hr or better		
	e- Prime (purge) function		
	f- Accuracy $\pm$ 5% (or better) of displayed flow rate and volume		
	g- Automatic pressure should be reduced when occlusion detected		
	h- Air bubble detector		
	i- The pump should be an open system (major set suppliers) while maintaining accuracy.		
3	Pump Mechanism: either linear peristaltic or (Linear, dual stage,		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	positive displacement, flow compensated)		
4	Microprocessor controlled unit with start-up self-test capability with an error code system		
5	Clear and easy to read LCD display of the following:		
	a- Flow rate		
	b- Volume infused and volume to be infused		
	c- Time remaining		
	d- Battery capacity		
	e- Pressure level		
	f- Bolus delivery		
	g- Alarms and error codes		
6	Hygienic, flat, soft touch keys control panel with visible and clearly identified controls		
7	Battery and mains AC power supply indicators		
8	Built in maintenance free rechargeable battery that is easy accessible with capacity not less than 6 hours operation at 25 ml/h flow rate when fully charged.		
9	Visual and audible alarms with adjustable alarm volume control, The following alarms should be included:		
	a- Upstream and downstream occlusion.		
	b- Malfunction alarms.		
	c- Air bubble.		
	d- Low battery alarm.		
	e- Door open		
	f- infusion complete dose		
10	Easy and secured clamping mechanism for pole fixation		
11	Light weight (≤ 3 kg)		
12	To work on either internal or external power supply		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
13	A list of standard accessories for the offered model.		
14	Please quote for any other optional accessories; IV pole, docking station, etc...		
15	Offer must include one infusion analyser (priced separately): - Single channel - From a reputable well known company - Should be suitable to both volumetric infusion and syringe pumps - Should be compatible with pumps from different manufacturers - All standard accessories needed to run the analyser should be included		
16	Abroad service training for 1 biomedical engineer/ technician as per special terms		



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Annex 2: Mobile Equipment

Item 13	Syringe Pump	Qty. (99)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	Performance data:		
	a- Flow rate setting: 0.1-999 ml/hr or better		
	b- Volume (VTBI) setting 0.1-999 ml or better		
	c- Automatic and manual bolus administration that is adjustable in rate and volume		
	d- KVO (keep vein open) function		
	e- Prime (purge) function		
	f- Accuracy $\pm 2\%$ (or better) of displayed flow rate and volume		
	g- Adjustable limit for occlusion pressure.		
	h- Automatic pressure should be reduced when occlusion detected		
	i- To accept syringe sizes from 10 ml up to 50 ml (or better) from several manufacturers (major suppliers)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	while maintaining accuracy (open system).		
3	Pump Mechanism: Syringe driver		
4	Microprocessor controlled unit with start-up self-test capability with an error code system		
5	Clear and easy to read LCD display of the following:		
	a- Flow rate		
	b- Volume infused and volume to be infused		
	c- Time remaining		
	d- Battery capacity		
	e- Pressure level		
	f- Bolus delivery		
	g- Alarms and error codes		
6	Hygienic, flat, soft touch keys control panel with visible and clearly identified controls		
7	Battery and mains AC power supply indicators		
8	Built in maintenance free rechargeable battery that is easy accessible with capacity not less than 6 hours operation at 5 ml/h flow rate when fully charged.		
9	Visual and audible alarms with adjustable alarm volume control, The following alarms should be included:		
	a- High pressure occlusion.		
	b- Syringe unlocked		
	c- Malfunction alarms.		
	d- Low battery alarm.		
	e- Empty and near empty syringe		
10	Easy and secured clamping mechanism for pole fixation		
11	Light weight (≤ 3 kg)		
12	To work on either internal or external power supply		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
13	A list of standard accessories for the offered model.		
14	Offer must include one infusion analyser (priced separately): - Single channel - From a reputable well known company - Should be suitable to both volumetric infusion and syringe pumps - Should be compatible with pumps from different manufacturers - All standard accessories needed to run the analyser should be included		
15	Abroad service training for 1 biomedical engineer/ technician as per special terms		



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Annex 2: Mobile Equipment

Item 14	Syringe Pump, Anaesthesia	Qty. (10)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	Performance data:		
	a- TCI (Target controlled infusion) mode for TIVA (Total intravenous anaesthesia).		
	b- Standard mode		
	c- Flow rate setting: 0.1-999 ml/hr or better		
	d- Volume (VTBI) setting 0.1-999 ml or better		
	e- Drug dose rate calculation function		
	f- Automatic and manual bolus administration that is adjustable in rate and volume		
	j- KVO (keep vein open) function		
	k- Prime (purge) function		
	l- Accuracy $\pm$ 2% (or better) of displayed flow rate and volume		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	m- Adjustable limit for occlusion pressure.		
	n- Automatic pressure should be reduced when occlusion detected		
	o- To accept syringe sizes from 10 ml up to 50 ml (or better) from several manufacturers (major suppliers) while maintaining accuracy (open system).		
3	Pump Mechanism: Syringe driver		
4	Microprocessor controlled unit with start-up self-test capability with an error code system		
5	Medication database: pre-programmed drug protocols		
6	Clear and easy to read LCD display of the following:		
	a- Flow rate		
	b- Volume infused and volume to be infused		
	c- Time remaining		
	d- Battery capacity		
	e- Pressure level		
	f- Bolus delivery		
	g- Medication name and settings		
	h- Alarms and error codes		
7	Hygienic, flat, soft touch keys control panel with visible and clearly identified controls		
8	Battery and mains AC power supply indicators		
9	Built in maintenance free rechargeable battery that is easy accessible with capacity not less than 6 hours operation at 5 ml/h flow rate when fully charged.		
10	Visual and audible alarms with adjustable alarm volume control, The following alarms should be included:		
	a- High pressure occlusion.		
	b- Syringe unlocked		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	c- Malfunction alarms.		
	d- Low battery alarm.		
	e- Empty and near empty syringe		
11	Easy and secured clamping mechanism for pole fixation		
12	Light weight (≤ 3 kg)		
13	To work on either internal or external power supply		
14	A list of standard accessories for the offered model.		
15	Please quote for any other optional accessories; IV pole, PCA function, etc...		



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Annex 2: Mobile Equipment

Item 15	Defibrillator/Monitor	Qty. (29)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	Dedicated for hospital use only		
3	Easy to use defibrillator/monitor with both manual and AED defibrillation capabilities.		
4	Biphasic waveform technology.		
5	Arrhythmia ECG monitoring capability through 3, 5 ECG lead sets and through external paddles.		
6	Synchronisation capability through front panel button		
7	Lightweight unit of less than 8 kg with batteries and external paddles		
8	Coloured LCD display of size not less than 5.5 inches and with at least the following:		
	a- Error messages (system errors, disconnected ECG lead or pads etc.)		
	b- Heart rate display		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	c- Selected energy level display		
	d- Synchronization indicator display		
	e- Battery capacity status and AC power supply indicator		
9	Energy selection: Through front panel rotary knob or touch buttons to select energy level between 2 Joules and 200 Joules (or higher)		
10	Shock control: Through both front panel and paddles.		
11	Charging time: less than 7 seconds to reach 200 Joules energy level using new fully charged batteries.`		
12	Discharge Time: must be specified, preference will be given to shorter time		
13	Patient Impedance Range: Should compensate on patient impedance of range not less than: 25 to 200 Ω		
14	The unit must feature charging and charged indicator tones		
15	QRS beeper with adjustable volume		
16	Self-test defibrillator capability		
17	Built in rechargeable batteries with the following specifications:		
	a- Less than 5 hours charging time		
	b- Capacity: at least 100 shocks at 200 Joules energy level		
	c- Batteries should be easy accessible & replaceable without any tools		
	d- Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else it price of the battery should be mentioned in the technical offer and fixed as per special terms		
	e- Battery should be replaced in free of charge basis during the warranty period		
	f- Any required battery conditioner should be included		
18	Built in full annotation recorder with 25 mm-sec nominal speed.		
19	The unit must feature audio and visual alarms		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
20	Fluids protection level: IPX 1 or better		
21	Defibrillation protection proof (patient isolation) type CF to ECG cables and internal paddles		
22	Defibrillation protection proof (patient isolation) type BF to external paddles and disposables pads.		
23	The following must be included with each unit:		
	a- 3 lead ECG cable Additional cable and trunk should be priced separately		
	b- External adult paddles , adult plates slide off to expose paediatric electrode surface Qty. 1 set		
	c- Paper roll Qty. 10 Paper rolls should be available in the local market		
24	The following must be quoted and priced separately:		
	a- 5 Lead ECG cable		
	b- Multifunction electrode pads		
25	All Accessories including ECG cables, disposable electrodes, external paddles, paper rolls and electrode pads should be priced separately; prices should be fixed for at least 5 years after warranty period		
26	Any other accessories or options should be quoted and priced separately		
27	Offer must include one Defibrillator Analyser (priced separately): - From well-known manufacturer - With multi load - Compatible with different defibrillator manufacturers - Complete with all standard accessories		
28	Abroad service training for 1 biomedical engineer/ technician as per special terms		



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Annex 2: Mobile Equipment

Item 16	Blood Warmer	Qty. (10)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	It shall be a microprocessor-controlled blood warmer of all infusions and transfusions in routine and massive application.		
3	Temperature setting range 37° C - 41° C in ≤ 0.5 increments.		
4	Automatic over heat safety switch off		
5	Audible/visual alarms and indicators for high temperatures		
6	Splash proof panel		
7	Light weight ≤ 3 kg		
8	Heated sleeve to avoid blood cooling from warmer to patient		
9	Universal fixation for fast and safe fixation on IV poles		
10	Direct AC 220 volts power supply without external power converters.		
11	The unit should operate on disposables from different manufacturers		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
12	20 original sets of all required consumables (including PVC blood line, air bubble trap and any other required consumables) for each system must be listed in a clear and itemized manner and priced separately.		



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Annex 2: Mobile Equipment

Item 17	Vein Viewer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The device should be used for identifying patient veins		
2	Handheld, light weight compact design.		
3	The unit shall operate without the need of any type of consumables		
4	Rechargeable battery (Preferable)		
5	All available standard & optional features & accessories must be listed and priced separately.		
6	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 18	Patient Warmer, Air Type	Qty. (12)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	Main purpose: whole body patient warming therapy to maintain normal body temperature during surgical operation and recovery.		
3	Microprocessor controlled		
4	Forced air convective warming technology that delivers gently moving warm air		
5	Soft touch key control panel or touch LCD display to select air temperature.		
6	At least three temperature selection: 32° C, 38° C, 43° C ($\pm 3^\circ$ C)		
7	Fast warming operation		
8	Safety temperature cut off to protect the heaters		
9	Robust, heavy duty construction and compact small foot print design		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
10	Mobile on at least 4 antistatic castors		
11	Smooth quiet operation of less than 55 db noise level		
12	Highest level of safety for both patient and machine with alarm indicators.		
13	High and low temperature alarms.		
14	High efficiency $\leq 0.3 \mu\text{m}$ air filter		
15	Light weight		
16	All blanket sizes to be priced separately		
17	Prices of blankets must be fixed as per special terms		
18	The system must be complete with all standard accessories needed to be operated.		



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Annex 2: Mobile Equipment

Item 19	Patient Hypo-Hyperthermia Unit, Water Type	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Main purpose: whole body patient warming and cooling therapy		
2	Microprocessor controlled		
3	Water based system		
4	Manual control of water temperature through soft touch key control panel		
5	Water temperature range: 5° C - 39° C or better		
6	Fast warming and cooling operation		
7	Safety temperature cut off to protect the heaters at approximately 42° C		
8	Digital temperature read-out for both set and measured values.		
9	Robust, heavy duty construction and compact small foot print design		
10	Mobile on at least 4 antistatic castors		
11	Smooth quiet operation of less than 45 db noise level		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
12	Highest level of safety for both patient and machine with alarm indicators.		
13	Audible and visual alarms of at least the following:		
	a- High temperature		
	b- Low water level		
14	The unit must be complete with 3 reusable mattresses (priced and quoted separately) with the following specifications:		
	a- Whole under-body paediatric size Qty. (1)		
	b- Whole under-body adult size Qty. (2)		
	c- Good heat conductivity (heat transfer to the patient).		
	d- Reusable water type that is easy to clean and disinfect		
	e- Durable design; made from high quality material that can resist punctures		
	f- Complete with all required hoses and attachments		
	g- Hoses length must be at least 3 meters		
	h- Please quote separately for different types and sizes of mattresses		
	i- Prices of mattresses must be fixed as per special terms		
15	The system must be complete with all standard accessories needed to be operated.		



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Annex 2: Mobile Equipment



Item 20	Patient Radiant Warmer, Adult & Paediatric	Qty. (12)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, heavy duty construction, reliable, ergonomic design and easy to use		
2	Application: for adult & paediatric patients in recovery, intensive care departments and hospital wards		
3	Safe warming operation without damaging patient skin layers and eyes.		
4	Fast heat operation with durable long life heating elements and protective cover to prevent hand burns		
5	Mounted on antistatic height adjustable pole; pole to be made of heavy duty stainless steel or equivalent material with high quality castors and braking mechanism		
6	Timer for setting of heating duration.		
7	Adjustable heat intensity		



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Annex 2: Mobile Equipment

Item 21	Laryngoscope Set, Adult, Pediatric & Neonate	Qty. (28 adult) Qty. (16 Pediatric) Qty. (7 Neonate)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, heavy duty construction, reliable, ergonomic design and easy to use		
2	Light weight.		
3	LED type.		
4	Fibre optic plate illumination type.		
5	To be made from heavy-duty stainless steel (Handle & Blades)		
6	Standard size, non-rechargeable battery operation.		
7	Durable case with sufficient padding.		
8	a- Qty. (28) of the total quantity with 2 curved blades each, sizes: 3, 4 (for adult patients) Size 5 to be priced separately b- Qty. (16) of the total quantity with 3 blades each, sizes: 1, 2 straight & size 2 curved (for paediatric patients) c- Qty. (7) of the total quantity with 3 straight blades each, sizes: 00, 0, 1 (for neonate patients)		



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Annex 2: Mobile Equipment

Item 22	Suction Machine	Qty. (32)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, heavy duty construction, reliable, ergonomic design and easy to use		
2	Mobile mounted on antistatic castors (at least 4) with sturdy stable base that resists tipping over		
3	On/Off switch with light indicator.		
4	Maximum flow rate not less than 30 l/min.		
5	Easy control of vacuum level through a knob or a switch on the control panel.		
6	Maximum vacuum not less than 675 mmHg.		
7	Display of vacuum through a gauge that is easy to read with high visibility mmHg and Kpa graduation.		
8	2 original reusable and autoclavable jars to be included with the unit, with lids that provide secure seal and float-type cut off valve to prevent overflow (All Jar sizes to be offered).		
9	Bacteria filter to minimize cross infection (available from different manufacturers)		
10	Silicon transparent tubes.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
11	Change-over valve to switch suction between jars.		
12	Splash proof design.		
13	Oil-free maintenance free unit		
14	Quiet pump operation (≤ 45 dB)		
15	Any other accessories must be listed and priced separately.		
16	Two extra original Jars are to be provided with the unit and priced separately		



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Item 23	ICU Patient Monitor	Monitors: Qty. (35) Central station : Qty. (4) Portable Monitor: Qty. (6) CO2 Module: Qty. (9)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Patient Monitor: From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
	1- ICU/CCU patient monitor		
	2- Adult, paediatric and neonatal patient monitor. Qty.(18) monitors with adult/ Paediatric ICU Qty.(17) monitors with Neonatal ICU		
	3- High resolution TFT-LCD touch-screen display of at least (1024 x 768) resolution and size not less than 19"		
	4- Ability to display 8 waveforms simultaneously		
	5- User friendly.		
	6- Heavy duty with robust design.		
	7- Configuration: modular type with a minimum of three slots for three plug-in modules that can be fitted simultaneously on a module rack/ slots. Or		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	One slot/ docking station for one removable module that is capable to measure all parameters mentioned in (8 & 9 & 10) in addition to BIS and cardiac output in all monitors without the need to add any hardware or software on the future.		
	8- Multi parameter module to measure the following parameters: ECG, Respiration rate, NIBP, Body temperature, SPO2 (Masimo technology) & IBP		
	9- Additional IBP (outlet or separate module) to be quoted separately		
	10- End tidal CO2 (side stream), priced separately Qty.(9)		
	11- Ability to measure 12 ECG leads, software should be included		
	12- ST Histogram		
	13- QT & QTc analysis		
	14- Wall- mounting accessories supplied and approved by the manufacturer of the monitor.		
	15- Leads off alarm		
	16- Escalating level audio visual alarm that <u>cannot be permanently silenced</u>		
	17- Original accessories (priced separately):		
	Accessory	Total required Qty.	
	a. ECG cable (3 leads), with ECG trunk cable	50	
	b. Reusable SpO2 sensors (adult), 3 meters long, Masimo technology, Finger clip type	24	
	c. Reusable SPO2 sensors (Paediatric), 3 meters long, Masimo technology, Finger clip type	12	
	d. Reusable SPO2 sensors (Neonate), 3 meters long, Masimo technology	34	
	e. Large adult cuff, reusable	6	
	f. Regular size adult cuffs, reusable	24	
	g. Small adult size cuff, reusable	6	



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	Minimum Requirements		Compliance (Y/N), Notes	Brochure Page No.
	h. Paediatric cuff, reusable	12		
	i. Neonate cuff, disposable	170		
	j. Temperature probe, skin type, adult & Paediatric	12		
	k. Temperature probe, skin type, neonate	17		
	l. CO2 kit	18		
	m. Accessories basket (supplied and approved by the manufacturer)	35		
	18- All data shall be in real time (waveform and numeric).			
	19- Software shall be of the latest version, and any service / settings password must be disclosed and perpetual			
	20- Vendors to list all prices of optional software and hardware for offered system.			
	21- Any software licenses must be listed and priced.			
	22- Trend storage capability to store patient data for at least 72 hours			
	23- All available options and accessories must be offered and priced separately			
	24- Prices of all accessories (including ECG cables, SPO2 sensors, cuffs, pressure transducers, temperature sensors etc.) should be priced separately and fixed as per special terms.			
	25- Small modular portable monitors (Qty.6) should be quoted; with built in rechargeable battery , multi-parameter module. Module should be compatible with the bed side monitor and should have the capability to store all critical patient information during transportation			
B	Central Station	Qty.(4)		
	1. Bed licenses: a- Qty. (1) Central station: 12 bed licenses (For Adult ICU Department) b- Qty. (1) Central station: 6 bed licenses (For Pediatric ICU Department)			



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	c- Qty. (1) Central station: 9 bed licenses (For inborn NICU Department) d- Qty. (1) Central station: 8 bed licenses (For out-born NICU Department)		
	2. The central station is to be located at the nurse station. Bidders shall quote for a comprehensive offer including network and any required cabling, switches, etc..... The local area network (LAN) must be designed so that the failure of any bedside monitor does not affect the function or balance of the system.		
	3. Central station must be supplied by the same manufacturer of the patient monitor, locally supplied central stations will be considered as non-conforming.		
	4. The central station monitor shall display waveforms for the following parameters as obtained from each individual bedside monitor: ECG, NIBP, IBP, Body temperature, SPO2, CO2		
	5. Ability to display waveforms, numeric data, graphic displays, tabular displays, and calculations.		
	6. Remote record initiation control for all waveforms.		
	7. Audio / visual alarms with standard alarm / acknowledge / reset control.		
	8. Digital display of alarm limits and status.		
	9. Memory for alarm events to provide a minimum of 10 seconds before the event, and 15 seconds after the event.		
	10. Alphanumeric data display for each parameter.		
	11. High resolution TFT-LCD touch screen colour monitor minimum 19 inches		
	12. Multi-channel strip-chart recorder or laser printer with the following features:		
	a. Annotation of time, date, bed number, alarm status, and vital signs.		
	b. Paper width minimum 50 mm.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	c. Printer to allow for manual initiation from either the central station or any bedside monitor.		
	13. Clinical review software with the following features:		
	a. Ability to store patient data for at least 96 hours.		
	b. Detailed analysis of waveforms.		
	c. Clinical review software capable of generating full documented report.		
	14. HL7 licence		
	15. All available options and accessories must be offered and priced separately		
C	Patient Monitor Analyser: Offer must include one patient monitor analyser (priced separately) - From well-known manufacturers - One compact unit with the ability to measure the following: - a- ECG - b- Respiration Rate - c- Temperature - d- Non Invasive Blood Pressure (NIBP) - e- Invasive Blood Pressure (IBP) - f- Oxygen Saturation (SPO2) - Analyser should be compatible with patient monitors from at least the following manufacturers: Philips, GE & Nihon Kohden. - All accessories needed to run the analyser should be included		
D	Abroad service training for 2 biomedical engineers/ technicians as per special terms		



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Annex 2: Mobile Equipment

Item 24	Patient Monitor, Preconfigured	Qty. (7 on Trolley) Qty. (34 Wall Mounted) Qty. (1 Central Station)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	Preconfigured type monitor or compact modular type (without separate module rack)		
3	The monitor should work on mains ac supply without external converters or adapters		
4	Adult, paediatric and neonatal patient monitor.		
5	Ability to measure and display the following parameters: a- ECG wave form b- NIBP c- Heart Rate d- Body temperature e- SPO2 (Masimo technology) f- IBP, one channel (Quoted separately) g- CO2, side-stream (Quoted separately)		
6	Original accessories (priced separately):		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	Accessory	Total required Qty.	
	a. ECG cable (3 leads), with ECG trunk cable	50	
	b. Reusable SpO2 sensors (adult), 3 meters long, Masimo technology, Finger clip type	76	
	c. Reusable SPO2 sensors (Paediatric), 3 meters long, Masimo technology, Finger clip type	18	
	d. Large adult cuff, reusable	12	
	e. Regular size adult cuffs, reusable	76	
	f. Small adult size cuff, reusable	10	
	g. Paediatric cuff, reusable	18	
	h. Temperature probe, skin type, adult & Paediatric	38	
7	Mounting Accessories: a- Qty. (5) of the total quantity mounted on original trolley with accessories basket b- Qty. (33) of the total quantity with wall mount and accessories basket (supplied by the same manufacturer)		
8	All data shall be in real time (waveform and numeric).		
9	The latest high end 12.1-inch colour TFT LCD screen patient monitor of resolution not less than 800 x 600 pixels		
10	Backup Battery: - Back-up time for settings and operation: minimum of 90 min - Batteries should be easy replaceable - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else its price of the battery should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period - Any required battery conditioner should be included		
11	Escalating level audio visual alarm that <u>cannot be permanently</u>		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	<u>silenced</u>		
12	Min 72 hours trend capacity		
13	Ability to display 4 waveforms simultaneously		
14	HL7 license		
15	All available options and accessories must be offered and priced separately		
16	Prices of all accessories (including ECG cables, SPO2 sensors, cuffs, pressure transducers, temperature sensors etc.) should be priced separately and <u>fixed as per special terms</u>		
17	Central Station (<u>for emergency department</u>) Qty.(1)		
	1. Bed licenses: 10		
	2. The central station is to be located at the nurse station in the emergency department. Bidders shall quote for a comprehensive offer including network The local area network (LAN) must be designed so that the failure of any bedside monitor does not affect the function or balance of the system.		
	3. Central station must be supplied by the same manufacturer of the patient monitor, locally supplied central stations will be considered as non-conforming.		
	4. The central station monitor shall display waveforms for the following parameters as obtained from each individual bedside monitor: ECG, NIBP, IBP, Body temperature, SPO2, CO2		
	5. Ability to display waveforms, numeric data, graphic displays, tabular displays, and calculations.		
	6. Remote record initiation control for all waveforms.		
	7. Audio / visual alarms with standard alarm / acknowledge / reset control.		
	8. Digital display of alarm limits and status.		
	9. Memory for alarm events to provide a minimum of 10 seconds before the event, and 15 seconds after the event.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	10. Alphanumeric data display for each parameter.		
	11. High resolution TFT-LCD touch screen colour monitor minimum 19 inches		
	12. Multi-channel strip-chart recorder with the following features:		
	a. Annotation of time, date, bed number, alarm status, and vital signs.		
	b. Paper width minimum 50 mm.		
	c. Printer to allow for manual initiation from either the central station or any bedside monitor.		
	13. Clinical review software with the following features:		
	a. Ability to store patient data for at least 72 hours.		
	b. Detailed analysis of waveforms.		
	c. Clinical review software capable of generating full documented report.		
	14. HL7 licence		
	15. All available options and accessories must be offered and priced separately		
18	Abroad service training for 2 biomedical engineers/ technicians as per special terms		



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Annex 2: Mobile Equipment

Item 25	Spot-Check Vital Signs Monitor	Qty. (34)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	The vital signs monitor should be used to rapidly & accurately spot check monitoring of the following vital signs parameters:		
	a- Noninvasive blood pressure: with accuracy ± 5 mmHg or better		
	b- Temperature measurement by one of the following technologies: • Welchallyn • Covidien		
	c- SpO2 pulse Oximeter measurement with accuracy $\pm 2\%$ or better		
	d- Heart rate		
3	LCD display of size not less 5.5 inches		
4	To work on either direct ac power supply or through ac/dc adapter		
5	Built in rechargeable battery: -Minimum of 3 hours operation when fully charged -Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else it price of the battery should be mentioned in the technical offer		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	and fixed as per special terms		
6	HL7 License or DICOM (Compatible with Hakeem Hospital Information System without any extra cost)		
7	Original heavy duty mounting trolley on five castors and accessories basket		
8	Original accessories (priced separately):		
	Accessory	Total required Qty.	
	a- Adult cuff	68	
	b- Pediatric cuff	20	
	c- Large adult cuff	10	
	d- SpO2 probe, reusable, adult	68	
	e- SpO2 probe, reusable, pediatric	20	
	f- Temperature sensor oral	34	
	g- Temperature sensor cover	20000	
9	Price of accessories and consumables including temperature sensor covers must be fixed as per special terms		
10	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its' running cost (temperature sensor cover and any other required consumable) over a period of seven years as per special terms (Total cost of owner ship)		
11	Printer option to be quoted separately (if available)		



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Annex 2: Mobile Equipment

Item 26	Oxygen Flow Meter Wall Type /Single	Qty. (241)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, heavy duty construction and reliable		
2	Oxygen flow meter to provide accurate gas flow measured and controlled within a range of 1-15 L/min, for use in a variety of respiratory therapy clinical devices.		
3	The flow meter gauge should be float in tube		
4	Clearly labelled and colour-coded flow meter		
5	Offer shall include 200-300 ml reusable humidifier mounted directly on the flow meter (priced separately)		
6	Quick connection type: BOC.		
7	Accuracy: +/- 10% or better		
8	Wall mounted.		



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Annex 2: Mobile Equipment

Item 27	Regulator Suction with canister, wall vacuum outlet	Qty. (150)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	A continuous vacuum regulator for use with all common suction therapy procedures to control suction from wall vacuum outlets. Durable, heavy duty construction and reliable		
2	Compact, lightweight regulator to be made of strong, break-resistant material		
3	Large suction pressure control knob		
4	Flow rate: 0 – 40 L/min.		
5	Gauge: 0-700 mmHg approximately		
6	Suction set shall consist of:		
	a- Quick connection type: BOC		
	b- All required tubing		
	c- Biological filter (should be priced separately, price should be fixed as per special terms)		
	d- One autoclavable jar min of two litres capacity with wall bracket		
	e- Overflow protection device with wall bracket if needed.		
	f- Disposable suction bags should be quoted separately		



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Annex 2: Mobile Equipment

Item 28	Oxygen Regulator for Oxygen Cylinders/ Low Flow	Qty. (47)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, heavy duty construction and reliable		
2	To be used with oxygen cylinders.		
3	Heavy duty metallic construction (stainless steel or brass).		
4	At least one gauge to indicate pressure inside cylinder		
5	Flowmeter: 1-15 LPM with reusable humidifier		
6	Bull nose connection.		



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Annex 2: Mobile Equipment

Item 29	Oxygen Regulator for Oxygen Cylinders/ High Flow	Qty. (9)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, heavy duty construction and reliable		
2	To be used with oxygen cylinders.		
3	Heavy duty metallic construction (stainless steel or brass).		
4	At least one gauge to indicate pressure inside cylinder		
5	Flowmeter: 1-50 LPM with reusable humidifier		
6	Bull nose connection.		



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Annex 2: Mobile Equipment

Item 30	Pulse Oximeter, Desktop	Qty. (18)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known manufacturer, durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	LCD display for digital parameter and waveform		
3	Microprocessor controlled with the ability to reject artifacts resulting from patient movement		
4	Ability to reject artifacts resulting low body temperature.		
5	SPO2 range 1-99 %.		
6	Pulse rate measurement range: 30 – 240 beats per minute (bpm).		
7	Measurement accuracy not less than 97%.		
8	Alarms to include: Audio-visual Hi/ Lo SpO2, pulse rate, sensor off, low pulse, low battery.		
9	Alarm volume control		
10	To be used for adults, paediatrics, infants and neonates.		
11	Patient cable length $\geq$ 3 meters		
12	24 hours or more memory for monitored data.		



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	Minimum Requirements		Compliance (Y/N), Notes	Brochure Page No.
13	Built in rechargeable battery: - Minimum of 3 hours operation when fully charged - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else it price of the battery should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period - Any required battery conditioner should be included			
14	Direct AC power supply (no external power supply).			
15	Original accessories (priced separately):			
	Accessory	Total required Qty.		
	a- Extension cable 3 meters approximately	25		
	b- Reusable adult sensor, clip type	10		
	c- Reusable pediatric sensor, clip type	5		
	d- Disposable neonate wrap sensor	2000		
16	All other accessories and probes must be offered and priced separately.			
17	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its’ running cost (disposable sensors and any other consumable) over a period of seven years as per special terms (Total cost of owner ship)			
18	Offer must include one pulse oximeter analyser (priced separately) - From well-known manufacturers - Ability to measure the following: - Analyser should be compatible with pulse oximeters from different manufacturers. - All accessories needed to run the analyser should be included			



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Annex 2: Mobile Equipment

Item 31	Pulse Oximeter, Fingertip	Qty. (18)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, compact, heavy duty construction, reliable, ergonomic design and easy to use		
2	Provides fast and accurate measurements of oxygen saturation and pulse rate in paediatric to adult patients		
3	Battery operated model on regular size batteries that are available in the local market		
4	Digital display of SPO ₂ and heart rate		
5	SPO ₂ range 1-99 %. Or better		
6	Pulse rate measurement range: 30 – 240 beats per minute (bpm) or better		
7	Measurement accuracy not less than 97%.		
8	Original carrying case to be included		



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Annex 2: Mobile Equipment

Item 32	Digital Scale, Adult & Paediatric	Qty. (18)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Suitable for adult and paediatric patients		
2	It shall have digital readout of patient weight in kg		
3	It should weight accurately to the nearest 100g or better		
4	It should be made from sturdy plastic/steel material.		
5	Maximum capacity should be 200 Kg / 440 lbs or better.		
6	It should power up from AC voltage		



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Annex 2: Mobile Equipment

Item 33	Oxygen Cylinder, 2 Cubic Meters	Qty. (42)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Nominal contents 2 cubic meters approximately		
2	Nominal cylinder pressure: 137 bar		
3	Valve outlet connection: Bullnose according to BS standard		
4	Material of construction: steel		
5	Colour: according to BOC colour code system		
6	Hand-wheel & safety valve		



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Annex 2: Mobile Equipment

Item 34	Oxygen Cylinder, 7 Cubic Meters	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Nominal contents 7 cubic meters approximately		
2	Nominal cylinder pressure: 137 bar		
3	Valve outlet connection: Bullnose according to BS standard		
4	Material of construction: steel		
5	Colour: according to BOC colour code system		
6	Hand-wheel & safety valve		



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Annex 2: Mobile Equipment

Item 35	Oxygen Cylinder, 1 Cubic Meter	Qty. (17)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Nominal contents 1 cubic meter approximately		
2	Nominal cylinder pressure: 137 bar		
3	Valve outlet connection: Bullnose according to BS standard		
4	Material of construction: steel		
5	Colour: according to BOC colour code system		
6	Hand-wheel & safety valve		



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Annex 2: Mobile Equipment

Item 36	Vascular Doppler	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Handheld type that can be inserted in a clinician's pocket.		
2	Lightweight: less than 300 grams.		
3	Battery operated (not rechargeable); batteries should be available at the local market.		
4	Two doppler probes (8 MHz frequency) for detecting blood stream status of blood vessels with each unit (probes should be priced separately and fixed as per special terms)		
5	Probe cable length: at least 2 meters (when fully extended)		
6	Probes and batteries should be easily replaced.		
7	Digital display of the average velocity of the blood flow.		
8	Built in loudspeaker and noise reduction filter for clear blood flow hearing.		
9	Auto shut off when not in use.		
10	Low battery indicator		
11	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 37	Examination Light, Mobile	Qty. (19)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable & heavy duty construction		
2	Small in size, should be suitable for clinics (internal medicine, surgical, OB/Gyn and dermatology clinics)		
3	LED type		
4	Light head should be adjustable in position		
5	Lamp service life at least 30,000 working hours		
6	Illumination at 0.5 meter not less than 20,000 Lux		
7	Mobile stand: Sturdy, stable that is not easy to be tilted and easy to manoeuvre with at least 50 cm diameter base and 5 heavy duty castors		



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Annex 2: Mobile Equipment

Item 38	Diagnostic Set	Qty. (17)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, compact, heavy duty construction & reliable, ergonomic design and easy to use		
2	Power handle, Ophthalmoscope head and an Otoscope head with at least three different sizes of reusable specula.		
3	A hard-shell well-padded protective case.		
4	Power handle should be made from heavy duty, easy to clean, corrosion resistant material.		
5	Batteries and light bulbs should be commonly available from several known manufacturers.		
6	Kindly quote for regular and/or rechargeable battery types.		
7	Fibre-optic cold light transmission		
8	LED illumination type		
9	Kindly quote for all sizes and types of specula / accessories.		
10	Full display of lens values		
11	Wall mounted option should be quoted		



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Annex 2: Mobile Equipment

Item 39	ECG Recorder System	Qty. (16)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, compact, heavy duty construction & reliable from well-known company		
2	Microprocessor controlled with self-test and error code/message capability.		
3	12 lead ECG acquisition		
4	Display:		
	a- Size: At least 5.7 inch LCD screen		
	b- Ability to display at least 6 ECG leads simultaneously and heart rate indicator		
5	ECG interpretation capability with event marking function		
6	Defibrillation protection: Type CF defibrillation proof		
7	Filters: AC noise filters (50/60 Hz) and muscle artifact filters		
8	Built in rechargeable battery: - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else it price of the battery should be mentioned in the		



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	Minimum Requirements		Compliance (Y/N), Notes	Brochure Page No.
	technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period			
9	Digital Thermal Printer:			
	a- High resolution print of ECG report including patient data and interpreted diagnostic aids.			
	b- Recoding paper: Thermal paper of A4 size			
10	Original heavy-duty mobile cart with articulated arm to hold ECG cable and at least one drawer			
11	Original Accessories (priced separately):			
	Accessory	Total Required quantity		
	ECG patient cable (12 leads)	25		
	Full set of suction electrodes	30		
	Full set of limb clamps	30		
12	Price of all accessories including ECG cables, suction electrodes, limb clamps and should be fixed as per special terms			
13	HL7 License or DICOM (Compatible with Hakeem Hospital Information System without any extra cost)			
14	Offer must include one ECG simulator (priced separately): - From well-known manufacturer - 12 Lead - Compatible with different ECG manufacturers - Complete with all standard accessories			



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Annex 2: Mobile Equipment

Item 40	Air Mattress System, Low-Air-Loss	Qty. (18)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	A complete Air Mattress for ICU patients use with air supply unit to prevent and treat bed sores (at least 4 th stage ulcers).		
2	Dimensions: 200 cm length, 90 cm width, 10 cm height approximately		
3	Adjustable pressure through hygienic soft buttons		
4	Air flow approx. 5 l/min		
5	Silent running (45 dB) compact air supply unit with digital display that can be attached to the bed.		
6	Quick and smooth inflation and deflation with intermittent action.		
7	Patient weight capacity $\geq$ 200 kg		
8	CPR valve		
9	Easy to clean smooth surface with breathable non-slip mattress cover		
10	Transport mode, mattress remains inflated during patient transfer.		
11	The mattress should be repairable, mattress cells should be independently replaceable, cells should be quoted separately		



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Annex 2: Mobile Equipment

Item 41	Stethoscope	Qty. (55 Adult) Qty. (17 Paediatric) Qty. (10 Neonate)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, compact, heavy duty construction & reliable, ergonomic design and easy to use		
2	Dual sided stainless steel chest piece		
3	Lightweight		
4	Latex free Y-tube		
5	High quality diaphragm material with non-chill rim for patient comfort		
6	Comfortable replaceable earpieces.		
7	a- Qty. (55) of the total quantity for adults b- Qty. (17) of the total quantity for paediatrics c- Qty. (10) of the total quantity for neonates		



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Annex 2: Mobile Equipment

Item 42	Aneroid Sphygmomanometer/ Mobile Stand	Qty. (31)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, compact, heavy duty construction & reliable, ergonomic design and easy to use		
2	Large, easy-to-read scale of at least 12 cm in diameter and up to 300 mmHg range		
3	Accuracy up to ± 3 mmHg		
4	Latex free inflation system		
5	Mobile stand: Sturdy, stable that is not easy to be tilted and easy to manoeuvre with at least 50 cm diameter base and 5 heavy duty castors		
6	Large storage basket mounted on the trolley		
7	The following original accessories must be included with each unit:		
	a- Two durable regular size adult cuffs		
	b- One durable paediatric cuffs		
	c- Two inflation bulbs		
	d- One spiral tubes of at least 1 meter long each		
8	All parts (tubing, valve, bulb...etc.) must be original from the original manufacturer.		
9	Kindly quote separately for all other sizes of cuffs including obese adult cuff.		



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Annex 2: Mobile Equipment

Item 43	Electric Cast Saw with Vacuum (Cast Cutter)	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Saw hand-piece:		
	1- Hand-held ergonomic unit dedicated to remove all casts		
	2- Heavy duty with impact resistant housing		
	3- Variable manual speed control		
	4- Quiet operation		
	5- At least 10 original blades to be included, all blade sizes and types to be priced separately		
	6- It should have a vacuum port with disposable filter elements.		
B	Vacuum Unit:		
	1- Mobile unit on at least 4 heavy duty castors		
	2- At least 2 meters vacuum hose that is easy to be connected/ disconnected to the vacuum unit		
	3- Quiet operation		
	4- Automatic operation when activating the saw hand-piece		
	5- Complete unit with all standard accessories		
C	Additional accessories and options to be listed and priced separately		



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Annex 2: Mobile Equipment



Item 44	Pneumatic Sequential Compression System for DVT	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Intermittent pneumatic compression system to prevent deep vein thrombosis (DVT)		
2	LCD display		
3	Light weight and small in size with carrying handle		
4	Liquid proof design with at least IPX2 rating		
5	Low noise operation		
6	All standard accessories must be included (tubing and sleeves) and must be priced separately with all available sizes and types (leg and foot)		



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Annex 2: Mobile Equipment

Item 45	Tablet Counter	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Electrical type		
2	Clear digital display for tablet counting		
3	Programmable to stop counting when target count is reached		
4	Upper funnel (inlet)		
5	Lower tray (outlet)		
6	Accuracy to be specified clearly		



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Annex 2: Mobile Equipment

Item 46	Operation Table, General Surgery, ENT, Ophthalmic & Orthopedic	Qty. (5)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	General operating table. It shall meet or exceed the following components/features:		
2	Electromechanical or electro hydraulic mobile operating table column.		
3	Radiolucent table-top: capability to be used with C-Arm, no metal bars in the middle of the table top for clear image		
4	It shall have integrated, maintenance-free, rechargeable batteries with integrated battery charger.		
5	4-section operating table-top for general surgeries including the following: a- Head section, removable b- back section c- Seat section d- Leg section, pair, removable, with straps		
6	Full function, corded hand control (wireless remote control to be offered as an option), the following functions must be included: a- Height control (up & down)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b- Trendelenburg and reverse Trendelenburg c- Tilt and back tilt d- Flex & reflex e- Zero position (return to level) f- Leg movement		
7	Override touch control panel with all remote control basic functions to be included and located on the table column for easy access.		
8	Safe working load without any restrictions on all table 4 sections ≥ 300 kg		
9	Approximate total length of the operating table-top with all of its sections: ~ 2000 mm approximately.		
10	Approximate table-top width (without side rails): $\sim 500 - 600$ mm		
11	Height (without mattress): $\sim \leq 60$ to ≥ 1000 mm.		
12	Trendelenburg / reverse Trendelenburg: $\sim 30^\circ$ or better		
13	Lateral tilt (left / right): 20° or better		
14	Back plate (up / down): $+80^\circ / -40^\circ$ or better		
15	Leg plate (up / down): $+30^\circ / -100^\circ$ with abduction movement		
16	Motorized Longitudinal shift of at least 400 mm and should be controlled from the remote control		
17	Table orientation: to work on normal and reverse orientations		
18	Heavy duty stainless steel construction of table frame, side-rails and column casing.		
19	European side rail		
20	It shall have stable base design with shock resistant base cover		
21	Four double antistatic swivel castors of at least 8 cm diameter with central braking system.		
22	It shall have the possibility to set up multiple patient positions for general procedures.		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
23	Mattresses (complete set: head, upper back, lower back, pelvis, leg sections, arm boards) to be with at least the following specifications: a- Thickness at least 80 mm b- Anti-microbial c- Solution resistant d- Seamless (cover should be full-welded) e- waterproof		
24	All general surgery options and accessories shall be included in the offer and priced separately		
25	For each table the following accessories and parts must be included in the offer with all needed radial clamps in addition:		
	a- Anaesthesia screen Qty.1		
	b- Pair of Arm boards, height adjustable, with straps Qty.1		
	c- Pair of Knee crutches (Goepel design), can be mounted on the table without detaching the leg section Qty.1		
	d- Pair of Lateral support Qty.1		
	e- Pair of Back Support Qty.1		
	f- Pair of shoulder supports Qty.1		
	g- Accessories stand trolley Qty.1		
26	For one table the following ophthalmic accessory should be included and priced separately: - Head rest for ophthalmic surgeries (for one table only) Qty.1		
27	For one table the following gynaecology accessories should be included and priced separately: - Soiled bowl Qty.1 - Pair of pelvis support Qty.1 - Pair of stirrups Qty.1		
28	For one table the following orthopaedic accessories should be included and priced separately:		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	a- Traction system for lower limbs, fully C-Arm accessible Qty.1 Pair		
	b- Adults foot boot (pair) Qty.1		
	c- Hand operating table surgery Qty.1		
	d- Pair of pelvis support Qty.1		
	e- Counter traction post for femur neck Qty.1		
	f- Orthopedic accessory trolley		
29	Abroad service training for at least 2 biomedical engineers/ technicians as per special terms		



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Annex 2: Mobile Equipment

Item 47	Anaesthesia Machine with Ventilator & Patient Monitor	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, heavy duty construction & reliable from reputable well-known brand , it should be suitable for adults, paediatrics and neonates .		
2	It should be capable of providing low-flow techniques to minimize gas and anesthetic agent consumption. Guidance system to set the fresh gas flow to ensure minimum required fresh gas sufficiency during low flow.		
3	Gas Supply: a- Central gas supply (Pipeline gas inlets) all with international colour code and pressure gauge according to NIST system and equipped with B.O.C probes for connection to central gas outlets (O2, N2O & Medical Air) b- Gas cylinder yokes: (O2 and N2O) with clear gas name marking and pressure gauge equipped with international pin-index system		
4	Original cart to include: - Upper shelf - Working tray/ surface		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	- At least 2 large drawers - Anti-static castors with brakes		
5	Flow meters: Machine should provide electronic gas mixing with digital control for O ₂ , N ₂ O and Air		
6	Hypoxia guard (O₂/N₂O safety control): The unit should be equipped with Integrated Ratio System to maintain at least 21 % O ₂ in Fresh Gas whenever the oxygen supply pressure is reduced below normal or when accidental opening of only N ₂ O flow with O ₂ valve closed		
7	Oxygen-flush range: up to 50 L/min		
8	Breathing Module: - a- Fully autoclavable module to deliver fresh gas to the patient (materials in contact with exhaled patient gases are autoclavable), it should be easy removable and reinstalled without tools - b- Flow sensor: Reusable type - c- It should have Pressure Graduated APL Valve (adjustable up to at least 70 cmH₂O), Inspiratory Valve, Expiratory Valve & Active Gas Scavenging Port - d- Breathing system warmer to minimize humidity in the breathing system		
9	CO₂ absorber with a reusable canister of approximately 0.7 kg or more, the canister should be easy removable and reinstalled without tools		
10	Suction regulator with all required hoses and probes (BOC)		
11	Common fresh gas outlet (auxiliary gas outlet): The unit should have common gas outlet for using open circuit		
12	Anesthetic vaporizers: Offer to include Selectatec type (or equivalent) maintenance free Isoflurane & Sevoflurane vaporizers (mounted at the same time), all keys and adapters should be included		
13	Self-test: Machine should perform automatic self-test to at least the		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	following: - a- System test - b- Circuit leak - c- Calibration of all sensors		
14	Ventilator:		
	1- Integrated Microprocessor controlled ventilator, Ventilator brand must be the same as the anaesthesia unit and manufactured by the same company		
	2- Ventilation modes to be selectable and to include at least: - a- Manual/ Spontaneous Ventilation - b- VCV (Volume Controlled Ventilation) - c- PCV (Pressure Control Ventilation) - d- PSV (Pressure Support Ventilation) - e- SIMV (Synchronized Intermittent Mechanical Ventilation)		
	3- Fully coloured touchscreen LCD display of not less than 15" size to monitor (numeric & graphics): - a- Real time FiO₂, capnograph, Anesthetic agents Isoflurane/ Sevoflurane & N₂O (if not shown on the patient monitor) - b- Tidal Volume, Minute Volume, Respiration Frequency, PEEP & Mean pressure - c- MAC: It should have a display of MAC (Minimum Alveolar Concentration) - d- Alarms		
	4- Ventilators Technical Data: - a- Tidal Volume: 5-1500 ml or better - b- Inspiratory pressure (P_{insp}): 5 to 60 cmH₂O or better - c- Pressure limitation (P_{max}): 12 to 80 cmH₂O or better - d- Respiratory Rate: 4 to 100 breaths/ minute or better - e- Inspiratory/ expiratory ratio: 1:4 to 4:1 or better - f- Positive End Expiratory Pressure (PEEP): 4 to 20 cmH₂O or		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	better		
15	Alarms , audible and visual alarms to include: - a- Power Failure - b- O2 inlet supply failure - c- Low/ High Tidal Volume - d- Low Inspired oxygen (FiO2) - e- Apnea - f- Low/ High airway pressure		
16	Built in rechargeable battery: - Minimum of 45 min. operation when fully charged. - Battery price should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period - Any required battery conditioner should be included		
17	Accessories - a- Reusable Closed-type patient circuits suitable for adults, paediatrics & Neonates - b- Gas Cylinders: Oxygen (Qty. 2) & N2O		
18	Physiological Patient Monitor: - a- LCD display ≥ 15 inch touch-screen (ECG, NIBP, IBP, Temp, SPO2 with Masimo technology) - b- From well-known reputable brand - c- Complete with all accessories for all required parameters (adult & pediatric) - d- HL7 License (compatible with Hakeem hospital information system) - e- Built-in rechargeable battery minimum life 1 hour of continuous monitoring - f- Min 72 hours trend capacity - g- QT and QTc analysis		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	h- ST Histogram i- Data such as waveforms, measurement numerics and alarms from the anaesthesia machine can be displayed on the monitor for complete clinical overview j- Escalating level alarm that cannot be permanently silenced k- It should be securely mounted on the anaesthesia machine		
19	Full gas module (on each machine): either built-in or removable on the anaesthesia machine to measure O ₂ (measured by permanent paramagnetic sensor), CO ₂ , N ₂ O & anaesthetic agents (Isoflurane & Sevoflurane), all necessary accessories to be included. Water trap: a- must be priced separately in the technical offer, price should be fixed as per special terms b- lifetime should be indicated in the technical offer		
20	Gas Analyser: Offer must include one gas analyser (priced separately, one unit with the whole quantity) from well-known brand, compact unit with the ability to measure the following: - High & low pressure & Ultra low pressure - Flow & Ultra low flow - Tidal volume - O₂, CO₂, N₂O measurements - Anaesthetic Agents (isoflurane & Sevoflurane) measurements - Analyser should be compatible with anaesthesia machines from different manufacturers - All accessories needed to run the analyser should be included		
21	Abroad service training for 1 biomedical engineer/ technician as per special terms		



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Annex 2: Mobile Equipment

Item 48	Nerve Stimulator	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The device is dedicated to generate low intensity electric pulses to locate peripheral nerves before the injection of local anaesthetic to block nerve conduction		
2	Portable and handheld		
3	Battery operated		
4	Digital display of all the following parameters:		
	a- Stimulus amplitude in mA		
	b- Stimulus duration in ms		
	c- Stimulus frequency in Hz		
	d- Battery Level		
5	Adjustable stimulus current, duration and frequency		
6	All Standard accessories to operate the unit should be included in the offer:		
	a- Electrode cable		
	b- Suitcase		
7	Any consumables/ disposables (i.e. stimulation needles)		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	needed should be quoted separately		
8	Other options and accessories should be quoted separately		
9	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 49	Video Assisted Laryngoscope, Rigid, Adult	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Video laryngoscope unit, for the use of difficult intubation for adults & paediatrics		
1	Monitor:		
	a- Size $\geq$ 6 inches		
	b- High resolution LCD type		
2	Rigid blades:		
	a- With built in video camera: CMOS technology that provides superior video image quality		
	b- Built in LED light Source		
	c- Bidder should state if blades are reusable or disposable.		
	d- Bidder should quote <u>separately</u> for the following blade sizes: - Sizes 3 (Curved) - Size 4 (Curved) - Special blade size dedicated for difficult intubation for <u>adults</u> must be included		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	- Other blade sizes and types to be priced separately		
	e- Can be connected easily to the monitor through a connecting table with length of at least 1.5 meters		
3	Protective case should be included		
4	All standard accessories should be included		
5	Option: Mobile trolley with basket for blades should be priced separately		
6	Option: Video stylet to be priced separately if available		
7	All consumables should be priced separately, prices should be fixed according to special terms		
8	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 50	Cabinet, Warming, Dual, Floor	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Dual heating chambers for warming of linens, blankets, IV fluids		
2	Free-standing type		
3	Capacity $\geq$ 400 litres		
4	It should be constructed from heavy duty stainless steel with stainless steel shelves and doors		
5	Digital readout of temperature inside cabinet in Celsius		
6	Uniform heat transfer in chambers		
7	It should have heating range from approx. 37°C to approximately 70°C.		
8	High & low temperature alarm		



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Annex 2: Mobile Equipment

Item 51	Conventional Electrosurgical Unit	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known brand		
2	Application: should be suitable for wide range of major surgeries (At least General, Orthopaedic, Laparoscopic & Caesarean & ENT surgeries)		
3	Controls to include mono-polar and bipolar modes, pure cut, blend cut, coagulate, spray coagulation		
4	Automatic Stable output control to maintain selected power level into a wide range of different tissue types		
5	Neutral patient plate monitoring system with indicator		
6	Maximum Cut output power: 300-400 watt		
7	Maximum Coagulation output power 80 watt or better		
8	Leakage current ≤ 20 mA		
9	Operating panel with touch buttons to select modes and adjust power levels.		
10	Digital LCD display of power level and error codes		
11	Monopolar handle connection: International 3-pin plug type		
12	The following accessories must be quoted separately:		
	a- Patient plate, adult, split type, disposable Qty. (20)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b- Patient plate, paediatric, split type, disposable Qty. (10)		
	c- Patient plate, adult, reusable Qty. (1)		
	d- Patient plate, paediatric, reusable Qty. (1)		
	e- Reusable patient plate cable		
	f- Bipolar forceps & cable		
	g- Monopolar pencil, reusable		
	h- Monopolar handle tips (Ball, loop, needle, spatula, curved spatula), all should be quoted separately Qty.(1 each)		
	i- Hook electrode with cable Qty.(1 each)		
	j- Footswitch, twin type, spill proof		
13	All types of cutting and coagulating tips and forceps for mono-polar and bipolar modes for major surgeries (mentioned in 2) must be quoted separately.		
14	Handle tips, forceps, cables must be autoclavable.		
15	Control through push buttons on handle, and through foot switch.		
16	Audible and visual alarm with self-test capability.		
17	Original mobile heavy duty trolley, with large twin anti-static lockable castors.		
18	Safety type : CF defibrillation proof		
19	Any options to be quoted separately		
20	Offer must include one electrical safety analyser (priced separately): - From a reputable well known company - Low weight portable type with carrying handle - All standard accessories needed to run the analyser should be included		
21	Abroad service training for 1 biomedical engineer/ technician as per special terms		



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Annex 2: Mobile Equipment

Item 52	Tourniquet, Double Cuff, Electrical	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Dual Channel		
2	Electrically operated with built in air compressor		
3	Digital LCD display ≥ 6 inches of preset and actual pressure in both channels.		
4	Built in digital timer with timer alarm after reaching the set alarm time		
5	Built-in backup rechargeable battery: at least 2 hours		
6	Adjustable pressure range: 100 to 500 mmHg or better		
7	With leak test capability		
8	Mounted on robust mobile stand and basket for cuffs and accessories		
9	Cuffs should be reusable (up to at least 100 times), durable, of high quality and colour coded and should not be damaged by disinfecting with commonly used agents used in the operating theatres		
10	All control unit output ports, cuffs and cuff tubing should have locking connectors.		
11	All types and sizes of cuffs should be listed and priced separately		
12	Other accessories and consumables to be listed and priced separately		



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Annex 2: Mobile Equipment

Item 53	Laparoscopic Surgical Unit	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Durable, heavy duty construction, reliable with superior image quality		
B	Camera system (4k Resolution): Provides electronic shutter function, automatic brightness control and optical zoom		
	1) Resolution (4k): a minimum of 3840*2160.		
	2) Compact, lightweight, easy to grip with low heat generation		
	3) Focal Distance with zoom lens, 16-28 mm or better		
	4) Gas sterilizable, autoclavable is preferable		
	5) Immersible in disinfections liquid.		
	6) Universal coupling mechanism to fit all standard endoscopes.		
	7) Camera cable 3 m or more		
	8) Camera controller (4k resolution)		
	9) Picture in picture mode		
C	Light Source:		
	1) LED Light source (light intensity should be equivalent to 300 Watt xenon lamp)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	2) Working hour $\geq$ 10,000 hours.		
	3) Automatic and manual adjustment of light intensity.		
	4) Front panel hygienic with convenient indicators for ease of operation.		
	5) Flexible fibre optic cable preferably autoclavable and not less than 230 mm.		
D	CO2 Insufflator:		
	1) Sealed hygienic front touch panel.		
	2) Maximum flow rate From 40- 50 L/MIN.		
	3) Display of gas consumption, flow rate and intra-abdominal pressure		
	4) Gas heating to body temperature (at 37 C).		
	5) Audible and visual alarms.		
	6) Filter on the CO2 output to prevent cross-contamination.		
	7) Smoke evacuator that is either integrated or quoted as a separate unit.		
E	Suction/ Irrigation combined unit:		
	1) Complete with all standard sets of tubes for the unit.		
	2) Roller pump for irrigation (Pressure: adjustable up to 200 mmHg or better).		
	3) Flow Rate: adjustable up to 1 litre//min or better.		
	4) Adjustable vacuum pressure.		
	5) Complete with all standard sets of tubes for the unit.		
F	LCD / LED Colour Monitor: Qty. (1)		
	1) Medical grade type that is supplied by the same manufacturer		
	2) At least of 32 inch size that is mounted on the mobile cart		
	3) Resolution: 4k resolution minimum of 3840*2160		
	4) DVI compatible.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
G	Mobile cart: Original to suit the above systems and consists of the following:		
	1) 4 antistatic, anti-scratch castors. And four shelves		
	2) Locking brakes.		
	3) Cable channel with shockproof plugs.		
	4) Adjustable or fixed shelves.		
	5) At least one drawer.		
	6) All accessories (connect cable, plugs, etc.) needed for the offered system to be included.		
	7) All accessories (connect cable, plugs, etc.) needed for the offered system to be included.		
H	Ability to record images and videos on Medical grade DVD recorder or USB flash memory		
I	Telescopes, 4 K Resolution, Qty. 1 each with each tower:		
	a- TELESCOPE 30° (4K) Diameter 10 mm		
	b- TELESCOPE 0° (4K) Diameter 10 mm		
	c- TELESCOPE 30° (4K) Diameter 5 mm		
	d- TELESCOPE 0° (4K) Diameter 5 mm		
J	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for the subcomponents for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 54	Gynaecology & Hysteroscopy Surgical Laparoscopic Tower	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Durable, heavy duty construction, reliable with superior image quality		
B	Camera system (4k Resolution) : Provides electronic shutter function, automatic brightness control and optical zoom		
	1) Resolution (4k): a minimum of 3840*2160.		
	2) Compact, lightweight, easy to grip with low heat generation		
	3) Focal Distance with zoom lens, 16-28 mm or better		
	4) Gas sterilizable, autoclavable is preferable		
	5) Immersible in disinfections liquid.		
	6) Universal coupling mechanism to fit all standard endoscopes.		
	7) Camera cable 3 m or more		
	8) Camera controller (4k resolution)		
	9) Picture in picture mode		
C	Light Source:		
	1) LED Light source (light intensity should be equivalent to 300 Watt xenon lamp)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	2) Working hour $\geq$ 10,000 hours.		
	3) Automatic and manual adjustment of light intensity.		
	4) Front panel hygienic with convenient indicators for ease of operation.		
	5) Flexible fibre optic cable preferably autoclavable and not less than 230 mm.		
D	CO2 Insufflator:		
	1) Sealed hygienic front touch panel.		
	2) Display of settings.		
	3) Maximum flow rate From 40- 50 L/MIN.		
	4) Display of gas consumption, flow rate and intra-abdominal pressure		
	5) Gas heating to body temperature (at 37 C).		
	6) Audible and visual alarms.		
	7) Filter on the CO2 output to prevent cross-contamination.		
	8) Smoke evacuator that is either integrated or quoted as a separate unit.		
E	Suction/ Irrigation combined unit:		
	1) Complete with all standard sets of tubes for the unit.		
	2) Roller pump for irrigation (Pressure: adjustable up to 150 mmHg or better).		
	3) Flow Rate: adjustable up to 0.5 litre//min or better.		
	4) Adjustable vacuum pressure.		
	5) Complete hysteroscopy set for irrigation system		
F	LCD / LED Colour Monitor: Qty. (1)		
	1) Medical grade type that is supplied by the same manufacturer		
	2) At least of 32 inch size that is mounted on the mobile cart		
	3) Resolution: 4k resolution minimum of 3840*2160		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	4) DVI compatible.		
G	Mobile cart: Original to suit the above systems and consists of the following:		
	1) 4 antistatic, anti-scratch castors. And four shelves		
	2) Locking brakes.		
	3) Cable channel with shockproof plugs.		
	4) Adjustable or fixed shelves.		
	5) At least one drawer.		
	6) All accessories (connect cable, plugs, etc.) needed for the offered system to be included.		
H	Ability to record images and videos on Medical grade DVD recorder or USB flash memory		
I	Telescopes, 4 K Resolution, Qty. 1 each with each tower:		
	1) Straight forward telescope 0°, 4K resolution, enlarged view, diameter 10 mm, length 30-31 cm, autoclavable		
	2) Forward oblique telescope 30°, 4K resolution, enlarged view, diameter 10 mm, length 30-31 cm		
	3) Straight forward telescope 0°, 4K resolution, enlarged view, diameter 5 mm, length 29-30 cm, autoclavable		
	4) Forward oblique telescope 30°, 4K resolution, enlarged view, diameter 5 mm, length 29-30 cm		
J	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for the subcomponents for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 55	Orthopedic Large Bone Drill & Saw, Battery Type	Qty. (5)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Durable, heavy duty construction, high performance & reliable		
A	Drill Hand piece:		
	1- Ergonomic, light weight, small in size and easy to handle		
	2- Battery type hand-piece		
	3- Hand controlled model of speed and direction		
	4- Quick action chuck mechanism		
	5- Construction: stainless steel or aluminium.		
	6- RPM $\approx$ 1000 or higher.		
	7- Simple daily maintenance.		
	8- The following attachments must be included and priced separately:		
	a- ¼ inch jackob shuck		
	b- Reamer attachment		
	c- Pin collet & wire collet		
B	Oscillating Saw Hand piece:		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	1- Ergonomic, light weight, small in size and easy to handle		
	2- Battery type hand-piece		
	3- Hand controlled model of speed		
	4- Quick action mechanism of blade mounting		
	5- Construction: stainless steel or aluminium		
	6- Simple daily maintenance.		
C	Reciprocating Saw hand piece/ attachment (to be priced separately)		
D	All accessories including burrs and blades for drilling and cutting blades are to be listed and priced separately.		
E	Batteries:		
	1- Battery continuous operation: at least 20 min		
	2- Two batteries for each hand piece with autoclavable aseptic housing and aseptic shield, all should be priced separately, price should be fixed as per special terms		
	3- Two battery chargers to be included (total quantity with all required drills & saws) with at least 4 battery slots with independent battery charge status display		
F	Sterilization container for all hand pieces and attachments, burs and blades to be included.		
G	All handpieces, attachments and battery housings should be autoclavable at standard 134°C cycle with standard sterilization, pre-vacuum and drying periods.		
H	A list of standard accessories and options for the offered model		
I	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 56	Fetal Monitor (CTG)	Qty. (11 Fetal Monitor) Qty. (1 Central Station)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable & heavy duty from a reputable well known manufacturer		
2	Fetal monitors		
	a- Each fetal monitor shall be capable of detecting displaying, and printing a record of fetal heart rate (single & twin) and uterine activity		
	b- Capability to monitor and display maternal heart rate, non-invasive blood pressure & SPO2		
	c- Each fetal monitor shall have an output connector that allows it to be connected to a central monitoring system.		
	d- The fetal monitor shall provide digital values and graphical trends for FHR and UA on an LCD touchscreen of size not less than 6"		
	e- Doppler & toco transducers shall include an adjustable elastic strap.		
	f- The fetal monitor digital display and the recorder shall indicate fetal heart rate over range of 50 to 210 bpm.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	g- Each fetal monitor shall be supplied with a monitor bracket and necessary hardware for mounting on a trolley and a patient cable and lead set. These shall be listed separately as options.		
	h- Built-in multi-channel strip-chart recorder with at least Qty. (20) paper roll with each unit		
	i- Prices of all accessories (including transducers) should be priced separately and <u>fixed as per special terms</u>		
3	Central Station:		
	a- The central station is to be located at the nurse station. Bidders shall quote for a comprehensive offer including network with all required cabling, switches, etc....		
	b- Central station must be supplied by the same manufacturer of the patient monitor, locally supplied central stations will be considered as non-conforming.		
	c- The central station monitor shall display digital values and graphical trends for FHR and UA as obtained from each individual fetal monitor:		
	d- Central station monitor, high resolution LCD ≥ 19 inches to be capable of displaying data from at least 11 fetal monitors simultaneously.		
	e- Remote record initiation control for all waveforms.		
	f- Audio/ visual alarms		
	g- External Laser printer from well-known manufacturer. Data print out is required to be on A4 paper. Locally supplied printer is acceptable		
	h- HL7 License or DICOM (Compatible with Hakeem Hospital Information System without any extra cost)		



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Annex 2: Mobile Equipment

Item 57	Infant Incubator	Qty. (17)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable & heavy duty from a reputable well known manufacturer		
2	Clear digital TFT-LCD colour screen to display numerical information of all parameters including skin temperature, air temperature, humidity level, error codes, alarms etc..., screen should be external and over the bed with trend capability.		
3	Skin temperature mode: i. Servo controlled ii. Set parameter value: 35°-37° C or better iii. Measurement and adjustment of temperature shall be in increments of 0.1° C iv. Temperature measurement accuracy $\pm 0.5^\circ$ or better		
4	Incubator Air temperature mode: i. Set parameter value: (24° C) to (37° C) or better ii. Measurement and adjustment of temperature shall be in increments of 0.1° C iii. Temperature measurement accuracy $\pm 0.5^\circ$ or better		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
5	Incubator Humidity: i. Servo controlled ii. Set parameter value: 40% to 95% RH or better		
6	Built-in electronic weighing scale: Weight unit in grams		
7	Alarms: i. Audible and visual alarms with adjustable limits of temperature, water level and sensors. ii. Alarm mute capability with automatic reactivation.		
8	Warm up time to be less than 60 min.		
9	Air circulation system with micro intake filters and durable low noise fan heater.		
10	Heat containment system to prevent sudden temperature changes when an access door/port is opened.		
11	Double wall canopy.		
12	Electrically adjustable height through foot pedal, height is adjusted up to 30 cm or more		
13	Noise level $\leq$ 50 dB		
14	Tiltable mattress platform of at least 10 degrees.		
15	High quality, waterproof, easy to clean and disinfect mattress (antibacterial and anti-fungal).		
16	X-Ray cassette.		
17	Large access doors integrated on each side of the hood, each door should be equipped with air curtain, doors should be robust and durable.		
18	Front panel must have the capability to be fully opened to enable infant placing and removing.		
19	At least two tubing ports.		
20	Adequate storage drawer (s) and / or Cabinet(s).		
21	At least one IV pole with two hooks.		
22	Large medical grade antistatic, swivel type, non-marking		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	castors with brakes		
23	Utility rails.		
24	The following should be included:		
	i. Skin temperature		
	ii. Air intake filter		
25	Offer must include one infant incubator analyser (priced separately): - From a reputable well known company - Ability to measure the following parameters: - a- Temperature (in different locations) - b- Sound level - c- Humidity - d- Air flow - Should be compatible with incubators from different manufacturers - All standard accessories needed to run the analyser should be included		
26	Abroad service training for 2 biomedical engineers/ technicians as per special terms		



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Annex 2: Mobile Equipment

Item 58	Transport Infant Incubator	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known brand		
2	Microprocessor controlled servo type with self-test capability and error code scheme		
3	Double wall hood		
4	Integrated humidifier		
5	Digital display of air & skin temperatures & battery status. All required accessories and consumables should be included and priced separately (price should be fixed as per special terms)		
6	Audio-visual alarm system with adjustable limits for: temperatures, settings, indicators, main power, sensors ...etc		
7	Alarm mute with automatic reactivation		
8	Micro intake filters.		
9	Integrated examination light.		
10	High quality, waterproof, easy to clean and disinfect mattress (antibacterial and anti-fungal) with pull-out mechanism		
11	Adjustable heater temperature		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
12	Large access doors		
13	At least two hand ports.		
14	At least one tubing port		
15	An auxiliary shelf for other monitoring devices with fixation mechanism.		
16	Two Oxygen bottles with holder and regulator with flowmeter should be included		
17	One IV pole with holder should be included		
18	Integrated collapsible trolley with medical grade antistatic, swivel type, non-marking castors with brakes and a minimum diameter of 12 cm. The trolley must be suitable for safe ambulance fixation.		
19	Provision for external power source.		
20	Battery: - Back-up time for settings and operation: minimum of 3 hours - Battery type and specifications should be mentioned clearly, bidder should state clearly if the battery is available in the local market; if else its price of the battery should be mentioned in the technical offer and fixed as per special terms - Battery should be replaced in free of charge basis during the warranty period - Any required battery conditioner should be included		
21	Other options to be priced separately: oxygen concentration in the hood, SPO2 (Masimo technology).....		



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Annex 2: Mobile Equipment

Item 59	Infant Resuscitator	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known brand		
2	Microprocessor controlled servo type with self-test capability and error code scheme		
3	Flat, touch-type, hygienic, and drip-proof control panel.		
4	Integrated, large, variable tilt bassinet not less than approx. 65x45 cm		
5	Integrated examination light.		
6	X-ray cassette holder.		
7	Regulated suction unit.		
8	Integrated oxygen and medical air flow meters with blender		
9	Adjustable height.		
10	Integrated storage drawer(s) and utility rail(s).		
11	High quality, waterproof, easy to clean and disinfect antibacterial anti-fungal mattress.		
12	Built in radiant heater		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
13	Continuous monitoring of skin temperature		
14	Measurements and adjustments of temperatures shall be in increments of 0.1°C.		
15	Digital display of set-point, skin temperature, and heater power.		
16	Audio-visual alarm system with adjustable limits for: skin temperature, settings, system malfunction, main power, sensors etc.		
17	Alarm mute for 1- 3 minutes with automatic reactivation.		
18	IV pole with two hooks.		
19	Medical grade antistatic, non-marking castors with minimum diameter 12 cm, swivel type, two equipped with brakes.		
20	Pre-warm function with automatic warming up		
21	APGAR timer		
22	Outlets for manual bagging and T-piece resuscitation with adjustable PIP up to 30 cmH ₂ O or better, PEEP up to 15 cmH ₂ O or better		



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Annex 2: Mobile Equipment

Item 60	Single Surface Phototherapy Unit	Qty. (9)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	LED based single surface phototherapy unit used for clinical management of neonatal hyperbilirubinemia.		
2	Irradiance level at 30 cm: Low level > 20 $\mu\text{W}/\text{cm}^2/\text{nm}$ High level > 30 $\mu\text{W}/\text{cm}^2/\text{nm}$		
3	Removable head for incubator use		
4	Effective area: > 1000 cm^2 or better.		
5	Noise level during normal operation $\leq 40\text{dB(A)}$		
6	Mobile with strong sturdy base with swivelling castors (at least 2 with brakes), with height adjustment capability and can be easily positioned on top of the incubator (base shape must be suitable for sliding underneath the incubator) and adjustable hood angle position		
7	Therapy digital timer to indicate the used operational hour of the phototherapy unit per patient.		
8	Bandwidth: 420 to 500 nm		
9	LED light source technology of lifetime not less than 30,000 hours, lamps should be priced separately and fixed as per special terms		
10	Safety goggles should be priced separately		



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Annex 2: Mobile Equipment

Item 61	Phototherapy Unit, Double	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Double hoods that covers at least 1 m2		
2	Mobile with strong sturdy base with swivelling castors (at least 2 with brakes), with height adjustment capability and can be easily positioned on top of the incubator (base shape must be suitable for sliding underneath the incubator) and adjustable hood angle position		
3	Digital display with hour meter to monitor and track time for bulb replacement		
4	Bandwidth: 400 to 500 nm		
5	LED light source technology of lifetime not less than 20,000 hours, lamps should be priced separately and fixed as per special terms		
6	Safety goggles should be priced separately		



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Annex 2: Mobile Equipment

Item 62	Phototherapy Unit, Intensive	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Cylinder type that covers uniformly the total body of the baby (360° all around the baby)		
2	Easy access to the baby		
3	Mobile on casters, with sturdy base, at least 2 casters with brakes		
4	Digital display with hour meter to monitor and track time for bulb replacement and treatment session timer; it should switch off automatically when reaching the set time		
5	Temperature monitoring capability of the baby with high/ low temp alarm (audio & visual)		
6	Bandwidth: 400 to 500 nm		
7	LED light source technology of lifetime not less than 20,000 hours, lamps should be priced separately and fixed as per special terms		
8	Side windows to enable baby monitoring during treatment session		
9	Safety goggles should be priced separately		



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Annex 2: Mobile Equipment

Item 63	Patient Radiant Warmer, Neonate	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, heavy duty construction, reliable, ergonomic design and easy to use		
2	Application: for new-born & neonate patients.		
3	Safe warming operation without damaging patient skin layers and eyes.		
4	Durable long life heating elements		
5	Fast heat operation		
6	Mounted on antistatic height adjustable pole; pole to be made of heavy duty stainless steel or equivalent material		
7	High quality castors with braking mechanism.		
8	Timer for setting of heating duration.		
9	Adjustable heat intensity		
10	Swivelling heating hood		
11	Non-conductive heat protective cover to prevent hand burns		



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Annex 2: Mobile Equipment

Item 64	Scale, Neonate	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Electronic with digital display switchable between Kilograms and Pounds		
2	Made from high quality material		
3	Easy to clean and disinfect		
4	Materials should be stain resistant.		
5	Scale range: 0 – 20 Kg		
6	Graduation ≤ 10 g		



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Annex 2: Mobile Equipment

Item 65	Fiber Optic Transilluminator	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Fiber-optic transilluminator that provides high intensity light for safely assisting in the diagnosis of pneumothorax		
2	Intensity can be varied to required application		
3	Cold light, temperature $\leq 35^{\circ} \text{C}$		
4	Fiber-optic cable: long, flexible, autoclavable and easy to be cleaned		
5	Battery operated		
6	Hand-held type		
7	All standard accessories should be included		
8	Any options should be mentioned and priced separately		
9	All consumables should be mentioned and priced separately		



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Annex 2: Mobile Equipment

Item 66	Total Body Cool Machine combined with EEG	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Suitable for use on babies suffering from Hypoxic Ischaemic Encephalopathy (HIE) after Birth		
2	Bench top model that can be mounted on a trolley		
3	Robust design with heavy-duty construction.		
4	Water or water-based solution type		
5	Large colour LCD display to set and monitor body temperature.		
6	Highest level of safety with alarm indicators for fluid level, temperature (out of range) system failure.		
7	To be supplied with all standard accessories including: reusable skin probe, reusable rectal probe.		
8	Range for mattress temperature; can be controlled from +15C° - +37C°.		
9	Wrap around mattress with approximate size 30*40 cm to be priced separately.		
10	Audible alarms.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
11	Low noise (less than 55 db)		
12	Original mobile stand which fits the system to be supplied with the offer		
13	All other options (i.e : EEG) and accessories including different probes, different mattress size etc. to be quoted separately.		
14	Microprocessor controlled with temperature constancy of $\pm 0.5\text{ C}^\circ$ or better.		



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Annex 2: Mobile Equipment

Item 67	Diagnostic Hysteroscopy Tower	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Durable & heavy duty with superior image quality & from a reputable well known manufacturer		
A-1	Camera system:		
	i. Single or three chip camera head (CCD or CMOS)		
	ii. Compact, lightweight, easy to grip with low heat generation		
	iii. Resolution (full HD): a minimum of 1920*1080.		
	iv. Gas sterilizable, autoclavable preferable		
	v. Immersible in disinfections liquid.		
	vi. Universal coupling mechanism to fit all standard endoscopes.		
	vii. Camera cable 3m		
	viii. Camera controller (Full HD Resolution)		
A-2	Light Source:		
	i. Long life, powerful LED that is equivalent to xenon 175 watt		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	ii. Working hour 10,000 hours or more.		
	iii. Flexible fibre optic cable preferably Autoclavable and not less than 230 mm		
A-3	LCD / LED Colour Monitor:		
	i. Medical grade type that is supplied by the same manufacturer		
	ii. A minimum of 24 inch.		
	iii. Full HD resolution		
A-4	Mobile video cart: Original to suit the above systems and consists of the following:		
	i. 4 antistatic, anti-scratch castors. And four shelves		
	ii. Locking brakes.		
	iii. Cable channel with shockproof plugs.		
	iv. Adjustable or fixed shelves.		
	v. At least one drawer		
	vi. All accessories (connect cable, plugs, etc.) needed for the offered system to be included.		
A-5	Telescopes, Full HD Resolution, Qty. 1 each with each tower:		
	a- Forward oblique telescope 30°, diameter, approx. 2.7-2.9 mm length 24-30 cm, autoclavable with suitable sheath		
	b- Mini fibre telescope 30°, diameter approximately 2 mm length 26-27 cm, autoclavable with suitable sheath		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A-6	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for the subcomponents for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 68	Vacuum Extractor	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The vacuum extractor should be capable of performing suction techniques to aid in cases such as held-up delivery, weak contractions, abnormal fetal position, and intrauterine asphyxia.		
2	The vacuum extractor shall be quiet ($\leq 45\text{dB}$)		
3	Low-maintenance usage without the risk of overheating.		
4	Easy to clean and to disinfect.		
5	The vacuum extractor shall incorporate a regulating valve offering a wide range of vacuum suction capacity		
6	The vacuum extractor shall have dial gauges that accurately measure the amount of suction (675 mm/Hg).		
7	All listed accessories that accompany the obstetrical vacuum extractor shall be provided.		
8	A list of standard accessories for the offered model.		



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Annex 2: Mobile Equipment

Item 69	Fetal Heart Detector	Qty. (5)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable & heavy duty from a reputable well known manufacturer		
2	Handheld type that can be inserted in a clinician's pocket.		
3	Lightweight: less than 300 grams.		
4	Battery operated (not rechargeable) with low battery indicator; batteries should be available at the local market.		
5	Two doppler probes (2 MHz frequency) with each unit		
6	Probe cable length: at least 2 meters (when fully extended)		
7	Probes and batteries should be easily replaced.		
8	Digital display of fetal heart rate		
9	Noise reduction filters for clear fetal heart sounds and built in loudspeaker.		
10	Probes should be waterproof		
11	Auto shut off when not in use.		
12	Any other options including probes should be quoted separately,		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	<u>prices of probes should be fixed as per special terms</u>		
13	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



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Annex 2: Mobile Equipment

Item 70	Digital Mobile Endoscopy Workstation	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	<u>A high definition (full HD)</u> mobile endoscopy workstation is required to comprise the following items and to conform to the minimal specifications outlined for each item:		
A	Full HD High definition standard video flexible gastroscope of the following specifications: Qty. (2)		
	1) The entire gastroscope must be submersible.		
	2) Optical system:		
	i. Viewing direction:(forward viewing 0 °)		
	ii. Field of view : (140°)		
	iii. Observation range: (5 - 100) mm or better		
	3) Insertion tube section:		
	i. insertion tube diameter: (9.1 - 10) mm		
	ii. working length : (1000-1100) mm		
	iii. total length: (1300 – 1500) mm		
	4) One working channel with a diameter: 2.8 mm or more		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	5) Tip deflection:		
	i. Up : (210 °)		
	ii. Down : 90 degree or more		
	iii. Left : 100 degree or more		
	iv. Right : 100 degree or more		
	6) Compatible with Plasma (H2O2), ETO & liquid reprocessing methods.		
	7) Shall have Water Jet channel.		
	8) Case with complete accessories kit should be listed separately with each scope.		
B	Full HD High definition pediatric video flexible gastroscope of the following specifications: Qty. (1)		
	1) The entire gastroscope must be submersible.		
	2) Optical system:		
	i. Viewing direction:(forward viewing 0 °)		
	ii. Field of view : (140°)		
	iii. Observation range: (2 - 100) mm or better		
	3) Insertion tube section:		
	i. insertion tube diameter: (9–9.3) mm		
	ii. working length : (1000-1100) mm or less		
	iii. total length: (1300 – 1500) mm		
	4) One working channel with a diameter: 2.8 mm or more		
	5) Tip deflection:		
	i. Up : (210 °)		
	ii. Down : 90 degree or more		
	iii. Left : 100 degree or more		
	iv. Right : 100 degree or more		
	6) Compatible with Plasma (H2O2), ETO & liquid		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	reprocessing methods.		
	7) Case with complete accessories kit should be listed separately with each scope		
C	High definition (Full HD) standard video flexible colonoscope of at least the following specifications: Qty. (2)		
	1) The entire colonoscope must be submersible.		
	2) Optical system:		
	i. Viewing direction: (forward viewing 0 °)		
	ii. Field of view : (140°) or better		
	iii. Observation range : (4 - 100) mm or better		
	3) Insertion tube section:		
	i. insertion tube diameter: (12.0-13.2) mm		
	ii. working length : (1500 – 1750) mm		
	iii. total length: (1700 – 2100) mm		
	4) One working channel with a diameter: 3.7 mm or more		
	5) Tip deflection:		
	i. Up : (180 °)		
	ii. Down : (180 °)		
	iii. Left : (160°)		
	iv. Right : (160°)		
	6) Compatible with ETO & liquid reprocessing methods.		
	7) Shall have Water Jet channel.		
	8) Case with complete accessories kit should be listed separately.		
D	High definition (Full HD) Pediatric video flexible colonoscope of at least the following specifications: Qty. (1)		
	1) The entire colonoscope must be submersible.		
	2) Optical system:		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	i. Viewing direction: (forward viewing 0 °)		
	ii. Field of view : (140°) or better		
	iii. Observation range : (3 - 100) mm		
	3) Insertion tube section:		
	i. insertion tube diameter ≤ 11.6 mm		
	ii. working length ≥ 1600 mm		
	iii. total length: (1700 – 2100) mm		
	4) One working channel with a diameter: 3.2 mm or more		
	5) Tip deflection:		
	i. Up : (210 °)		
	ii. Down : (160 °) or better		
	iii. Left : (160°) or better		
	iv. Right : (160°) or better		
	6) Compatible with ETO & liquid reprocessing methods.		
	7) Shall have Water Jet channel.		
	8) Case with complete accessories kit should be listed separately.		
E	Therapeutic video flexible bronchoscope of the following specifications: Qty. (1)		
	1) The entire bronchoscope must be submersible.		
	2) Optical system:		
	i. Viewing direction: (forward viewing 0 °)		
	ii. Field of view: (120°)		
	iii. Observation range: (3 - 100) mm or better		
	3) Insertion tube section:		
	i. insertion tube diameter: (5.8 – 6.4) mm		
	ii. working length : (600) mm		
	iii. total length: (800 – 900) mm		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	4) One working channel with a diameter: (2.8) mm		
	5) Tip deflection:		
	i. Up : (180 °)		
	ii. Down : (130 °)		
	6) Compatible with ETO & liquid reprocessing methods.		
	7) Case with complete accessories kit should be listed separately.		
F	Standard video flexible bronchoscope of the following specifications: Qty. (1)		
	1) The entire bronchoscope must be submersible.		
	2) Optical system:		
	i. Viewing direction: (forward viewing 0 °)		
	ii. Field of view: (120°)		
	iii. Observation range: (3 - 100) mm or better		
	3) Insertion tube section:		
	i. insertion tube diameter: (4.8 – 5.6) mm		
	ii. working length : (600) mm		
	iii. total length: (800 – 900) mm		
	4) One working channel with a diameter: (2.0-2.2) mm		
	5) Tip deflection:		
	i. Up : (180 °) or better		
	ii. Down : (130 °)		
	6) Compatible with ETO & liquid reprocessing methods.		
	7) Case with complete accessories kit should be listed separately.		
G	A high-definition digital video processor (Full HD) with integrated or detached light Source with the following specifications:		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	1) Touch Panel LCD screen		
	2) Shall be equipped with image enhanced technology with compatible video endoscopes.		
	3) Brightness adjustment		
	4) Automatic white balance.		
	5) Support for Electronic Zoom at least 1.5X or above.		
	6) Shall have integrated pump.		
	7) Pump shall be controllable to feed the Air/Water as required.		
	8) HD video outputs: (HD/ SDI/ DVI)		
	9) Standard video outputs: (RGB, S-Video, Composite Video)		
	10) 300-watt Xenon light source or equivalent LED type		
	11) Emergency backup light shall be available.		
	12) Shall be upgradable for Ultrasound Gastroscope, balloon Enteroscope, Ultrasound bronchoscope in future.		
H	LCD or LCD with LED backlight Colour Monitor		
	1) Medical grade.		
	2) Not less than 24 inch		
	3) High definition (full HD) image display		
	4) DVI output (to provide completely digital signal).		
	5) Flicker free.		
	6) Low radiation.		
I	Leakage tester Qty. (2)		
J	Irrigation Pump		
	1) Irrigation via the instrument or auxiliary water channel		
	2) Controlled flow rate		
	3) Remote control or foot switch operation		
	4) All Tube, adapters and accessories that are required to operation must be included.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	5) Any other options or accessories must be priced separately.		
K	Medical DVD Recorder from well-known brand		
L	Original mobile cart to suit the above system and consists of the Followings specifications:		
	1) Antistatic, anti-scratch castors.		
	2) Locking brakes.		
	3) Cable channel with shockproof plugs.		
	4) Drawer(s) and/or cabinets.		
	5) Scope Hanger to hold the scope during the procedure.		
2	A certified service training program at a reputable centre abroad recognized by the manufacturer for at least two biomedical engineers or biomedical technicians.		



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Annex 2: Mobile Equipment

Item 71	Endoscope High Level Disinfector	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Dedicated for cleaning and disinfection of flexible endoscopes:		
1	Fully automatic microprocessor controlled with multi program selection, (at least 2 cycles: standard and extended for each scope)		
2	Short cycle time that does not exceed 30 minutes		
3	Ability to wash and disinfect the endoscopes and the internal channels		
4	Ergonomic compact design, bidders should visit the site (Endoscopy department in Military Ma'an Hospital) and state clearly in the technical offer that the washer will meet all the requirements needed to install the machine (space & electromechanical requirements)		
5	Single scope capacity		
6	Free standing type or table top with original trolley		
7	Unit to be heavy duty and robust with a construction of corrosion resistant material (non-metallic)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
8	Single hinged manual door.		
9	Automatic & continuous integrated leak test		
10	The unit must operate on single phase 220 volt 50 HZ		
11	Audio /visual alarm with error message including leak test alarm		
12	Digital LCD display with the ability to monitor the phase, time and the temperature		
13	Water treatment system (R.O and /or Deionizer) and pre-filters must be quoted and priced separately if needed		
14	All adapters for small and large endoscopes from the manufacturers (Pentax, Fujinon, Olympus) must be quoted and priced separately		
15	All racks, baskets, inserts that are needed for operation are to be listed and priced separately		
16	Must operate without external air supply		
17	Original endoscope trolley to be priced separately with 2 shelves, one for the contaminated scope and the other one for the disinfected scope		
18	All pre-installation requirements must be stated clearly: a- Space required b- Electrical requirements c- Consumption and flow of cold and hot water d- Drainage requirement		
B	Original consumables (detergents & filters) needed to run the equipment for (500 cycles for each unit) should be included, all consumables should be compatible with endoscopes and bronchoscopes from the following manufacturers: Pentax, Fujinon & Olympus, shelf life of the consumables should be stated clearly		
C	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its' running cost (consumables) over a period of seven years		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	Original consumables (all detergents & filters) needed to run the equipment for 7 years (40 cycles/ month) should be quoted separately Consumables should be from the same manufacturer of the unit & should be specified clearly in tabular form including: - All detergents needed to operate the unit - Size of containers (detergents' containers) - Price of each container - Consumption of each detergent per/ cycle		



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Annex 2: Mobile Equipment

Item 72	Electrosurgical Unit, Endoscopy	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Suitable for <u>GI endoscopic procedures</u>		
2	From a reputable well-known brand		
3	Controls to include mono-polar and bipolar modes, pure cut, coagulate and special mode for polypectomy and ERCP procedures		
4	Automatic Stable output control to maintain selected power level into a wide range of different tissue types		
5	Neutral patient plate monitoring system with indicator		
6	Maximum CUT output power: ≥ 200 watt		
7	Maximum COAGULATION output power 80 watt		
8	Operating panel with touch buttons to select modes and adjust power levels.		
9	Digital LCD display of power level and error codes		
10	Monopolar handle connection: International 3-pin plug type		
11	The following accessories must be quoted separately:		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	a- Patient plate, adult, split type, disposable Qty. (20)		
	b- Patient plate, paediatric, split type, disposable Qty. (10)		
	c- Patient plate, adult, reusable Qty. (1)		
	d- Reusable patient plate cable		
	e- Bipolar forceps		
	f- Bipolar cable		
	g- Monopolar pencil, reusable		
	h- Monopolar handle tips (Ball, loop, needle, spatula, curved spatula) should be priced separately Qty.(1 each)		
	i- Footswitch, twin type, spill proof		
	j- Adapter for all single pin monopolar cables (from different manufacturers)		
12	Handle tips, forceps and cables must be autoclavable.		
13	Control through foot switch.		
14	Audible and visual alarm with self-test capability.		
15	Original mobile heavy duty trolley, with large twin anti-static lockable castors.		
16	Safety type : CF defibrillation proof		



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Item 73	Electroencephalograph (EEG)	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Isolated power supply.		
2	System mounted on original trolley.		
3	Photo stimulator to be integrated in the system. It should be mounted on a mobile stand.		
4	Head box (Amplifier, junction box) mounted on a separate mobile stand with pin inserts for electrodes. The head box to be equipped with all standard EEG channels including ground and reference		
5	Digital acquisition and display of EEG.		
6	Noise artifacts detection and rejection.		
7	CMRR > 105 db.		
8	The system should be compatible with HAKEEM hospital information system; all licenses, software and hardware needed should be included		
9	System should be easy to maintain and user friendly.		
10	High quality, durable reusable electrodes, provide optimum		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	signal quality, are easy to clean with female end-connection for the head box.		
11	Back-up software to be included.		
12	The software should provide the following:		
	a- DSA tendograph and data reviewing during acquisition		
	b- Mapping for channels. Number of channels ≥ 32 . Labelling and sequence of channels to be compatible with that of the head box channels.		
	c- Six extra channels (SpO2, CO2, monopolar and bipolar sensors)		
	d- Intensity and frequency adjustment for photic stimulator. Stimulation type should be manual and automatic.		
	e- EEG signal display. The display rate of the signal to be specified (Screen/ sec and mm/ sec).		
	f- Signal freeze mode.		
	g- Calibration signal.		
	h- Sampling rate setting.		
	i- Notch filters setting.		
	j- High pass filter setting		
	k- Low pass filter setting		
	l- Reference electrode selection.		
	m- Sensitivity setting. Sensitivity should be controlled for all groups of channels or individually		
	n- Time coincidence.		
	o- Montage		
	p- Ability to montage and edit already stored EEG analysis. The stored analysis to be read and stored again via any montage selected by the operator.		
	q- Patient ID and time/ date.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	r- Automatic electrode impedance check (manual check is an option)		
	s- Spike and sharp wave detector		
13	To be suitable for neonates, paediatrics and adults: accessories for all categories must be listed and priced separately.		
14	Desktop configuration computer with at least the following specifications:		
	a- Intel i7 processor or better.		
	b- 8 GB RAM		
	c- 1 TB hard drive		
	d- Windows operating system		
	e- LCD/LED monitor of at least 21 inch size.		
	f- DVD recorder (for EEG recording)		
	g- Laser printer, data print out is required to be on A4 paper.		
	h- PC's specification must comply with the manufacturer requirements and with special terms.		
	i- PC's specification must comply with the manufacturer requirements and with special terms		



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Annex 2: Mobile Equipment

Item 74	Wood's Light	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Hand Held		
2	Efficient fluorescent or halogen lamp technology		
3	Lamp life 1000 Hours (Approximately)		
4	Rugged Construction		
5	2 set spare bulbs		



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Annex 2: Mobile Equipment

Item 75	Cryotherapy Unit	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Cryotherapy Gun		
	1- Handheld type		
	2- Fingertip trigger operation		
	3- Non-electrical, non-powered		
	4- Dedicated for dermatologic applications, it must be mentioned clearly in the product catalogue that the unit is dedicated for dermatology.		
	5- Coolant: liquid nitrogen		
	6- Temperature: must decrease down to -190° or more.		
	7- Relief valve must be included to maintain a constant operation pressure		
	8- At least 6 of spray applicators (tips) with variety sized apertures for most common skin lesions (e.g. warts, small tumours etc.)		
	9- Volume: 0.5 litres approx.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	10- Static holding time: 20-24 hours or more		
	11- Vessel should be constructed from heavy duty material and covered to insulate operator's hand.		
	12- All accessories to be listed and priced separately		
B	Liquid Nitrogen container		
	1- Made of high strength antirust aluminium alloy/stainless steel/ enamelled steel.		
	2- Suitable for long-distance transportation or frequent pouring		
	3- Storage capacity : 30 Litres		
	4- Static holding time: 14-16 weeks or more		
	5- Lockable device installed to the container lid		
	6- Roller base must be included		
	7- Complete with withdrawal device and filter to transfer liquid nitrogen to the Cryotherapy gun		
	8- Items A and B must be from the same manufacturer		



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Annex 2: Mobile Equipment

Item 76	Dermascope	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Handheld type		
2	A hard-shell, well-padded protective case		
2	Power handle should be made from heavy duty, easy to clean, corrosion resistant material.		
3	To run on standard size rechargeable batteries		
5	Batteries, light bulbs and charger should be priced		
6	Brightness control: 3 levels of light intensity		
7	10x magnification or better		
8	All necessary standard accessories and spares to be included		



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Annex 2: Mobile Equipment

Item 77	Electrosurgical Unit, Dermatology	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	It should be stated clearly in the original catalogue that the intended use for the system is dermatology.		
2	Table-top unit.		
3	Low cutting power of approximately 50 watt.		
4	Monopolar & bipolar modes		
5	Pencil type handle with a cable not less than 3 meters in length.		
6	Activation control: Through handle switch or foot switch.		
7	Adjustable cutting and coagulation power through rotary knobs or soft keys.		
8	All necessary electrodes (needle, wire loop and ball electrodes) to be quoted and priced separately.		
9	Accessories to be reusable and autoclavable		
10	Original trolley to be quoted and priced separately		



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Annex 2: Mobile Equipment

Item 78	Microscope, Dermatology	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	4-fold revolving objective nosepiece, rear facing.		
2	Semi-Apochromatic infinity objectives (or equivalent); 4x , 10x, 20x, 40x , (60x or 63x) and (100x). All objective to be of the same class for use with up to 23mm field of view		
3	Ergonomic binocular tube, F.O.V. 23mm, with tilting angle of 10-30° or better and telescope mechanism 15mm movement. Inter-pupillary distance: 55 to 75mm		
4	Pair of adjustable eyepieces 10x/23mm. With IPD adjustment.		
5	Transmitted LED illumination light.		
6	Coaxial double knob focusing and adjustable height stop		
7	Condenser: Swing-out with aperture iris diaphragm with variable Koehler illumination.		
8	Mechanical stage with wide scanning area not less than 75 x 50mm with slide holder for up to two slides.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
9	Simple polarizing set		
10	Filters: Standard set of filter		
11	Adjustable light intensity		
12	All necessary standard accessories and spares to be included.		
13	A list of additional accessories for the offered model (optional)		



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Annex 2: Mobile Equipment

Item 79	Cough Pressure, Normal Saline, 500 ml	Qty. (25)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	



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Annex 2: Mobile Equipment

Item 80	Low Temperature H ₂ O ₂ / Plasma Sterilizer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well known company that has an excellent experience in this field and has multiple installation bases in many countries in Europe/ USA in addition to Jordan, a list of installation bases should be included in the technical offer		
2	Sterilant: Hydrogen peroxide (H ₂ O ₂) - In Cartridges, Bottles or Cassettes: that can be easily loaded and locked on the sterilizer - Designed in a way to prevent the capability of refilling - Sealed perfectly to prevent spillage - Can be stored safely in room temperature - Bidder should state clearly that he has the capability to provide H₂O₂ cartridges within 40 days from a written notification (with at least 2/3 of its shelf life)		
3	The efficacy of the process must be established by demonstrating a sterility assurance level (SAL) of at least 10 ⁻⁶ reduction.		



Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
4	Capable to sterilize heat and moisture sensitive materials including: - a- Cameras & light cables - b- Batteries - c- Lenses - d- Drills and saws - e- Microsurgical and general surgery instruments - f- Rigid lumens: Ability to process single channel stainless steel lumens of internal diameter at least 0.8 mm or larger and length of 500 mm or longer. - g- Flexible lumens: Ability to process flexible single-channel lumens of internal diameter at least 1 mm or larger and length of 1000 mm or longer. - h- Limit of at least 20 lumens per cycle. - i- Capability to sterilize flexible endoscopes with at least one lumen		
5	Compatibility with medical devices: it should have wide range of compatibility and recommendations from all medical devices manufacturers		
6	Removing H₂O₂ after sterilization process: - a- Cycles shall include perfect removal of H₂O₂ residues (from the goods) by either plasma generation or by deep vacuum, H₂O₂ residuals should not exceed (1 ppm) after both successful and failed cycle - b- The machine should also have the capability to remove all H₂O₂ residues from the cartridge/ cassette, the empty cartridge should be safe to be disposed without any special treatment		
7	Continuous monitoring of pressure and temperature during the whole cycle		
8	Process should be safe for the operator, patient and the medical devices		
9	Sub-atmospheric cycle (negative pressure); the whole cycle should be conducted under atmospheric pressure		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
10	Non-toxic process by-products		
11	Temperature during cycle does not exceed 55° C		
12	Free stand type, with castors and brakes		
13	Useful chamber capacity 90 L at least; useful chamber capacity should be mentioned clearly in the original catalogues		
14	Chamber to be rectangular in shape		
15	Single door with door safety mechanism to prevent door opening during cycle		
16	Leak alarm		
17	Large LCD screen which displays cycles, process parameters (temperature, time and pressure) and error messages		
18	Foot pedal to open the door		
19	Built in printer		
20	Short cycle times, time should not exceed 50 minutes for a standard lumen cycle.		
21	To include a minimum of 3 predefined cycles		
22	Minimum installation requirements; electrical power supply only, no need for water, drain, air, exhaust hood and vent line		
23	Preventive maintenance is the sole responsibility of the supplier during the warranty period including labor and parts used (filters, oil, etc.....)		
24	Shelf life of H ₂ O ₂ to be stated clearly and should be at least 12 months from the date of manufacturing		
25	Ability to use the H ₂ O ₂ Cartridge for at least 10 days from the date of installing a new one on the sterilizer		
26	Number of cycles (lumen cycles) per one H ₂ O ₂ cartridge/cassette to be mentioned clearly		
27	Offer must include one biological incubator auto-reader with the capability of providing the result (Positive or negative) after 30 min or less		



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Annex 2: Mobile Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
28	All necessary baskets, inserts, racks and shelves to be included.		
29	Qualifications and after sales service: The technical bid should contain all the necessary documents to prove the capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specifications of the manufacturer and the ability of the bidders for providing efficient after sales service conducted by at least one certified biomedical engineer/ technician		
30	Required Consumables: 1- H ₂ O ₂ sufficient to sterilize 50,000 litres 2- Plasma/ H ₂ O ₂ reel: 25 cm x 70 m Qty. (4 Rolls) 3- Plasma/ H ₂ O ₂ reel: 35 cm x 70 m Qty. (4 Rolls) 4- Plasma/ H ₂ O ₂ Pouch: 150 mm x 320 mm Qty. (600) 5- Plasma/ H ₂ O ₂ : 250 mm x 600 mm Qty. (600) 6- Plasma/ H ₂ O ₂ sheet 50 x 50 Qty.(3000) 7- Plasma/ H ₂ O ₂ sheet 90 x 90 Qty.(3000) 8- Plasma/ H ₂ O ₂ sheet 120 x 120 Qty.(2500) 9- Plasma/ H ₂ O ₂ sheet 100 x 140 Qty.(2500) 10- Plasma/ H ₂ O ₂ Seal secure tape Qty. (30) 11- Plasma/ H ₂ O ₂ Chemical indicator Qty.(25 box of 250) 12- Plasma/ H ₂ O ₂ Biological indicator Qty.(30) All consumables should have at least 2/3 of its shelf life.		
31	Consumables that exceeds its shelf life due to machine fault should be replaced on free of charge basis		
32	For the final list of offers having a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its' running cost (<u>Total Cost of Ownership</u>) over a period of <u>seven years</u> from the date of		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	installation and commissioning (as per special terms); this shall include: a- Machine Price with all requirements mentioned above b- H₂O₂ sufficient to sterilize 80,000 litre/year c- Biological indicators Qty. (60/ year) d- Preventive Maintenance Kits Bidders should fill the table below (Table 1)		

Table 1

	(A) Num. of cycles to sterilize 80,000 L (Lumen cycles) (80,000 ÷ Useful Volume)	(B) Cycles/ Cartridge	(C = A ÷ B) # of Cartridges to sterilize 80,000 L =	(D) Cartridge price in JD	(E = C x D) Total cost to sterilize 80,000 L	PM kit price	BI Ampule price Qty. (60)
1 st Year							
2 nd Year							
3 rd Year							
4 th Year							
5 th Year							
6 th Year							
7 th Year							
Total Price							



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Annex 2: Mobile Equipment



Item 81	Ultrasonic Cleaner, Bench Top	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Bench top model		
2	The electronic ultrasonic cleaning system shall be capable of using ultrasonic energy to remove biological debris from surgical equipment while it is soaking in a solvent.		
3	Tank capacity should be at least 45 litres.		
4	Tank internal dimensions approximately (W x L x H): 50 x 30 x 30 cm		
5	Sweep-function for distribution and cleaning performance in the entire ultrasonic bath		
6	Adjustable time control		
7	Built in water heating system with ability to adjust temperature		
8	To include a stainless steel instrument basket with handle and lid		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
9	Stainless steel tank and outer casing		
10	Digital display of set and remaining cleaning time		
11	Manual water feed		
12	Drain through manual shut-off valve and hose		
13	Ultrasound frequency: >35 KHz		
14	All standard accessories to be included		
15	Heavy duty stainless steel table with dimensions suitable for the ultrasonic cleaner, should be quoted separately (locally supplied is accepted)		



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Annex 2: Mobile Equipment

Item 82	Digital Thermometer	Qty. (40)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Fast: quickly captures accurate readings on all patient types		
2	Convenient storage for 25 probe cover		
3	Large LCD displays temperatures in Celsius		
4	Oral probe type, rectal type to be priced separately		
5	Last temperature recall button		
6	Interchangeable, removable probe covers to help reduce the risk of cross-contamination		
7	Probe covers to be priced separately		
8	For the final list of offers having equal chances of winning the award, the awarding process will be based on the accumulative value of both the offered item and its' running cost (probe covers) over a period of seven years as per special terms (Total cost of owner ship)		
9	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



Item 83	Rapid Reader Incubator for Steam Sterilizer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Dedicated for steam sterilization method		
2	Capable of reading 4 indicators simultaneously		
3	Rapid read out of result in 3 hour maximum		
4	Digital readout of positive or negative result.		
5	Audible alarm when positive reading.		
6	50 steam indicators to be included		
7	Calibration (if needed) during the warranty period should be the sole responsibility of the supplier		
8	Cost of calibration and consumables (if needed) after the warranty period should be mentioned clearly and without the need for annual service contract, cost should be fixed as per special terms		
9	In case all offers are not compliant with special term (19) considering the spare parts; preference will be given to the offer submitting the best alternative for the term after the warranty period (i.e. fixed exchange price or fixed maintenance cost for a period of at least 5 years after the warranty period with a maximum annual increase of 2% annual increase)		



SPECIAL TERMS

- *Offers not complying with any of the special terms or the technical specifications shall be considered non-conforming with tender requirements.*
 - *Any vendor providing FORGED documents shall be disqualified from the current tender and banned from participating in any future RMS tenders.*
 - *Wherever term “based” is mentioned it refers to the country where the manufacturing company is founded & established.*
1. *All equipment must be the most recently released model/version which is equal to or higher than the range of the specifications of the required system (low, mid or high) and equal to or higher than the level of technology and required options mentioned in the technical specifications.*
 2. *Required certificates (must be submitted with the technical offer):*
 - 2.1 *FDA clearance (510K) for equipment of USA based companies.*
 - 2.2 *MDR (EU) 2017/745 certificate for equipment of EU (European Union) based companies.*
 - 2.3 *UKCA certificate For Equipment of Great Britain based companies (England, Scotland, Northern Ireland, and Wales).*
 - 2.4 *ARTG (Australian Register of Therapeutic Goods) certification or approval for Australian and New Zealand based companies.*
 - 2.5 *Establishment License with the relevant Device License issued by the Therapeutic Products Directorate for Equipment of Canadian based companies.*
 - 2.6 *PMDA (Pharmaceuticals and Medical Devices Agency) certification or approval for equipment of Japanese based companies.*
 - 2.7 *Swissmedic (Swiss agency for therapeutic products) certification or approval for equipment of Swiss based companies.*
 - 2.8 *Norwegian Medicines Agency certification or approval for equipment of Norwegian based companies.*
 - 2.9 *Only for class I medical equipment manufactured by companies based in one of the countries mentioned above, submission of either one of the certificates mentioned above or a free sale certificate in any of these countries shall be accepted.*



2.10 For the following equipment:

- All X-ray equipment, MRI, ultrasound, and nuclear medicine systems (regardless where the manufacturing companies are based).
- Where the manufacturing companies are based in other origins than the mentioned in terms 2.1 - 2.8.

The following are required:

- a- At least two of the certificates mentioned above, one of which has to be FDA clearance (510K) (Only for class I medical equipment submission of certificates mentioned in 2.9 shall be accepted).
- b- Evaluation certificate from the Royal Medical Services for the same offered model with at least 80% passing grade.

If the evaluation is not applicable (based on purchasing committee perspective) bidder should submit a list of installation basis of the same offered model and/or previous models in at least two of the following hospitals (King Hussein Cancer Center, National Center for Diabetes Endocrinology and Genetic Diseases, Jordan University Hospital or King Abdullah University Hospital) with at least three years of operation, list should include: Name of hospital, Model installed, Quantity, and date of installation.

The purchasing committee has the right to officially contact any of these hospitals and disqualify any offer where the feedback is negative in operation, after sales service or local agent performance.

2.11 *The vendor is responsible to ensure through official documents that classified medical devices are manufactured in conformity with applicable quality system standards (ISO, IEC); (the international quality systems standard for medical device manufacturing ISO 13485) or ISO9001.*

2.12 *With each offer, bidders must provide a formally endorsed document issued by the manufacturer stating that the bidder is the sole certified agent for the offered item.*

2.13 *In all of the above cases (except 2.12) certificates must be formally endorsed by JFDA.*

2.14 *Any vendor not submitting all required certificates will be eliminated.*

3. *Official website of the manufacturer must be provided. The website must clearly demonstrate the history profile and manufacturing features of the company including the same offered model and its brochure.*

In case of inconsistency between the information on the website with the provided information of the local agent regarding any offered product, the committee has the right to eliminate that product from the awarding process.



4. Offered items should be from reputable well known manufacturers and excellent experience in the field and shall have multiple installations of the same offered model and/ or previous models in RMS main hospitals with at least two years of operation and excellent experience in operation, after sales service & local agent performance; otherwise the purchasing committee has the right to request any of the following:

- a) An evaluation certificate as mentioned in term 2.10.b.
- b) A sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification; any vendor rejects to deliver a sample unit will be eliminated. Evaluation duration will be determined by the purchasing committee.

Any offered item fail in the evaluation/assessment process will be rejected

5. Vendors must specify the origin of the offered items and accessories in the technical offer.
6. Bidders must submit their reservations/queries regarding tender specifications and/or special terms within the first half of the tender closing period starting from the tender announcement date. Reservations/queries submitted after the end of this period shall be rejected.
7. Goods are to be brand new; manufacturing date of the delivered products should not exceed 18 months from the date of the final award.
8. Delivery period should be mentioned clearly; the purchasing committee has the right to reject any offer with delivery time exceeding 4 months.
9. Warranty:

- a- Offers must include a full warranty for a period of a minimum of 24 months from the date of installation or 30 months from the date of receiving the items at the agreed location mentioned in the final order (whichever comes first).

Warranty must include corrective & preventive maintenance activities as per manufacturer recommendations including:

- Required spare parts (free of charge)
- Labour
- Hardware
- Software
- Rechargeable batteries

At the end of the warranty period, The supplier commits to implement final inspection of the submitted goods and submit the reports signed by the site chief engineer stating that the equipment are working properly as well as all preventive maintenance reports during the warranty period.



Warranty & installation are excluded for items mentioned in Attachment no.1 the purchasing committee has the right to exclude any other item not listed in the attachment and does not required installation and warranty.

- b- In the case where a delay in installation has occurred as a result of the supplier's dereliction and has exceeded a period of one month from the date of receiving the items, the approved warranty period will automatically be considered as 24 months from the date of installation.***
- c- If at any time during the warranty period the item becomes inoperative due to a technical fault the item must then be repaired by the supplier /local agent within a period of 5 working days from written notification, warranty will be extended according to downtime period.***
- d- If the delay exceeds 30 days the supplier must replace the item with a new identical functioning one (within the same delivery period mentioned in the final offer). In case the item was replaced by a new one, the warranty period mentioned in 9.a) above will start from the installation and commissioning date of the new item.***
- e- Local agent/ supplier is committed to transport and install any awarded item during the warranty period on free of charge basis to any location inside the country whenever required by Royal Medical Services, this should not include pre-installation requirements in the new site.***

10. All offered items (main unit) should be fully designed, manufactured, and labelled by their real original manufacturer in which all related testing, research, development and approvals went through.

Any relabelled products for the main unit (white-label manufacturing, OEM, or repackaging) are rejected.

11. One set of operation manual(s) and one set of service manual(s) including schematics and a spare-part list must be delivered with each unit, CD/DVD is acceptable. For large tenders, a certain agreed percentage of manuals per item may be agreed upon.

12. Where applicable, pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include removal of old system(s), any civil work, electrical work or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s).



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13. *Power requirements: where applicable either single phase 220V, 50Hz or 3-phase 380V. Systems with external transformers are considered conforming only if clearly stated in the technical specifications.*
14. *Technical offers must include clear original technical brochures/catalogues for all offered items.*
15. *Offers must include fully detailed technical offers and compliance sheets as a soft copy (either Microsoft office or Microsoft excel format) in addition to a hard copy, mentioning the exact model/catalogue number and country of origin of the offered item(s), full technical description/specifications and any accessories or options included in the offer.*
- Offer must clearly indicate the origin of the offered item and the country where the manufacturer of the offered items is based.*
16. *Compliance sheets must be as per the tabular format of the technical specifications in the tender documents, listing the required specifications on one column and a Yes or NO response to each point in the adjacent column, with reference to page and line numbers in the relevant technical brochure. Offers not complying with this term shall be rejected.*
17. *Qualifications and after sales service: The technical bid should contain all the necessary documents (training certificates) to prove the capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specifications of the manufacturer and the ability of the bidders for providing efficient after sales service conducted by authorized certified biomedical service engineers with minimum 2 years experience in the same field.*
18. *Accessories and consumables:*
- 18.1 *Any accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately.*
- All offered accessories and consumables must be approved by the manufacturer.*
- 18.2 *Technical offers must include a priced list for all accessories and consumables related to the required equipment as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) with prices fixed for a period of five years from the date of installation and commissioning with a maximum annual increase of 2%, any essential item not listed will be considered free of charge.*
- 18.3 *Accessories and consumables must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
- 18.4 *Where applicable, a start-up kit of accessories and consumable items must be provided with each system on a free-of-charge basis.*



19. Spare Parts:

- 19.1 *Technical offers must include a comprehensive and priced list of all spare parts related to the awarded equipment (including rechargeable batteries) as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) valid for a minimum period of five years with a maximum annual increase of 2%, commencing at the end date of the warranty period, any essential item not listed will be considered free of charge.*
- 19.2 *Spare parts must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
- 19.3 *Prices of spare parts should be reasonable and will be taken into consideration during the purchasing process; the purchasing committee has the right to eliminate any offered item with unreasonable high prices of spare parts.*
- 19.4 *Delivery period of required spare parts should not exceed 2 months from the date of the final order.*

20. Spare parts, consumables and accessories availability must be guaranteed for a minimum period of ten years starting from the date of installation and commissioning.

21. Local agent is committed to sign a service contract with Royal Medical Services to perform all relevant maintenance for the awarded equipment (whenever required by DRMS within a period that does not exceed one year from the end date of the warranty period and if mentioned clearly in the specifications) without exceeding the original mentioned cost and as per mentioned terms within minimum required period.

22. Tender Awards:

- 22.1 *For the final list of offers having a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its' running cost (Total Cost of Ownership) over a period of seven years from the date of installation and commissioning. Only offers with the lowest total cost of ownership over a period of seven years from the date of installation and commissioning shall qualify for the award.*
- 22.2 *Running cost includes the value of consumables, accessories needed to operate the system over the same period as well as the cost of any service contract (where applicable).*



23. For PC/Laptop based systems:

- 23.1 Complete restoration medium (CD/DVD/etc.) of the operating system and the application software must be supplied.**
- 23.2 Purchased licenses, software keys & dongles must be provided at any time during and after the warranty period on free of charge basis whenever required by DRMS for a minimum period of ten years starting from the date of installation and commissioning.**
- 23.3 Where locally supplied computers, laptops & printers are offered, the offered model should be from well known manufacturer.**

24. Pricing must include services of sale, shipment, transportation, delivery from port to site or to Main Medical Stores, installation, pre-installation (if needed), training, commissioning, warranty and bringing the equipment into service.

25. Custom clearance of goods shall be the responsibility of the Jordanian Armed Forces (JAF), however, suppliers shall bear all costs incurred by handling charges and any demurrage charges or extra expenses incurred by the port's corporation (including expenses caused by delay in presenting the necessary shipment documents for either clearing or transporting the goods to the required location mentioned in the final order, delivery note issuing charges, unloading charges, local shipping charges etc.). The supplier is also responsible for providing of all relevant shipping documents, together with the delivery order(s).

- 26. a. DRMS has the right to increase the awarded quantities by a percentage not exceeding 35% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.**
b. DRMS has the right to decrease the awarded quantities by a percentage not exceeding 50% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.
- 27. a. Bidder is not allowed to submit more than one offer for the same item whether that's solely or in coalition or partnership with other bidders.**
b. Bidder is allowed to include within their offer optional alternatives for the same offered item from the same manufacturer.
- 28. The supplier must furnish DRMS with a guarantee stamped and legalized by the Notary Public equals to (115%) of the total value of the awarded equipment valid for twelve months from the date of final acceptance of the equipment by DRMS.**



29. Training:

- 29.1** *For items where abroad service training courses are required in technical specifications, offers must include a certified service training program for at least 3 working days at a reputable center abroad recognized by the manufacturer for at least one biomedical engineer or biomedical technician; all costs inclusive, air tickets, , boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.*
- 29.2** *For items where abroad user training courses are required in technical specifications, offers must include a certified operator training program at a reputable center abroad recognized by the manufacturer for at least one operator; all costs inclusive, air tickets, boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.*
- 29.3** *The period of the training courses must be according to the manufacturer's program excluding traveling days and must be stated clearly in the technical offer.*
- 29.4** *Training Programs must conform to the following standards:*
- *User training must comprise understanding and use of operation manual(s), correct and safe operation of the equipment, as well as user preventive maintenance and calibration.*
 - *Service training must comprise: theory, understanding and use of service manual(s), calibration, preventive maintenance procedure, and practical troubleshooting and repair exercises, and must be conducted by professional instructors employed or authorized by the system manufacturer.*
 - *Service training must be conducted on a system of identical make, model, and configuration to that purchased by DRMS, and designated by the manufacturer or the local agent for training purposes.*
 - *Certificates must be endorsed and officially sealed by the system manufacturer, legally empowering trainees to engage in user and service activities according to operation and service manual(s).*
 - *Where applicable, offers must include an on-site user and service training.*

30. *For offers submitted in Jordanian dinars, payment will be either by wire transfer or by cheque after final acceptance of good, any other way of payment will be rejected.*



Attachment 1

#	Equipment
1	Adjustable Auto Pipettes
2	Resuscitation Bag
3	Laryngoscope Set
4	Oxygen Flow meter wall type/ single
5	Regulator Suction with canister, wall vacuum outlet
6	Oxygen Regulator for Oxygen Cylinders
7	Pulse Oximeter, Finger type
8	Oxygen Cylinder
9	Doppler, portable
10	Diagnostic set, Portable
11	Direct Ophthalmoscope, Portable
12	Otoscope, Portable
13	Air Mattress System, homecare
14	Stethoscope
15	Aneroid Sphygmomanometer
16	Video Assisted Laryngoscope, portable
17	Scale, Manual
18	Wood's Light
19	Cough Pressure, Normal Saline
20	Rehabilitation Walking Parallel Bars, non-powered
21	Therapy Mat
22	Medical Ball All Size
23	Dumbbells Rack with complete set of dumbbells
24	Crutches
25	Shoulder wheel
26	Mobile Mirror
27	Cuff Weights
28	Walker, different sizes
29	Patient Elbow Stick
30	Rehabilitation Training Ladder
31	Rehabilitation Suspension Frame



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32	<i>Exercise Band All Size (Theraband)</i>
33	<i>Lens trial set</i>
34	<i>Wheel Chair</i>
35	<i>Commode Chair</i>
36	<i>Bassinet (Baby Cot)</i>
37	<i>Resuscitation Cart (Crash Cart)</i>
38	<i>Medication Cart</i>
39	<i>Cart, Drawers</i>
40	<i>Examination Couch, Manual</i>
41	<i>Gynaecology Examination Table, Manual</i>
42	<i>Examination Table, Neonates, Manual</i>
43	<i>Intravenous Pole, Mobile Stand</i>
44	<i>DDA Cabinet</i>
45	<i>Stainless steel Multipurpose Trolley</i>
46	<i>Cabinet, Instrument, Operation Theatres</i>
47	<i>Dressing Cart</i>
48	<i>Stainless steel wire shelving unit</i>
49	<i>Paper Trolley</i>
50	<i>Stainless Steel Sink (Clean up counter)</i>
51	<i>Scopes Cabinet</i>
52	<i>Mayo Table</i>
53	<i>Table, Instrument</i>
54	<i>Stool, Adjustable, Doctor</i>
55	<i>Stool, Adjustable, Operation Theatres</i>
56	<i>Carts, linen/laundry, soiled, Double</i>
57	<i>Closed distribution trolley</i>
58	<i>Step Ladder, Conductive, Double</i>
59	<i>Step, Surgeon, Single</i>
60	<i>Kick Bucket</i>
61	<i>Mobile Stand for Oxygen Cylinder</i>
62	<i>Stainless Steel Wire Basket, 1 STU</i>
63	<i>Cart, Plaster</i>



Item 1	MRI, 1.5 Tesla	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	<u>General Description of the Required System:</u> Whole-body top of the line, 1.5 Tesla Magnetic Resonance Imaging systems with AI technology, for diagnostic purposes is required for the Radiology Department of Ma'an Military Hospital to be used for all types of clinical applications such as Neurology, Cardiology, Oncology, Vascular, Musculoskeletal, and Breast.... etc. The required Scanner has to be of the latest model and design, heavy duty, and top of the line.		
A	Magnet & Gantry		
1	Configuration: Closed		
2	Strength: 1.5 T		
3	Guaranteed Homogeneity (V-RMS) 40 cm DSV ppm: ≤ 1.4		
4	Shimming: Active		
5	Zero Helium boiling off technology (Boil off rate = 0)		
6	Cryogen refill frequency: ≥ 5 years		
7	Bore diameter, cm: ≥ 70		
8	Patient comfort: Audio, lighting, camera etc.		
9	Feet first scanning included.		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
10	Acoustic noise reduction		
11	LCD display on Gantry		
12	2 LCD display on both side of Gantry (Both side magnet screen (preferred touch screen) it should allow the user to position the patient to the ISO center of the scanner, guide and tips for fast and efficient exam preparation show and modify patient information).		
B	Fixed Table		
1	Two-speed longitudinal movement		
2	Min. height, cm ≤ 70 cm		
3	Tabletop motorized movement		
4	Table control from console		
5	Digital display of table position		
6	Scan range ≥ 200 cm whole body exam without patient repositioning		
7	Laser light indicator.		
8	Table weight limit: ≥ 200 kg		
C	Gradient System		
1	Max .actual Amplitude, mT/m: ≥ 33		
2	Standard slew rate, T/m/sec: ≥ 120		
3	Rise time : ≤ 0.3 sec.		
4	Cooling type: Water cooled system or air cooled system.		
D	RF System		
1	Amplifier type: Solid state		
2	Number of independent channels ≥ 32		
3	Automatic Calibration technique		
E	Coils:		
1	1. Dedicated body and abdomen Coil: ≥ 16 channels <u>QTY (2)</u> 2. Dedicated Head/ Neck Coil: ≥ 16 channels 3. Dedicated Knee Coil (large and/or X large): ≥ 8 channels 4. Dedicated Shoulder Coil: ≥ 8 channels 5. Dedicated Foot-Ankle Coil: ≥ 8 channels		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	6. Dedicated hand / Wrist Coil: ≥ 8 channels 7. Flex Coils (or equivalent for small joints) - a- Small: max. number of channels - b- Large: max. number of channels		
F	Scanning Techniques		
1	Clinical Application Packages: Neuro, Body, Breast, Ortho, Angio contrast and non-contrast included, Onco. and Pediatric.		
2	Neurologic imaging		
3	Diffusion/Perfusion		
4	ADC Maps		
5	CSF flow		
6	Susceptibility weighted imaging.		
7	Motion Correction		
8	High Resolution diffusion		
9	Dixon technique for fat fraction quantification		
10	Metal Artifact reduction		
11	AI technology based deep learning techniques to accelerate the scanning and reconstruction speed for neuro, spine, MSK and whole body.		
G	Image Processor		
1	Processor, speed: Please Specify		
2	Dedicated RAM: Please Specify		
3	Maximum matrix: $\geq 1024 \times 1024$		
4	Min. 2D slice thickness, mm: ≤ 0.5		
5	Min. 3D slice thickness, mm: ≤ 0.1		
6	Minimum FOV, (X,Y,Z) cm: $\geq (50,50,45)$ or better		
7	Zooming and distance measurement: Please Specify		
8	Pixel intensity value and ROI measurement: Please Specify		
H	Control Console Workflow		
1	Processor, speed: Please Specify		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
2	Dedicated RAM: : Please Specify		
3	OS: 64bit System		
4	Color LCD, $\geq 19''$ 1280×1024		
5	HDD storage: ≥ 250000 image		
6	CD/DVD Archiving		
7	Full DICOM 3.0, RIS, HIS, PACS Support		
I	Independent Workstation		
1	Processor, speed: Please Specify		
2	Dedicated RAM: ≥ 8 GB		
3	HDD storage capacity: ≥ 500 GB		
4	CD/DVD/USP Archiving		
5	Full DICOM 3.0, RIS, HIS, PACS Support		
J	MRI compatible dual-head Injector		
1	Mobile unit mounted on a pedestal with a stable wheeled base		
2	Touch screen control room unit, screen size $\sim 8''$ or larger		
3	Maximum syringe capacity: Please specify		
4	Volume & increments for each syringe: Please specify		
5	Flow rate & increments: Please specify		
6	Programmable protocols		
7	Maximum Pressure: ~ 325 psi		
8	Offers must include a priced full list of compatible consumables.		
K	Supplementary Equipment (MRI compatible)		
1	MRI compatible anesthesia machine (adult, pediatric & neonate) with patient monitor and all required cylinders, vaporizers (isoflurane & sevoflurane) & vacuum regulator & hoses		
2	Patient Monitor Modular type MRI compatible		
3	Patient stretcher MRI compatible		
4	Oxygen flowmeter MRI compatible		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
5	Wheel Chair		
6	Control room furniture (4 chairs & one Table)		
7	Two Chillers must be included		
L	(FOC) Abroad Service training for one biomedical engineer/ technicians		
M	(FOC) Abroad User training for one radiologist and one radiographer		
N	All available standard & optional features, packages, & accessories must be listed and priced separately		
O	Offer must include the price for a comprehensive service contract (including all replacement parts) for the main unit (MRI System), injector, anesthesia machine, patient monitor & chillers valid for a period of (8) years starting at the end of the 24 month warranty period.		



Item 2	Computed Tomography Scanner, 64 Slice, with Injector	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	A multi-slice spiral CT scanner with AI technology is required for all types of CT examinations including head, spine, chest, abdomen and pelvis in addition to cardiovascular applications in a general hospital. The system must meet or transcend the minimum requirements listed below.		
A	Main Features		
1	Type: Multislice		
2	Number of slices per rotation (physical) ≥ 64		
3	Application: General, Full Body		
4	Shortest rotation time, sec, 360°: ≤ 0.4		
B	Gantry		
1	Gantry aperture, cm ≥ 70		
2	Scan localizer: Laser		
3	Detector type: Solid state		
4	Detector width z axis ≥ 38 mm		
5	Number of reconstructed slices ≥ 128		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
6	Field of view (standard), cm: ~ 50		
7	Slice width options, mm: ~ 0.65-10 or better		
8	Tilt : $\pm 30^\circ$ (physical or digital)		
C	X-Ray Tube		
1	Anode Heat storage, MHU: 7 or a better combination		
2	Small focal spots, mm: please specify		
3	Large focal spots, mm: please specify		
4	mA for smallest tube spot: please specify		
5	Max. scan time at maximum mA, sec: Please Specify		
D	X-Ray Generator		
1	KW output: ≥ 70 KW.		
2	Specify focus to detector distance		
3	kVp range: ~80-135		
4	mA range: ~20-600		
E	Performance		
1	Spatial Resolution 0% MTF(Z axis), lp/cm: $\geq \sim 16$		
2	Spatial Resolution 50% MTF, lp/cm: $\geq \sim 6$		
3	Adaptive filtrations for noise reduction		
4	Max. Continuous scan time, sec higher is preferred : Please Specify		
5	Periodic User calibration: NONE, Automatic		
6	Total time from fully off to scanning: Please Specify.		
F	Patient Table		
1	Vertical movement, cm: Please Specify		
2	Longitudinal movement, cm: : ≥ 175		
3	Scannable range, cm: ≥ 175		
4	Max. load capacity, kg : ≥ 200		
5	Table speed, mm/s: 10 – 100, or better		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
6	Positioning accuracy, mm: $\leq \pm 1.0$		
G	Radiation Dose		
1	Pediatric-specific dose control		
2	Prospective ECG gating		
3	Latest generation raw data based iterative reconstruction Low-dose Scanning.		
4	AEC:		
	1- mA adjustment for patient size		
	2- mA adjustment along the z-axis		
H	Clinical Applications and Functionality		
1	3D Reconstruction, MIP, MPR		
2	Pediatric Package		
3	Metal artifacts reduction		
4	Bolus tracking		
5	Injector integration software		
I	Image Reconstruction		
1	Reconstruction matrix: 512×512		
2	Reconstruction rate, (512 x 512), f/s: ≥20		
3	Simultaneous scanning and reconstruction		
4	Simultaneous scanning and routine analysis		
J	Main Console		
1	Two color LCD monitor: ≥19" 1024×1024		
2	HDD storage: ≥ 250000 image (5122)		
3	CD/DVD Archiving		
4	Full DICOM 3.0, RIS, HIS, PACS, Support (work list, query retrieve, dicom send, dicom, archive, etc.)		
K	Main Computer		
1	Processor, speed: Please Specify		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
2	Dedicated RAM: : Please Specify		
3	Word length: 64bit		
4	Maximum matrix: $\geq 512 \times 512$		
L	Independent Workstation		
1	Processor, No.× speed: Please Specify		
2	Dedicated RAM: : ≥ 16 GB		
3	HDD storage capacity: ≥ 1 TB		
4	CD/DVD/USB Archiving		
5	Full DICOM 3.0, RIS, HIS, PACS Support		
M	CT compatible dual-head Injector		
1	Mobile unit mounted on a pedestal with a stable wheeled base		
2	Touch screen control room unit, screen size ~8” or larger		
3	Maximum syringe capacity: Please specify		
4	Volume & increments for each syringe: Please specify		
5	Flow rate & increments: Please specify		
6	Programmable protocols		
7	Maximum Pressure: ~ 325 psi		
8	Offers must include a priced full list of compatible consumables.		
N	Supplementary Equipment		
1	Anesthesia machine (adult, pediatric & neonate) with patient monitor and all required cylinders, vaporizers (isoflurane & sevoflurane) & vacuum regulator & hoses (Qty.1 for the whole quantity)		
2	Integrated UPS For Console at least 5 kva		
3	Control room furniture (4 chairs & one table)		
O	(FOC) Abroad Service training for one biomedical engineer/ technician		
P	(FOC) Abroad User training for one radiologist and one radiographer		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
Q	All available standard & optional features, packages, & accessories must be listed and priced separately		
R	Offer must include the price for a comprehensive service contract (including all replacement parts and x-ray tubes) for the main unit (CT Scanner), injector and anesthesia machine valid for a period of (8) years starting at the end of the 24 month warranty period.		



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Item 3	Digital Mobile X-Ray with Wireless Flat Panel Detector	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	A heavy-duty digital mobile radiographic unit is required for radiographic imaging of patients in various hospital settings The unit shall satisfy the following minimum requirements:		
*	X-ray tube & FPD should be made in one of the countries mentioned as per special term 3.a		
*	The system should have built-in detector battery charger with one extra battery		
1	Full microprocessor control of all functions with an elaborate self-test routine.		
2	Controlled mobility via motion system.		
3	High battery storage.		
4	Input charging voltage rate to be regular mains 100-240V AC.		
5	System should be operative over battery or while charging, plus AC.		
6	Safety anti-collision system for accidental shocks while movement or safety bumpers.		
7	Integrated dedicated system software and soft console with $\geq 17"$		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	touch monitor.		
8	Tube arm to reach maximum distance of 110 cm.		
9	System Start-up time: please specify.		
10	Collimator with integrated variable filter		
11	Manually adjustable multi-leaves collimator, rotatable $\pm 90^\circ$		
12	Collimator light (LED)		
13	Maximum SID from Focal point to floor of 190 cm.		
14	Minimum SID from Focal point to floor, 65 cm.		
15	X-ray generator: a- Effective Nominal power: 30KW or higher b- mAs Range: From 0.5 to 320 mAs. or higher c- KVp Range: From 50 to 125 KVp. or higher		
16	Detector:		
A	Wireless portable detector		
B	Rigid design		
C	To work with broad range of frequencies & bands (2.4 GHz and 5 GHz).		
D	High resolution, with pixel pitch of 150 μ m or less.		
E	Scintillator screen type: CSI		
F	High transmission rate with preview time on screen of 8 seconds or less.		
G	(Active area) Detector size (35X43) cm. Or better		
H	Large format detector weight, not to exceed 4.0 Kg including battery attached in.		
I	Anti-scatter grid to be included		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
17	X-ray tube: - Anode heat capacity: 120 KHU. - Tube rotation: +/- 90 degrees. - Dual Focal spot: I. Small ≤ 0.7 mm II. Large ≤ 1.3 mm III. or nominal focal spot ≤ 0.8 - Anode rotation speed :minimum of 2700 min⁻¹ approximately		
18	Dose area product (DAP) to be priced separately.		
19	Full DICOM 3.0, RIS, HIS, PACS Support		
20	(FOC) Abroad Service training for one biomedical engineer/ technicians		
21	A list of standard accessories for the offered model (optional).		
22	Offer must include the price for a comprehensive service contract (including all replacement parts and x-ray tubes) valid for a period of (8) years starting at the end of the 24 month warranty period		



Item 4	Radiographic/ Fluoroscopic System	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	A Digital Radiographic/Fluoroscopic system is required for general hospital use. The system must meet or transcend the minimum requirements listed below.		
A	Main Features		
1	Type: Digital		
2	Application: General Purpose		
3	Configuration: Over couch tube		
4	Remote Operation from control area		
5	X-ray tube & FPD should be made in one of the countries mentioned as per special term 3.a		
B	Imaging Tower		
1	Longitudinal movement, cm: ≥150		
2	Lateral movement, cm: ≥ 25 (Tower or table movement)		
3	Maximum SID, cm: 150		
4	Minimum SID, cm: 115		
5	Fluoroscopy control: Footswitch		
6	Integrated table/tower movements controls		
C	Detector(fixed detector)		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Technology: Solid State (FPD)		
2	High resolution, with pixel pitch of 150µm or less		
3	(ACTIVE) Detector IMAGE Size, ≥ 42X42 cm.		
4	Field Sizes: Please Specify		
D	Fluoroscopy		
1	kVp pulsed fluoroscopy		
2	Pulse rate: ~0-30		
3	User selectable filtration		
4	Additional filtration, mm Cu: ~0.1, 0.2, 0.3		
5	Maximum acquisition matrix size: 1k		
6	Acquisition bit depth: ≥10		
E	Radiography, Spot Filming		
1	Acquisition matrix size: 1k		
2	Maximum spatial resolution, lp/mm: ~5		
3	Frames per second up to 6 or more		
4	Acquisition bit depth: ≥10		
5	Conventional radiography: size, cm: Please Specify		
6	Retractable grid		
F	Imaging Capabilities		
1	Last image hold		
2	Virtual collimation		
3	Edge enhancement and noise reduction		
4	Zoom and pan functions		
5	Manual pixel shift		
G	Patient Table		
1	Maximum load kg: ≥200		
2	Lateral movement, cm: ≥~20		
3	Table tilt, °: ±90		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
4	Tilt indicator		
5	Motorized Movements		
H	Generator		
1	High-Frequency type generator		
2	Generator power, kW: ≥ 60		
3	Radiographic kVp range: $\sim 50-150$		
4	Radiographic mA range: $\sim 10-800$		
5	Fluoroscopic kVp range: $\sim 40-110$		
6	Fluoroscopic mA range: $\geq \sim 0.5-10$		
I	X-Ray Tube		
1	Focal spot sizes, mm: $\sim 0.6, 1.2$ or better		
2	Tube heat capacity, kHU: ≥ 300 or equivalent		
3	Controls on X-ray tube		
J	Image Display		
1	Two overhead color LCD monitors: $\geq 18''$		
2	Control room color LCD monitor: $\geq 18''$		
K	Connectivity		
1	Full DICOM 3.0, RIS, HIS, PACS Support		
L	Accessories		
1	Handgrips		
2	Removable footrest		
3	Shoulder rests		
M	All available standard & optional features, packages, & accessories must be listed and priced separately		
N	Offer must include the price for a comprehensive service contract (including all replacement parts and x-ray tubes) valid for a period of (8) years starting at the end of the 24 month warranty period		



Item 5	Mammogram	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	A Digital Radiographic Mammography system with AI technology is required to provide excellent image quality for screening, and diagnostic mammography exams and upgradeable to tomosynthesis technology. The system must meet or transcend the minimum requirements listed below.		
A	Generator		
1	Type: High Frequency		
2	Generator Power, kW: $\geq \sim 3.2$		
3	kV range: Lower ~ 23 , Upper: $\geq \sim 35$, 1kV steps		
4	mAs range: Lower ~ 4 , Upper: ≥ 500		
5	mA range: Max. ≥ 100		
B	X-Ray Tube		
1	Anode type: Rotating		
2	Heat capacity, kHU: ≥ 300		
3	Heat dissipation rate, kHU/min: ≥ 40		
4	Target/filter combinations: Mo/Mo, Mo/Rh		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
5	Focal spot size, mm: 0.1 / 0.3 or both		
C	Detector		
1	Technology: Solid State		
2	ACTIVE Detector IMAGE Size, 22X26 cm. or larger		
D	Positioning Assembly		
1	Auto Collimation, 12 x 20 cm & 22 x 26 cm or larger		
2	Assembly movement: Motorized		
3	Rotation range, °: -135 to +180 or wider		
4	Vertical Travel, Vertical Travel, cm: ~80-135		
5	SID, cm: ~65		
6	Display: at least pressure and thickness		
7	Removable patient face shield		
E	Compression System		
1	Motorized with foot switch and manual mode		
2	Automatic Force, N: Up to 200, variable		
3	Manual Force, N: Up to 200, variable		
4	Compression Modes: Please Specify		
5	Safety Features: Please Specify		
F	Main Console		
1	Medical grade Color LCD monitor: $\geq 19"$.		
2	HDD storage: ≥ 250 GB		
3	CD/DVD Archiving		
4	Full DICOM 3.0, RIS, HIS, PACS Support		
G	Diagnostic Workstation		
1	Processor type (intel) , No. of core speed: $\geq 2 \times 3.0\text{GHz}$		
2	Dedicated RAM: $\geq 8\text{GB}$		
3	Dual 5 MP Resolution display		
4	HDD storage capacity: $\geq 500\text{GB}$		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
5	CD/DVD Archiving		
6	Full DICOM 3.0, RIS, HIS, PACS Support		
7	AI contrast enhancement mammography to enhance image quality with low dose.		
H	CAD option should be priced separately: Following accessories to be included 1) low routine paddle: 18x24 & 24x30 2) - high routine paddle: 18x24 & 24x30 3) Spot compression paddles: 4) - spot focus compression plate (small) 5) - spot focus compression plate (large) 6) Magnification paddle I. approx. 1.5 spot magnification II. approx. 1.8 spot magnification III. Magnification compression plate, 16 cm x 20 cm approx. IV. Mag spot compression plate, 9 cm x 9 cm approx. 7) Wall holder for paddles QTY (2)		
I	All available standard & optional features, packages, & accessories including all available paddles must be listed and priced separately		
J	Offer must include the price for a comprehensive service contract (including all replacement parts and x-ray tubes) valid for a period of (8) years starting at the end of the 24 month warranty period		



Item 6	Bone Densitometer (DXA)	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	BMD should be make all performs measurements of the bone density on various parts of the body such as the spine, the femoral bone, the forearm and the whole body using X-ray.		
A	Main Features		
1	High frequency generator		
2	Switched-pulse dual-energy (100 kVp / 140 kVp)		
3	Digital Fast Beam with X and Y kinematics		
4	Linear X-ray fan-beam, utilizing motorized table and C-arm		
5	Multi-element high resolution digital detector array		
6	Patient weight $\geq 130\text{kg}$		
7	Number of detectors : ≥ 128 Detectors		
B	X-Ray Tube		
1	Constant potential source at 76 kV		
2	Dose efficient K-edge filter		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
3	Tube current: 0.05 - 1.50 mA		
C	Typical exposure time		
1	Lumbar spine & femur : 10 sec / 0.04 mGy (A, W, C models)		
2	IVA HD: 15 sec / 0.025 mGy (A, W, C models)		
3	Whole body : 180 sec / 0.007 mGy (A, W, C models)		
4	Proximal Femur: 10 sec / 0.04 mGy (A, W, C models)		
5	SE femur: 15 sec / 0.025 mGy (C, W, A models)		
D	Calibration		
1	Automatic, continuous calibration using automatic internal reference system		
2	Automatic quality control program with multiple system checks		
E	Scan Applications:		
1	Whole Body		
2	Forearm		
3	Lateral 'Lumbar 'Spine		
4	Supine 'Lumbar 'Spine		
5	Hip		
6	Lateral Distal Femur		
F	Standard Computer Hardware		
1	Computer worktable with Core i5 GHz or higher		
2	Windows® 7XP Professional 64 bits or higher		
3	HD : 500GB		
4	RAM : 8 GB		
5	21" LCD flat panel monitor		
6	Color laser Jet® printer		
7	DVD RAM drive		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
8	Complete connectivity with DICOM, HL7		
G	Offer must include the price for a comprehensive service contract (including all replacement parts and x-ray tubes) valid for a period of (8) years starting at the end of the 24 month warranty period		



Item 7	Radiographic System, General Purpose	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	A General purpose digital radiography system is required for hospital use. The system must meet or transcend the minimum requirements listed below.		
A	Main Features		
1	Application: General Purpose		
2	Auto Stitching application for long films (for one unit only)		
3	Tube assembly: Ceiling Suspended		
4	Configuration: Fixed or wireless (built in charger) flat panel table detector & Fixed or wireless (built in charger) flat panel chest stand detector (CSI scintillator type).		
5	High resolution, with pixel pitch of 150 µm or less for both detectors.		
6	Active detector image Size, 42X42 cm approximately		
7	Wall stand Bucky center distance from floor equal or less than 40 cm.		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
B	Table: Fixed Pedestal Base		
1	Type: 4-way float-top		
2	vertical movement, cm : ≥ 30 Motorized		
3	Longitudinal movement, cm: ± 50 cm or better		
4	Lateral movement, cm: ≥ 25		
5	Table weight capacity, kg: ≥ 200		
6	Locking system: Electromagnetic		
C	Generator		
1	High-Frequency type generator		
2	Generator power, kW: ≥ 80		
3	kVp range: $\sim 40-150$		
4	mAs range: $\sim 0.5-800$		
5	mA range: $\sim$ Up to 800 mA		
6	Automatic exposure programs		
D	X-Ray Tube		
1	Focal spot sizes, mm: $\sim 0.6, 1.2$ or better		
2	Tube heat capacity, kHU: ≥ 300 or equivalent		
3	Anode Heat Dissipation rate, kHU/min: ≥ 95		
4	Controls on X-ray tube.		
5	Manual and automatic collimation		
E	Control Console		
1	Medical grade color LCD monitor: $\geq 19"$.		
2	HDD storage: ≥ 500 GB		
3	CD/DVD Drive		
4	Full DICOM 3.0, RIS, HIS, PACS Support		
F	(FOC) Abroad Service training for one biomedical engineer/ technician		
G	All available standard & optional features, packages,		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	&accessories must be listed and priced separately		
H	Offer must include the price for a comprehensive service contract (including all replacement parts and x-ray tubes) valid for a period of (8) years starting at the end of the 24 month warranty period		



Item 8	C-ARM	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	A state of the art digital Mobile C-Arm fluoroscopy system is required to provide excellent image quality and minimal dose for a wide range of applications. The system must comprise sufficiently sophisticated hardware and software platforms to be able to host a wide range of real-time and post processing image enhancement techniques, the system must meet or transcend the following specifications:		
1	Application: Orthopaedics, Trauma surgery, General surgical and interventional procedures, Vascular surgery; Angiography and DSA		
2	Physical Configuration: Two wheeled units with smooth manual steering system: one supporting the C-Arm and console and the other supporting monitors, image processing, recording devices etc.		
3	System backbone: Microprocessor control over all subsystems with an elaborate self-test and error code scheme.		
4	Control Console: hygienic touch type controls with easy to read, user friendly annotation.		
5	X-Ray Tube:		
	a- Rotating anode type.		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b- Anode heat Capacity, kHU: ≈ 300 . (approximately)		
	c- Anode cooling, kHU/min: $\geq \approx 50$. (approximately)		
	d- Dual focus, size: ≤ 0.6 each		
6	X-Ray Generator:		
	a- Ripple-free high-frequency converter type.		
	b- Power rating, kW@100 kVp: ≥ 12 kW.		
	c- Radiographic Mode: - kV range: ~ 40 to 120 kV in steps of 1 kV. - mAs range: ~ 10 to 60 mA. - AEC		
	d- Fluoroscopic Mode: - kV range: ~ 40 to 110 kV. - mA range: ~ 0.2 to 8 mA. - Pulsed fluoroscopy: ~ 1 to 25 pulses per sec. - Digital Snapshot mode		
7	Flat panel detector		
	a- Size not less than (21 cm × 21 cm).		
	b- CMOS flat panel detector type		
	c- Pixel Pitch $\leq 200 \mu\text{m}$.		
8	TV Monitor:		
	a- High-resolution coloured LCD display.		
	b- Flat panel monitors mounted on an articulating arm.		
	c- Monitor size: ≥ 18 ".		
9	Image Acquisition:		
	a- Image matrix: $\sim 1024 \times 1024$.		
	b- Collimation: Dual Leaf and Iris type.		
	c- Image reversal and rotation capability.		
	d- Magnification (detector zoom)		
10	Image Processing and Storage:		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	a- Image storage matrix: ~ 1024x1024.		
	b- Patient data registration system.		
	c- Last image hold.		
	d- Cine replay.		
	e- Digital subtraction.		
	f- CD/DVD R archiving.		
	g- Full DICOM 3.0 connectivity.		
	h- Kindly quote for all available software packages (e.g. DSA, Roadmap, Zoom, Image enhancement, dedicated vascular package, dedicated Ortho Package etc		
11	C-Arm:		
	a- Free Space: $\geq \approx 70\text{cm}$.		
	b- Depth: $\geq \approx 60\text{cm}$.		
	c- Vertical Travel: $\geq \approx 40\text{cm}$.		
	d- Orbital and pivot Rotation, Horizontal and panning motion, and reverse position.		
12	A list of standard accessories for the offered model (optional).		
13	(FOC) Abroad Service training for one biomedical engineer/ technicians		
14	Offer must include the price for a comprehensive service contract (including all replacement parts and x-ray tubes) valid for a period of (8) years starting at the end of the 24 month warranty period		



Item 9	Ultrasound, General, Mid-Range	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	A general-purpose, Mid-Range diagnostic ultrasound system is required for general hospital use at the radiology department. The system must meet or transcend the following specifications:		
A	Application:		
1	Abdominal, Musculoskeletal, Neonatal Pediatric, Small Parts, Urological, Vascular & Transcranial		
B	Configuration		
1	Heavy duty Mobile cart / built-in trolley type		
2	Four full swivel castors with brakes		
3	Full control keyboard		
4	High-resolution LCD: $\geq 21"$ at least		
5	Storage for transducer cables		
6	Auxiliary storage compartments/drawers		
7	Minimum of 4 active transducer connector		
8	User-adjustable presets		
9	Adjustable monitor position: up/down, rotate, swivel, & tilt		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
C	General Features:		
1	Gray-scale levels: 256		
2	Power up time: ≤ 2 minutes		
3	Self-diagnostic routine during power up		
4	Acquisition frame rate: ≥ 1000 fps		
5	Simultaneous processing bandwidth capability: 1-15MHz		
6	No. of digitally processed channels: ≥ 300000		
7	Input dynamic range: ≥ 230 dB		
8	Cine loop: ≥ 1200 frames		
9	Automatic real-time Doppler trace capability including calculation and display of user-selected measurements		
10	Measurements on replay		
11	Real-time Pan/Zoom		
12	Frozen image Pan/Zoom		
13	Automatic optimization of base line and scale		
14	Local HDD patient search through name and/or ID		
15	Full DICOM 3.0, RIS, HIS, PACS Support		
16	Raw data processing capability or equivalent		
17	System must be upgradable, hardware and software		
D	Image Storage:		
1	Capacity of stored images HDD: ≥ 300 GB		
2	Removable Storage: CD/DVD, USB		
E	Multi-frequency Transducers:		
1	Linear Array: 5-12 MHz approximately		
2	Curved Array: 2-6 MHz approximately		
3	Linear Array : 3-8 MHz for vascular application approximately		
F	Imaging Modes:		
1	2D		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
2	B-mode		
3	Tissue harmonic imaging		
4	M-mode and colour M-mode		
5	Dual imaging		
6	Doppler imaging		
7	Colour Doppler imaging		
8	Colour Power Angio Imaging		
9	Pulsed Wave (PW) Doppler		
10	Simultaneous PW Doppler and 2D (Dual Mode)		
11	Simultaneous 2D, colour Doppler, and PW Doppler (Triple Mode)		
12	Compounding imaging		
13	Speckle reduction (Noise reduction imaging)		
G	(FOC) Abroad Service training for one biomedical engineer/ technicians		
H	(FOC) Abroad User training for one radiologist and one radiographer		
I	All available standard & optional features, packages, & accessories must be listed and priced separately		



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Item 10	Ultrasound, General, High-End	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	A general-purpose, High-End diagnostic ultrasound system is required for general hospital use at the radiology department. The system must meet or transcend the following specifications:		
A	Application:		
1	Abdominal, Musculoskeletal, Neonatal Pediatric, Small Parts, Urological, Vascular, Transcranial		
B	Configuration:		
1	Mobile cart / built-in trolley type.		
2	Four full swivel castors with brakes		
3	Full control keyboard		
4	High-resolution LCD: $\geq 21"$ at least		
5	Storage for transducer cables		
6	Auxiliary storage compartments/drawers		
7	Minimum of 4 active transducer connector		
8	User-adjustable presets		
9	Adjustable control panel: up/down & rotate		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
10	Adjustable monitor position: up/down, rotate, swivel, & tilt		
C	General Features:		
1	Gray-scale levels: 256		
2	Power up time: ≤ 3 minutes		
3	Self-diagnostic routine during power up		
4	Touch screen capability		
5	Acquisition frame rate: ≥ 1900 fps		
6	Simultaneous processing bandwidth capability: 1-18MHz		
7	No. of digitally processed channels: ≥ 3 Millions		
8	Input dynamic range: ≥ 280 dB		
9	Cine loop: ≥ 1800 frames		
10	Automatic real-time Doppler trace capability including calculation and display of user-selected measurements		
11	Real-time Pan/Zoom		
12	Frozen image Pan/Zoom		
13	Automatic optimization of base line and scale		
14	Local HDD patient search through name and/or ID		
15	Full DICOM 3.0, RIS, HIS, PACS Support		
16	Raw data processing capability Or post processing or equivalent		
D	Image Storage:		
1	Capacity of stored images HDD: ≥ at least 300 GB		
2	Removable Storage: CD/DVD, USB		
E	Multi-frequency Transducers:		
1	Linear Array: 5-12 MHz approximately with biopsy guides		
2	Curved Array: 1-5 MHz approximately with biopsy guides, The highest end technology (Single Crystal technology or equivalent).		
3	Micro convex for Pediatric applications 4-8 MHz approximately		
4	Linear Array: 3-8 MHz approximately for vascular application		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
5	Trans-rectal: 4-8 MHz approximately with biopsy guides		
F	Imaging Modes:		
1	2D		
2	B-mode		
3	Tissue harmonic imaging		
4	M-mode and colour M-mode		
5	Dual imaging		
6	Doppler imaging		
7	Color Doppler imaging		
8	Color Power Angio Imaging		
9	Pulsed Wave (PW) Doppler		
10	Simultaneous PW Doppler and 2D (Dual Mode)		
11	Simultaneous 2D, color Doppler, and PW Doppler (Triple Mode)		
12	Contrast imaging in imaging mode		
13	Compounding imaging		
14	Speckle reduction (Noise reduction imaging)		
G	All available standard & optional features, packages, & accessories must be listed and priced separately		



Item 11	Cardiac Color Doppler Ultrasound System, Mid-Range	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	This section describes the requirements for diagnostic ultrasound system that can be configured to meet a variety of specialized cardiac clinical demands. The system shall be based on a digital architecture that provides for broad bandwidth digital beam-forming and all digital signal processing. The system must be upgradeable in hardware and software to any advanced medical application.		
A	Applications		
1	Adult echocardiography		
2	Paediatric echocardiography		
3	Stress echocardiography		
4	Trans Esophageal echo cardiography to support adult and paediatric application (optional to be priced separately)		
5	Complete measurements package for all mentioned applications		
B	Imaging Technologies		
1	The entire bandwidth of broadband transducer received frequencies should be in the range 1 – 15 MHz		
2	Frame rate of not less than ≥1000 fps.		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
3	A min. depth of up to 30 cm or better		
4	2D		
5	B-mode		
6	Tissue harmonic imaging(THI) on all transducers		
7	M-mode and colour M-mode		
8	Dual imaging		
9	Doppler imaging		
10	Colour Doppler imaging		
11	Directional Colour Power Angio Imaging		
12	Pulsed Wave (PW) Doppler with auto trace		
13	Continuous Wave (CW) Doppler		
14	Simultaneous PW Doppler and 2D (Dual Mode)		
15	Simultaneous 2D, colour Doppler, and PW Doppler (Triple Mode)		
16	Stress-echo application.		
17	Other recent functions to be specified		
18	Speckle reduction (Noise reduction imaging)		
19	Fully digital beam former with highest digitally processed for simultaneous formation, acquisition and delay processing of multiple ultrasound beams		
20	Number of digital processing channels: ≥ 300000		
21	Min. 230 dB dynamic range.		
22	Auto Doppler analysis in Real Time		
C	Real-Time 2D Imaging		
1	Real-Time Zoom (magnification)		
2	Continuous zoom from 1x to 5x magnification		
3	A positioning device to freeze the zoomed (magnified) image		
4	Reversal of left/right and up/down image orientation		
5	Real-Time auto optimization of 2D gain, TGC, and Dynamic Range		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
6	Cineloop image for review and analysis of anatomical structures		
7	A min. of 1200 frames cine loop		
8	Raw data processing capability or equivalent		
D	System Configuration		
1	The system should be modular in design and consist of a main module, control module, keyboard, and a min. 21-inch high resolution flat LCD flicker free colour monitor with tilt and swivel.		
2	Built-in trolley type (mobile configuration) Adjustable monitor position: up/down, rotate, swivel, & tilt		
3	The system should have integrated and easy to use transducer cable holders to prevent cables from dragging or entangling on the ground.		
4	The system should have 4 independent swivel wheels to allow for positioning in tight spaces, yet allow the locking of 2 wheels for ease in transporting.		
5	Fast power-up capability, not to exceed 3 minutes.		
6	A min. of 4 active probe connectors.		
7	Automatic diagnostic system check during power-up and during use to verify correct system operation		
8	Capacity of stored images HDD: ≥ 300 GB		
9	Image Storage on CD-RW, DVD, and USB.		
E	Quantification		
1	Digital image filing and patient data management functions.		
2	Advanced zoom functions with high quality zoomed images.		
3	All kinds of measurement functions in cardiovascular examinations are needed; including the latest automatic measurements such as heart muscle tracing and thickness measurement.		
4	Tissue tracking and myocardium thickness tracking, left atrium wall tracking and Intima-media thickness (optional to be priced separately)		
5	Stress-echo software and protocols with playback functions, saving functions and measurements.		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
F	Reporting and Management System		
1	The system shall be capable to perform patient report which should include; patient data, measurements, analyses, to allow embedding of images into patient reports.		
2	The system must be DICOM compatible		
3	Black and White printer		
G	Transducers:		
1	Broadband phased array for adult transducer with approximate 1-5 MHz bandwidth		
2	Broadband phased array for paediatric transducer with approximate 3-7 MHz bandwidth		



Item 12	Ultrasound, Gynecology, High Range	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	An all-purpose Gynaecology ultrasound scanner to cover the entire range of common clinical applications. The system must meet or transcend the following specifications:		
A	Application:		
1	Abdominal, Musculoskeletal, Neonatal, Pediatric, Small Parts, Urological, Vascular, Transcranial, OB/GYN		
B	Configuration:		
1	Mobile cart / built-in trolley type.		
2	Four full swivel castors with brakes		
3	Full control keyboard		
4	High-resolution LCD: $\geq 21''$		
5	Storage for transducer cables		
6	Auxiliary storage compartments/drawers		
7	Minimum of 4 active transducer connector		
8	User-adjustable presets		
9	Adjustable control panel: up/down & rotate		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
10	Adjustable monitor position: up/down, rotate, swivel, & tilt		
C	General Features:		
1	Gray-scale levels: 256		
2	Power up time: ≤ 3 minutes		
3	Self-diagnostic routine during power up		
4	Touch screen capability		
5	Acquisition frame rate: ≥ 1900 fps		
6	Simultaneous processing bandwidth capability: 1-15MHz		
7	No. of digitally processed channels: ≥ 3 Millions		
8	Input dynamic range: ≥ 280 dB		
9	Cine loop: ≥ 1600 frames		
10	Automatic real-time Doppler trace capability including calculation and display of user-selected measurements		
11	Real-time Pan/Zoom		
12	Frozen image Pan/Zoom		
13	Automatic optimization of base line and scale		
14	Local HDD patient search through name and/or ID		
15	Full DICOM 3.0, RIS, HIS, PACS Support		
16	Raw data processing capability or equivalent		
D	Image Storage:		
1	Capacity of stored images HDD: ≥ 300 GB		
2	Removable Storage: CD/DVD, USB		
E	Multi-frequency Transducers:		
1	Curved Array: 2-5 MHz with biopsy guide approximately (Single Crystal technology or equivalent)		
2	4D Curved Array: 2-6 MHz approximately (Single Crystal technology or equivalent)		
3	Trans- Vaginal : 4-8MHz with 15 cm min. depth approximately		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
F	Imaging Modes:		
1	2D		
2	B-mode		
3	Tissue harmonic imaging		
4	4D HD LIVE		
5	Dual imaging		
6	Doppler imaging		
7	Color Doppler imaging		
8	Color Power Angio Imaging		
9	Pulsed Wave (PW) Doppler		
10	Simultaneous PW Doppler and 2D (Dual Mode)		
11	Simultaneous 2D, color Doppler, and PW Doppler (Triple Mode)		
12	Contrast imaging in imaging mode		
13	Compounding imaging		
14	Speckle reduction (Noise reduction imaging)		
15	Thermal Black and White printer		
G	All available standard & optional features, packages, & accessories must be listed and priced separately		



Item 13	Ultrasound, Gynecology, MID Range	Qty. (5)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	An all-purpose Gynaecology ultrasound scanner to cover the entire range of common clinical applications. The system must meet or transcend the following specifications:		
A	Configuration		
1	Mobile cart / built-in trolley type		
2	Four full swivel castors with brakes		
3	Full control keyboard		
4	High-resolution LCD: $\geq 21"$		
5	Storage for transducer cables		
6	Auxiliary storage compartments/drawers		
7	Minimum of 4 active transducer connector		
8	User-adjustable presets		
9	Adjustable monitor position: up/down, rotate, swivel, & tilt		
B	General Features:		
1	Gray-scale levels: 256		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
2	Power up time: ≤ 2 minutes		
3	Self-diagnostic routine during power up		
4	Acquisition frame rate: ≥ 1200 fps		
5	Simultaneous processing bandwidth capability: 1-15MHz		
6	No. of digitally processed channels: ≥ 300000		
7	Input dynamic range: ≥ 230 dB		
8	Cine loop: ≥ 1200 frames		
9	Automatic real-time Doppler trace capability including calculation and display of user-selected measurements		
10	Real-time Pan/Zoom		
11	Frozen image Pan/Zoom		
12	Automatic optimization of base line and scale		
13	Local HDD patient search through name and/or ID		
14	Full DICOM 3.0, RIS, HIS, PACS Support		
15	Raw data processing capability or equivalent		
C	Image Storage:		
1	Capacity of stored images HDD: ≥ 300 GB		
2	Removable Storage: CD/DVD, USB		
3	Black and White printer		
4	Colour printer		
D	Multi-frequency Transducers with minimum 12cm depth approximately		
1	Convex probe: 2-5 MHz approximately		
2	Vaginal probe: 4-9 MHz approximately		
3	4D probe: To be priced separately		
E	Imaging Modes:		
1	2D		
2	4D ready		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
3	B-mode		
4	Tissue harmonic imaging		
5	Colour Doppler imaging		
6	Zoom function with Movable zoom box.		
7	Speckle reduction (Noise reduction imaging)		
F	Reporting and Management System		
1	The system shall be capable to perform patient report which should include; patient data, measurements, analyses, to allow embedding of images into patient reports.		
2	Thermal Black and White printer		
G	(FOC) Abroad Service training for one biomedical engineer/ technicians		
H	(FOC) Abroad User training for one radiologist and one radiographer		
I	All available standard & optional features, packages, & accessories must be listed and priced separately		



Item 14	Ultrasound Machine, Portable	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Anaesthesia dedicated ultrasound scanner to be used in operating theatres. The system must meet or transcend the following specifications:		
A	Application: Abdominal, Vascular, Transcranial, Musculoskeletal OB/GYN, Small parts, nerve application		
B	Configuration		
	1- Portable design with original trolley		
	2- Four full swivel castors with brakes		
	3- High-resolution LCD: $\geq 12''$		
	4- Storage for transducer cables		
	5- Minimum of 2 active transducer connector on trolley		
	6- User-adjustable presets		
	7- Adjustable monitor position		
C	General Features:		



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	1- Grays-scale levels: 256		
	2- Power up time: ≤ 2 minutes		
	3- Shutdown confirmation capability		
	4- Self-diagnostic routine during power up		
	5- Acquisition frame rate: ≥ 500 fps		
	6- Simultaneous processing bandwidth capability: 2-12 MHz		
	7- No. of digitally processed channels: ≥ 100000		
	8- Input dynamic range: ≥ 160 dB		
	9- Cine loop: ≥ 200 frames		
	10- Automatic real-time Doppler trace capability including calculation and display of user-selected measurements		
	11- Real-time Pan/Zoom		
	12- Frozen image Pan/Zoom		
	13- Automatic optimization of base line and scale		
	14- Local HDD patient search through name and/or ID		
	15- Full DICOM 3.0, RIS, HIS, PACS Support		
	16- Raw data processing capability or equivalent		
D	Image Storage:		
	1- Capacity of stored images HDD, please specify.		
	2- Removable Storage: CD/DVD, USB		
E	Multi-frequency Transducers:		
	1- Convex probe: 2-5 MHz		
	2- Linear probe: 5-12 MHz		
F	Imaging Modes:		
	1- 2D		
	2- B-mode		
	3- Tissue harmonic imaging		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	4- Colour Doppler imaging		
	5- Zoom function with Movable zoom box.		
	6- Speckle reduction (Noise reduction imaging)		
	7- Needle guide imaging software		
G	Reporting and Management System		
	1- The system shall be capable to perform patient report which should include; patient data, measurements, analyses, to allow embedding of images into patient reports.		
	2- Thermal Black and White printer		
H	All available standard & optional features, packages, & accessories must be listed and priced separately		



SPECIAL TERMS

- *Offers not complying with any of the special terms or the technical specifications shall be considered non-conforming with tender requirements.*
 - *Any vendor providing FORGED documents shall be disqualified from the current tender and banned from participating in any future RMS tenders.*
 - *Wherever term “based” is mentioned it refers to the country where the manufacturing company is founded & established.*
1. *All equipment must be the most recently released model/version which is equal to or higher than the range of the specifications of the required system (low, mid or high) and equal to or higher than the level of technology and required options mentioned in the technical specifications.*
 2. *Required certificates (must be submitted with the technical offer):*
 - 2.1 *FDA clearance (510K) for equipment of USA based companies.*
 - 2.2 *MDR (EU) 2017/745 certificate for equipment of EU (European Union) based companies.*
 - 2.3 *UKCA certificate For Equipment of Great Britain based companies (England, Scotland, Northern Ireland, and Wales).*
 - 2.4 *ARTG (Australian Register of Therapeutic Goods) certification or approval for Australian and New Zealand based companies.*
 - 2.5 *Establishment License with the relevant Device License issued by the Therapeutic Products Directorate for Equipment of Canadian based companies.*
 - 2.6 *PMDA (Pharmaceuticals and Medical Devices Agency) certification or approval for equipment of Japanese based companies.*
 - 2.7 *Swissmedic (Swiss agency for therapeutic products) certification or approval for equipment of Swiss based companies.*
 - 2.8 *Norwegian Medicines Agency certification or approval for equipment of Norwegian based companies.*
 - 2.9 *Only for class I medical equipment manufactured by companies based in one of the countries mentioned above, submission of either one of the certificates mentioned above or a free sale certificate in any of these countries shall be accepted.*



2.10 For the following equipment:

- All X-ray equipment, MRI, ultrasound, and nuclear medicine systems (regardless where the manufacturing companies are based).
- Where the manufacturing companies are based in other origins than the mentioned in terms 2.1 - 2.8.

The following are required:

- a- At least two of the certificates mentioned above, one of which has to be FDA clearance (510K) (Only for class I medical equipment submission of certificates mentioned in 2.9 shall be accepted).
- b- Evaluation certificate from the Royal Medical Services for the same offered model with at least 80% passing grade.

If the evaluation is not applicable (based on purchasing committee perspective) bidder should submit a list of installation basis of the same offered model and/or previous models in at least two of the following hospitals (King Hussein Cancer Center, National Center for Diabetes Endocrinology and Genetic Diseases, Jordan University Hospital or King Abdullah University Hospital) with at least three years of operation, list should include: Name of hospital, Model installed, Quantity, and date of installation.

The purchasing committee has the right to officially contact any of these hospitals and disqualify any offer where the feedback is negative in operation, after sales service or local agent performance.

2.11 *The vendor is responsible to ensure through official documents that classified medical devices are manufactured in conformity with applicable quality system standards (ISO, IEC); (the international quality systems standard for medical device manufacturing ISO 13485) or ISO9001.*

2.12 *With each offer, bidders must provide a formally endorsed document issued by the manufacturer stating that the bidder is the sole certified agent for the offered item.*

2.13 *In all of the above cases (except 2.12) certificates must be formally endorsed by JFDA.*

2.14 *Any vendor not submitting all required certificates will be eliminated.*

3. *Official website of the manufacturer must be provided. The website must clearly demonstrate the history profile and manufacturing features of the company including the same offered model and its brochure.*

In case of inconsistency between the information on the website with the provided information of the local agent regarding any offered product, the committee has the right to eliminate that product from the awarding process.



4. *Offered items should be from reputable well known manufacturers and excellent experience in the field and shall have multiple installations of the same offered model and/ or previous models in RMS main hospitals with at least two years of operation and excellent experience in operation, after sales service & local agent performance; otherwise the purchasing committee has the right to request any of the following:*

- a) An evaluation certificate as mentioned in term 2.10.b.*
- b) A sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification; any vendor rejects to deliver a sample unit will be eliminated. Evaluation duration will be determined by the purchasing committee.*

Any offered item fail in the evaluation/assessment process will be rejected

5. *Vendors must specify the origin of the offered items and accessories in the technical offer.*
6. *Bidders must submit their reservations/queries regarding tender specifications and/or special terms within the first half of the tender closing period starting from the tender announcement date. Reservations/queries submitted after the end of this period shall be rejected.*
7. *Goods are to be brand new; manufacturing date of the delivered products should not exceed 18 months from the date of the final award.*
8. *Delivery period should be mentioned clearly; the purchasing committee has the right to reject any offer with delivery time exceeding 4 months.*
9. **Warranty:**

- a- Offers must include a full warranty for a period of a minimum of 24 months from the date of installation or 30 months from the date of receiving the items at the agreed location mentioned in the final order (whichever comes first).*

Warranty must include corrective & preventive maintenance activities as per manufacturer recommendations including:

- **Required spare parts (free of charge)**
- **Labour**
- **Hardware**
- **Software**
- **Rechargeable batteries**

At the end of the warranty period, The supplier commits to implement final inspection of the submitted goods and submit the reports signed by the site chief engineer stating that the equipment are working properly as well as all preventive maintenance reports during the warranty period.



Warranty & installation are excluded for items mentioned in Attachment no.1 the purchasing committee has the right to exclude any other item not listed in the attachment and does not required installation and warranty.

- b- In the case where a delay in installation has occurred as a result of the supplier's dereliction and has exceeded a period of one month from the date of receiving the items, the approved warranty period will automatically be considered as 24 months from the date of installation.***
- c- If at any time during the warranty period the item becomes inoperative due to a technical fault the item must then be repaired by the supplier /local agent within a period of 5 working days from written notification, warranty will be extended according to downtime period.***
- d- If the delay exceeds 30 days the supplier must replace the item with a new identical functioning one (within the same delivery period mentioned in the final offer). In case the item was replaced by a new one, the warranty period mentioned in 9.a) above will start from the installation and commissioning date of the new item.***
- e- Local agent/ supplier is committed to transport and install any awarded item during the warranty period on free of charge basis to any location inside the country whenever required by Royal Medical Services, this should not include pre-installation requirements in the new site.***

10. All offered items (main unit) should be fully designed, manufactured, and labelled by their real original manufacturer in which all related testing, research, development and approvals went through.

Any relabelled products for the main unit (white-label manufacturing, OEM, or repackaging) are rejected.

11. One set of operation manual(s) and one set of service manual(s) including schematics and a spare-part list must be delivered with each unit, CD/DVD is acceptable. For large tenders, a certain agreed percentage of manuals per item may be agreed upon.

12. Where applicable, pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include removal of old system(s), any civil work, electrical work or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s).



13. *Power requirements: where applicable either single phase 220V, 50Hz or 3-phase 380V. Systems with external transformers are considered conforming only if clearly stated in the technical specifications.*
14. *Technical offers must include clear original technical brochures/catalogues for all offered items.*
15. *Offers must include fully detailed technical offers and compliance sheets as a soft copy (either Microsoft office or Microsoft excel format) in addition to a hard copy, mentioning the exact model/catalogue number and country of origin of the offered item(s), full technical description/specifications and any accessories or options included in the offer.*

Offer must clearly indicate the origin of the offered item and the country where the manufacturer of the offered items is based.
16. *Compliance sheets must be as per the tabular format of the technical specifications in the tender documents, listing the required specifications on one column and a Yes or NO response to each point in the adjacent column, with reference to page and line numbers in the relevant technical brochure. Offers not complying with this term shall be rejected.*
17. *Qualifications and after sales service: The technical bid should contain all the necessary documents (training certificates) to prove the capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specifications of the manufacturer and the ability of the bidders for providing efficient after sales service conducted by authorized certified biomedical service engineers with minimum 2 years experience in the same field.*
18. *Accessories and consumables:*
 - 18.1 *Any accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately.*

All offered accessories and consumables must be approved by the manufacturer.
 - 18.2 *Technical offers must include a priced list for all accessories and consumables related to the required equipment as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) with prices fixed for a period of five years from the date of installation and commissioning with a maximum annual increase of 2%, any essential item not listed will be considered free of charge.*
 - 18.3 *Accessories and consumables must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
 - 18.4 *Where applicable, a start-up kit of accessories and consumable items must be provided with each system on a free-of-charge basis.*



19. Spare Parts:

- 19.1 *Technical offers must include a comprehensive and priced list of all spare parts related to the awarded equipment (including rechargeable batteries) as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) valid for a minimum period of five years with a maximum annual increase of 2%, commencing at the end date of the warranty period, any essential item not listed will be considered free of charge.*
- 19.2 *Spare parts must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
- 19.3 *Prices of spare parts should be reasonable and will be taken into consideration during the purchasing process; the purchasing committee has the right to eliminate any offered item with unreasonable high prices of spare parts.*
- 19.4 *Delivery period of required spare parts should not exceed 2 months from the date of the final order.*

20. Spare parts, consumables and accessories availability must be guaranteed for a minimum period of ten years starting from the date of installation and commissioning.

21. Local agent is committed to sign a service contract with Royal Medical Services to perform all relevant maintenance for the awarded equipment (whenever required by DRMS within a period that does not exceed one year from the end date of the warranty period and if mentioned clearly in the specifications) without exceeding the original mentioned cost and as per mentioned terms within minimum required period.

22. Tender Awards:

- 22.1 *For the final list of offers having a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its' running cost (Total Cost of Ownership) over a period of seven years from the date of installation and commissioning. Only offers with the lowest total cost of ownership over a period of seven years from the date of installation and commissioning shall qualify for the award.*
- 22.2 *Running cost includes the value of consumables, accessories needed to operate the system over the same period as well as the cost of any service contract (where applicable).*



23. For PC/Laptop based systems:

- 23.1** Complete restoration medium (CD/DVD/etc.) of the operating system and the application software must be supplied.
- 23.2** Purchased licenses, software keys & dongles must be provided at any time during and after the warranty period on free of charge basis whenever required by DRMS for a minimum period of ten years starting from the date of installation and commissioning.
- 23.3** Where locally supplied computers, laptops & printers are offered, the offered model should be from well known manufacturer.

24. Pricing must include services of sale, shipment, transportation, delivery from port to site or to Main Medical Stores, installation, pre-installation (if needed), training, commissioning, warranty and bringing the equipment into service.

25. Custom clearance of goods shall be the responsibility of the Jordanian Armed Forces (JAF), however, suppliers shall bear all costs incurred by handling charges and any demurrage charges or extra expenses incurred by the port's corporation (including expenses caused by delay in presenting the necessary shipment documents for either clearing or transporting the goods to the required location mentioned in the final order, delivery note issuing charges, unloading charges, local shipping charges etc.). The supplier is also responsible for providing of all relevant shipping documents, together with the delivery order(s).

26. a. DRMS has the right to increase the awarded quantities by a percentage not exceeding 35% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.

b. DRMS has the right to decrease the awarded quantities by a percentage not exceeding 50% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.

27. a. Bidder is not allowed to submit more than one offer for the same item whether that's solely or in coalition or partnership with other bidders.

b. Bidder is allowed to include within their offer optional alternatives for the same offered item from the same manufacturer.

28. The supplier must furnish DRMS with a guarantee stamped and legalized by the Notary Public equals to (115%) of the total value of the awarded equipment valid for twelve months from the date of final acceptance of the equipment by DRMS.



29. Training:

- 29.1** *For items where abroad service training courses are required in technical specifications, offers must include a certified service training program for at least 3 working days at a reputable center abroad recognized by the manufacturer for at least one biomedical engineer or biomedical technician; all costs inclusive, air tickets, , boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.*
- 29.2** *For items where abroad user training courses are required in technical specifications, offers must include a certified operator training program at a reputable center abroad recognized by the manufacturer for at least one operator; all costs inclusive, air tickets, boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.*
- 29.3** *The period of the training courses must be according to the manufacturer's program excluding traveling days and must be stated clearly in the technical offer.*
- 29.4** *Training Programs must conform to the following standards:*
- *User training must comprise understanding and use of operation manual(s), correct and safe operation of the equipment, as well as user preventive maintenance and calibration.*
 - *Service training must comprise: theory, understanding and use of service manual(s), calibration, preventive maintenance procedure, and practical troubleshooting and repair exercises, and must be conducted by professional instructors employed or authorized by the system manufacturer.*
 - *Service training must be conducted on a system of identical make, model, and configuration to that purchased by DRMS, and designated by the manufacturer or the local agent for training purposes.*
 - *Certificates must be endorsed and officially sealed by the system manufacturer, legally empowering trainees to engage in user and service activities according to operation and service manual(s).*
 - *Where applicable, offers must include an on-site user and service training.*

30. *For offers submitted in Jordanian dinars, payment will be either by wire transfer or by cheque after final acceptance of good, any other way of payment will be rejected.*



Attachment 1

#	Equipment
1	Adjustable Auto Pipettes
2	Resuscitation Bag
3	Laryngoscope Set
4	Oxygen Flow meter wall type/ single
5	Regulator Suction with canister, wall vacuum outlet
6	Oxygen Regulator for Oxygen Cylinders
7	Pulse Oximeter, Finger type
8	Oxygen Cylinder
9	Doppler, portable
10	Diagnostic set, Portable
11	Direct Ophthalmoscope, Portable
12	Otoscope, Portable
13	Air Mattress System, homecare
14	Stethoscope
15	Aneroid Sphygmomanometer
16	Video Assisted Laryngoscope, portable
17	Scale, Manual
18	Wood's Light
19	Cough Pressure, Normal Saline
20	Rehabilitation Walking Parallel Bars, non-powered
21	Therapy Mat
22	Medical Ball All Size
23	Dumbbells Rack with complete set of dumbbells
24	Crutches
25	Shoulder wheel
26	Mobile Mirror
27	Cuff Weights
28	Walker, different sizes
29	Patient Elbow Stick
30	Rehabilitation Training Ladder
31	Rehabilitation Suspension Frame



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32	<i>Exercise Band All Size (Theraband)</i>
33	<i>Lens trial set</i>
34	<i>Wheel Chair</i>
35	<i>Commode Chair</i>
36	<i>Bassinet (Baby Cot)</i>
37	<i>Resuscitation Cart (Crash Cart)</i>
38	<i>Medication Cart</i>
39	<i>Cart, Drawers</i>
40	<i>Examination Couch, Manual</i>
41	<i>Gynaecology Examination Table, Manual</i>
42	<i>Examination Table, Neonates, Manual</i>
43	<i>Intravenous Pole, Mobile Stand</i>
44	<i>DDA Cabinet</i>
45	<i>Stainless steel Multipurpose Trolley</i>
46	<i>Cabinet, Instrument, Operation Theatres</i>
47	<i>Dressing Cart</i>
48	<i>Stainless steel wire shelving unit</i>
49	<i>Paper Trolley</i>
50	<i>Stainless Steel Sink (Clean up counter)</i>
51	<i>Scopes Cabinet</i>
52	<i>Mayo Table</i>
53	<i>Table, Instrument</i>
54	<i>Stool, Adjustable, Doctor</i>
55	<i>Stool, Adjustable, Operation Theatres</i>
56	<i>Carts, linen/laundry, soiled, Double</i>
57	<i>Closed distribution trolley</i>
58	<i>Step Ladder, Conductive, Double</i>
59	<i>Step, Surgeon, Single</i>
60	<i>Kick Bucket</i>
61	<i>Mobile Stand for Oxygen Cylinder</i>
62	<i>Stainless Steel Wire Basket, 1 STU</i>
63	<i>Cart, Plaster</i>



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Annex 4: Physiotherapy Equipment

Item 1	Shockwave	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable & heavy duty bed from a reputable well known manufacturer		
2	Shockwave system For treatment of orthopaedic and rehabilitation medical conditions		
3	The shockwave generation probe has to be electromagnetic or piezoelectric or equivalent.		
4	radial shock wave therapy		
5	Piezoelectric Shockwave probe output should be ≥ 4 million pulses, and regarding the electromagnetic probe, vendor must provide number of probes capable to deliver min. 4 million pulses (to be priced separately)		
6	Pressure up to 4 bar or better		
7	Frequency up to 20 Hz or better		
8	User friendly operation system with Single mode and continuous mode application		
9	interface : coloured touch screen ≥ 5 "		



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Annex 4: Physiotherapy Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
10	Original trolley		
11	A list of standard accessories for the offered model.		
12	Any options to be quoted separately		



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Annex 4: Physiotherapy Equipment

Item 2	Combined Electrotherapy with Vacuum Therapy Unit	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a well-known reputable brand		
2	Simple and easy to use		
3	At least two separate current channels		
4	Channels can be set independently		
5	Channels should be isolated for patient safety		
6	At least 15 forms of current for electrotherapy including TENS and Interferential current forms		
7	Multiple pre-set programs		
8	Integrated vacuum unit		
9	Continuous and intermittent vacuum		
10	Large LCD screen to display current and vacuum settings		
11	Complete set of standard accessories including rubber electrodes (2 sets), sponges (2 sets) and colour coded cables		
12	Original heavy duty trolley		



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Annex 4: Physiotherapy Equipment

Item 3	Combined Therapy (Ultrasound with Multi Current)	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Electrotherapy:		
	1- Two pole and four pole channels.		
	2- Interferential current.		
	3- High voltage.		
	4- TENS.		
	5- Biodynamic.		
	6- Complete set of accessories with two sets of electrodes to be included.		
B	Ultrasound		
	1- Continuous and pulsed ultrasound therapy		
	2- Multi-frequency treatment head with 1 and 3 MHz		
	3- Automatic power switch-off.		
	4- Adjustable treatment time session		
	5- Visual indicator on treatment head for proper contact.		



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Annex 4: Physiotherapy Equipment

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	6- User-defined programs		
	7- Intensities for continuous and pulsed treatments to be mentioned		
C	Original heavy duty trolley should be included		



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Annex 4: Physiotherapy Equipment

Item 4	Pneumatic Compression System, Lymph Drainage Therapy (Pressotherapy Machine)	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	To improve the circulation of lymphatic fluid from the extremities of the body by applying air pressure to the limbs		
2	Pressure range approximately 30–130 mmHg or better		
3	Digital display of pressure, time, flow & mode		
4	Multiple predefined treatment modes: at least 4		
5	Adjustable treatment session time interval and pressure		
6	The following accessories to be included:		
	a- Complete set of air hoses (3 sets)		
	b- Lower limb cuffs (4 chambers) with extension zip Qty.(2)		
	c- Upper limb cuffs (4 chambers) with extension zip Qty.(2)		
	d- Lower limb cuffs, small with extension zip Qty.(2)		



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Item 5	Continuous Passive Motion (CPM Knee), Adult	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Designed to accommodate the typical knee replacement for adult patients, athletes		
2	Progressive range of motion		
3	Fast-back mode		
4	Lightweight design		
5	Digital display.		
6	Allows therapist to safely set amount of passive force without causing unnecessary pain or damage to the surgery.		



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Annex 4: Physiotherapy Equipment

Item 6	Continuous Passive Motion (CPM Knee), Paediatric	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Designed to accommodate the typical knee replacement for paediatric patients		
2	Progressive range of motion		
3	Fast-back mode		
4	Lightweight design		
5	Digital display.		
6	Allows therapist to safely set amount of passive force without causing unnecessary pain or damage to the surgery.		



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Annex 4: Physiotherapy Equipment

Item 7	Chilling Unit	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Large size		
2	Stainless Steel		
3	Temperature range: Approximately (-12°C to -6°C).		
4	Four cervical standard sized cold packs and covers, original from the same manufacturer of the unit Qty.(10)		
5	Four lumbar standard sized cold packs and covers, original from the same manufacturer of the unit Qty.(10)		



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Annex 4: Physiotherapy Equipment

Item 8	Hydro Collator Heating Unit	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Stainless steel housing		
2	Top lid with handle		
3	Tank capacity approximately 90 litres or larger		
4	Electronic adjustable temperature control 35°C to 80°C or better		
5	Removable stainless steel insert tray		
6	Digital temperature display		
7	Water outlet manual valve		
8	Standard size Cervical hot pack with cover, original with the same manufacturer of the unit Qty. (10)		
9	Standard size Lumbar hot pack with cover, original with the same manufacturer of the unit Qty. (10)		



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Annex 4: Physiotherapy Equipment

Item 9	Short Wave Diathermy Machine	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Continuous and pulsed operation.		
2	Automatic switch off and acoustic signal.		
3	Multi direction heavy duty treatment arm with signal – knob fixation.		
4	Adjustable power and frequency		
5	Standard accessories to be included		
6	Tester should be included with each unit		



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Annex 4: Physiotherapy Equipment

Item 10	Microwave Diathermy Machine	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Continuous / pulse therapy.		
2	Adjustable intensity from approximately (0 -250) watt / and output approximately of maximum 1600 watt.		
3	Multi direction heavy duty treatment arm with signal – knob fixation		
4	Standard accessories to be included		
5	Large field radiation.		



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Annex 4: Physiotherapy Equipment

Item 11	Paraffin Bath	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Stainless steel inner tank		
2	Approximate Thermostatic temp. control adjustable ~30 °C to ~90°C		
3	Tank capacity of approximately 15 liters.		



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Annex 4: Physiotherapy Equipment

Item 12	Tilting Table	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Electrical adjustment of tilting angle from 0° to $\geq 85^\circ$ degrees with angle indicator		
2	At least three extra-wide positioning straps		
3	Mobile with brakes		
4	Foot support		
5	Upholstery that is easy to clean & disinfect.		
6	Lifting capacity: at least 175 kg		
7	Tabletop size: at least 200* 65 cm		



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Annex 4: Physiotherapy Equipment

Item 13	Standing Frame, Electric	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	For adult use		
2	Motorized height adjustment of chair from seat to stand position		
3	Unit can power lift up to around 140 kg patient or more		
4	Hand control operation.		
5	Padded top with easy to clean material		
6	Dimensions of top approximately (68X44) inch with raised rim.		
7	Cut-out size is approximately 19" W x 10" D.		
8	Padded knee		
9	Constructed from heavy duty coated steel or stainless steel		
10	Retractable locking swivel casters.		



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Annex 4: Physiotherapy Equipment

Item 14	Patient Couch, Electric	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Two section patient Couch		
2	Electrical height adjustment 50 to 90 cm or better		
3	Upper section adjustable (manual or electrical)		
4	Frame made from high quality medical grade stainless steel or epoxy coated steel		
5	Foam padded top in two sections for comfort of patient		
6	Length approximately 195cm.		
7	Safe working load ≥ 150 kg		
8	Foot control for elevation		
9	Patient breathing hole in the head section.		



Annex 4. Physiotherapy Equipment



Item 15	Treadmill with Gait Analysis and Harness Support	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Complete Gait Analysis system with Treadmill and Harness support from the same manufacturer with the following specification:		
A	Gait Analysis Qty. (1)		
1	Makes powerful gait and balance assessment, accessible for any clinic		
2	No need setup or calibration between users		
3	Simple and easy to use interface software		
4	Provides real-time measurement, reporting, and feedback of temporal and spatial parameters of gait and balance		
5	Graphical representation of data presented for identification of asymmetries in gait		
6	Reports for step and stride length and time, gait cycle phases, weight-bearing, gait symmetry, speed and cadence		
B	Treadmill Qty. (1)		
1	The unit shall be capable of maintaining speeds at diverse elevations for adult patients		
2	In addition to standard workout programs, the treadmill should provide the ability to customize an individual exercise program		



Annex 4. Physiotherapy Equipment



	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
3	The unit should resist tipping over during use		
4	The running deck should be cushioned and not to be less than approx. 400 mm in width and approx. 1200 mm in length or better		
5	The treadmill should elevate electrically		
6	The treadmill should be capable of speeds up to approximately 10 Km/h in forward or better		
7	The treadmill should be capable of speeds up to approximately 3 Km/h in reverse or better		
8	The treadmill should start at a safe minimum speed and slowly increase to the desired speed setting		
9	An emergency stop must be provided to stop the treadmill		
10	Adjustable bar (Sturdy Side rails should be provided for user safety)		
C	Harness Support Qty. (1)		
1	Control and weight-bearing assistance for fall-free therapeutic activities		
2	Easily lift and safely support patients up to 150 kg		
3	Electrically up/down for height adjustment		
*	Additional accessories and options to be listed and priced separately		



Annex 4. Physiotherapy Equipment



Item 16	Rehabilitation Walking Parallel Bars, Motorized	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Made entirely from heavy duty stainless steel material, floor should be covered by anti-slip material		
2	Should be accessible to wheel chairs from both sides		
3	Electrically adjustable in height (60-100 cm approximately) and width (45-80 cm approximately)		
4	Length approximately 3 meters		



Item 17	Cervical Traction	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Continuous and intermittent cervical traction		
2	Traction forces up to approximately 900 N (approximately 90 kg)		
3	Continuous electronic monitoring of the traction for forces		
4	Patient stop switch		
5	Nylon cord with hook		
6	Easy to move with castors and brakes		



Item 18	Exercise Bicycle	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, rigid and heavy duty design.		
2	Superior training flexibility and safety		
3	Frame built from heavy duty steel		
4	Corrosion Resistant Fittings		
5	Number of levels: at least 8 levels		
6	Digital display of speed and heart rate.		
7	Easily replaceable plastic covers on the handlebars and frame		
8	Holds patients up to approximately 150 kg minimum.		
9	Movable with castors and brakes		
10	Patient chair: - a- Integrated with the bicycle - b- With back support - c- Adjustable sliding position - d- With retractable armrests - e- Swivable 180° - f- Comfort upholstery that is easy to clean		



Annex 4. Physiotherapy Equipment



Item 19	Cross Trainer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Can be used as either a cross trainer or exercise cycle, and is easily switchable between the two		
2	Resistance Levels not less than 8		
3	Digital display		
4	Console Feedback:- Time, speed, distance, calories, pulse, resistance level		
5	Heavy duty Footplates		
6	Frame built from heavy duty steel		



Annex 4. Physiotherapy Equipment



Item 20	Therapy Mat	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	For floor exercise activities.		
2	Durable, made from heavy duty vinyl with polyurethane fire-retardant foam.		
3	Easily cleaned with disinfectant/ soap and water.		
4	Two handles for easy transporting (preferable)		
5	Foldable		



Annex 4. Physiotherapy Equipment



Item 21	Medical Ball All Sizes	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Manufactured from dense PVC - for physiotherapy and bobath exercises		
2	Inflatable		
3	Set of Ball diameters (45 cm, 55 cm, 65 cm, 75cm, 85cm), each size should be with distinct colour		



Item 22	Dumbbells Rack with Complete set of Dumbbells	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Two-tier vertical dumbbell rack.		
2	Holds at least 10 pairs of dumbbells from 0.5 kg to 5.0 kg		
3	Heavy duty steel construction.		
4	Dumbbells (one pair each): a- 0.5 kg b- 1.0 kg c- 1.5 kg d- 2.0 kg e- 2.5 kg f- 3.0 kg g- 3.5 kg h- 4.0 kg i- 4.5 kg j- 5.0 kg		



Annex 4: Physiotherapy Equipment



Item 23	EVA Support Walker	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, frame made from heavy duty stainless steel.		
2	Four locking solid antistatic anti scratch castors.		
3	Adjustable height		
4	Comfortable Saddle Support		
5	Progressive use from Early Standing to Walking		
6	Provides All Round Support; Frame Designed for Stability		
7	Hand loop brakes with locking feature.		
8	Supports up to approximately 120 kg or more.		
9	Easy folding for storage and transport.		



Annex 4: Physiotherapy Equipment



Item 24	Quadriceps Exercise Bench (N.K Table)	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty construction: Stainless steel or epoxy coated steel		
2	steel leg support		
3	Padded covering		
4	Adjustable backrest		
5	Belt for leg (2 pcs)		
6	Cylindrical Weights (one pair each): a- 0.5 kg b- 1.0 kg c- 1.25 kg d- 1.5 kg e- 2 kg f- 2.5 kg g- 3 kg		



Annex 4: Physiotherapy Equipment



Item 25	Shoulder Wheel	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Made from heavy duty stainless steel or chrome plated material		
2	Two rails for height adjustment.		
3	Height adjustment range of about 50 cm or more		
4	Diameter of around one meter.		
5	Adjustable resistance knobs.		
6	Wall mounted on hardwood frame.		



Annex 4: Physiotherapy Equipment



Item 26	Mobile Mirror	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy plated glass.		
2	Oak laminated frame.		
3	Dim. App. 70x185cm.		
4	Retractable locking casters.		



Annex 4: Physiotherapy Equipment



Item 27	Buck's Traction System	Qty. (35)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Made from heavy duty stainless steel		
2	Can be mounted easily on patient bed with any tools (with hooks only)		
3	Adjustable height		
4	With each unit the following weights should be included a- 1 lb. b- 2 lb. c- 3 lb. d- 4 lb. e- 5 lb.		



Annex 4: Physiotherapy Equipment



Item 28	Cuff Weights	Qty. (16 Pairs)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Qty. 4 pairs of the total quantity: 0.5 kg		
2	Qty. 4 pairs of the total quantity: 1.0 kg		
3	Qty. 4 pairs of the total quantity: 1.5 kg		
4	Qty. 4 pairs of the total quantity: 2.0 kg		



Annex 4: Physiotherapy Equipment



Item 29	Walker, different sizes	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Made from heavy duty light weight material		
2	Adjustable height		
3	Foldable		
4	Qty. 2 of the total quantity: adult size		
5	Qty. 2 of the total quantity: paediatric size 2-7 years		
6	Qty. 2 of the total quantity: paediatric size 7-12 years		



Item 30	Patient Elbow Stick	Qty. (4 Pairs)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Made from heavy duty light weight material		
2	Adjustable height		
3	Qty. 2 pairs of the total quantity: adult size		
4	Qty. 2 pairs of the total quantity: paediatric size		



Annex 4. Physiotherapy Equipment



Item 31	Rehabilitation Training Ladder	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Made from heavy duty wooden material		
2	2-way design (bi-directional) with At least 9 steps: - 4 steps on one side: 10 cm step height approximately - 5 steps on the other side: 15 cm step height approximately		
3	Steps should be covered by anti-slip material		
4	Left and right side bars made from stainless steel		



Annex 4. Physiotherapy Equipment



Item 32	Rehabilitation Suspension Frame	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Metal frame: three-dimensional work surface		
2	overall size:2600*2400*2400mm approximately		
3	welded steel rod mesh at the top for complete suspension with slings & ropes		
4	Mesh facilitates suspension at any desired point		
5	Different size of the slings and ropes to meet the training needs of different body parts:		
6	Middle belt: size 760*90* 10mm approximately		
7	Mid-suspension belt: size 1000*80mm approximately		
8	Wide-suspension belt:size1000*120mm approximately		
9	Waist suspension belt:1300*230mm		
10	Open chain exercise and closed chain exercise. The load of movement can be adjusted freely through sandbags (1kg, 2kg, 4kg, 5kg)		



Annex 4: Physiotherapy Equipment



Item 33	Exercise Band All Colors (Theraband)	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	One set of six rolls (50 meters each) of different colours with different resistance		



SPECIAL TERMS

- *Offers not complying with any of the special terms or the technical specifications shall be considered non-conforming with tender requirements.*
- *Any vendor providing FORGED documents shall be disqualified from the current tender and banned from participating in any future RMS tenders.*
- *Wherever term “based” is mentioned it refers to the country where the manufacturing company is founded & established.*
- 1. *All equipment must be the most recently released model/version which is equal to or higher than the range of the specifications of the required system (low, mid or high) and equal to or higher than the level of technology and required options mentioned in the technical specifications.*
- 2. *Required certificates (must be submitted with the technical offer):*
 - 2.1 *FDA clearance (510K) for equipment of USA based companies.*
 - 2.2 *MDR (EU) 2017/745 certificate for equipment of EU (European Union) based companies.*
 - 2.3 *UKCA certificate For Equipment of Great Britain based companies (England, Scotland, Northern Ireland, and Wales).*
 - 2.4 *ARTG (Australian Register of Therapeutic Goods) certification or approval for Australian and New Zealand based companies.*
 - 2.5 *Establishment License with the relevant Device License issued by the Therapeutic Products Directorate for Equipment of Canadian based companies.*
 - 2.6 *PMDA (Pharmaceuticals and Medical Devices Agency) certification or approval for equipment of Japanese based companies.*
 - 2.7 *Swissmedic (Swiss agency for therapeutic products) certification or approval for equipment of Swiss based companies.*
 - 2.8 *Norwegian Medicines Agency certification or approval for equipment of Norwegian based companies.*
 - 2.9 *Only for class I medical equipment manufactured by companies based in one of the countries mentioned above, submission of either one of the certificates mentioned above or a free sale certificate in any of these countries shall be accepted.*
 - 2.10 *For the following equipment:*



- *All X-ray equipment, MRI, ultrasound, and nuclear medicine systems (regardless where the manufacturing companies are based).*
- *Where the manufacturing companies are based in other origins than the mentioned in terms 2.1 - 2.8.*

The following are required:

- a- *At least two of the certificates mentioned above, one of which has to be FDA clearance (510K) (Only for class I medical equipment submission of certificates mentioned in 2.9 shall be accepted).*
- b- *Evaluation certificate from the Royal Medical Services for the same offered model with at least 80% passing grade.*

If the evaluation is not applicable (based on purchasing committee perspective) bidder should submit a list of installation basis of the same offered model and/or previous models in at least two of the following hospitals (King Hussein Cancer Center, National Center for Diabetes Endocrinology and Genetic Diseases, Jordan University Hospital or King Abdullah University Hospital) with at least three years of operation, list should include: Name of hospital, Model installed, Quantity, and date of installation.

The purchasing committee has the right to officially contact any of these hospitals and disqualify any offer where the feedback is negative in operation, after sales service or local agent performance.

2.11 *The vendor is responsible to ensure through official documents that classified medical devices are manufactured in conformity with applicable quality system standards (ISO, IEC); (the international quality systems standard for medical device manufacturing ISO 13485) or ISO9001.*

2.12 *With each offer, bidders must provide a formally endorsed document issued by the manufacturer stating that the bidder is the sole certified agent for the offered item.*

2.13 *In all of the above cases (except 2.12) certificates must be formally endorsed by JFDA.*

2.14 *Any vendor not submitting all required certificates will be eliminated.*

3. *Official website of the manufacturer must be provided. The website must clearly demonstrate the history profile and manufacturing features of the company including the same offered model and its brochure.*

In case of inconsistency between the information on the website with the provided information of the local agent regarding any offered product, the committee has the right to eliminate that product from the awarding process.



4. *Offered items should be from reputable well known manufacturers and excellent experience in the field and shall have multiple installations of the same offered model and/ or previous models in RMS main hospitals with at least two years of operation and excellent experience in operation, after sales service & local agent performance; otherwise the purchasing committee has the right to request any of the following:*

- a) *An evaluation certificate as mentioned in term 2.10.b.*
- b) *A sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification; any vendor rejects to deliver a sample unit will be eliminated. Evaluation duration will be determined by the purchasing committee.*

Any offered item fail in the evaluation/assessment process will be rejected

5. *Vendors must specify the origin of the offered items and accessories in the technical offer.*
6. *Bidders must submit their reservations/queries regarding tender specifications and/or special terms within the first half of the tender closing period starting from the tender announcement date. Reservations/queries submitted after the end of this period shall be rejected.*
7. *Goods are to be brand new; manufacturing date of the delivered products should not exceed 18 months from the date of the final award.*
8. *Delivery period should be mentioned clearly; the purchasing committee has the right to reject any offer with delivery time exceeding 4 months.*

9. **Warranty:**

- a- *Offers must include a full warranty for a period of a minimum of 24 months from the date of installation or 30 months from the date of receiving the items at the agreed location mentioned in the final order (whichever comes first).*

Warranty must include corrective & preventive maintenance activities as per manufacturer recommendations including:

- *Required spare parts (free of charge)*
- *Labour*
- *Hardware*
- *Software*
- *Rechargeable batteries*

At the end of the warranty period, The supplier commits to implement final inspection of the submitted goods and submit the reports signed by the site chief engineer stating that the equipment are working properly as well as all preventive maintenance reports during the warranty period.



Annex 4. Physiotherapy Equipment



Warranty & installation are excluded for items mentioned in Attachment no.1 the purchasing committee has the right to exclude any other item not listed in the attachment and does not required installation and warranty.

- b- In the case where a delay in installation has occurred as a result of the supplier's dereliction and has exceeded a period of one month from the date of receiving the items, the approved warranty period will automatically be considered as 24 months from the date of installation.***
- c- If at any time during the warranty period the item becomes inoperative due to a technical fault the item must then be repaired by the supplier /local agent within a period of 5 working days from written notification, warranty will be extended according to downtime period.***
- d- If the delay exceeds 30 days the supplier must replace the item with a new identical functioning one (within the same delivery period mentioned in the final offer). In case the item was replaced by a new one, the warranty period mentioned in 9.a) above will start from the installation and commissioning date of the new item.***
- e- Local agent/ supplier is committed to transport and install any awarded item during the warranty period on free of charge basis to any location inside the country whenever required by Royal Medical Services, this should not include pre-installation requirements in the new site.***

10. All offered items (main unit) should be fully designed, manufactured, and labelled by their real original manufacturer in which all related testing, research, development and approvals went through.

Any relabelled products for the main unit (white-label manufacturing, OEM, or repackaging) are rejected.

11. One set of operation manual(s) and one set of service manual(s) including schematics and a spare-part list must be delivered with each unit, CD/DVD is acceptable. For large tenders, a certain agreed percentage of manuals per item may be agreed upon.

12. Where applicable, pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include removal of old system(s), any civil work, electrical work or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s).



Annex 4. Physiotherapy Equipment

13. **Power requirements:** where applicable either single phase 220V, 50Hz or 3-phase 380V. Systems with external transformers are considered conforming only if clearly stated in the technical specifications.
14. **Technical offers must include clear original technical brochures/catalogues for all offered items.**
15. **Offers must include fully detailed technical offers and compliance sheets as a soft copy (either Microsoft office or Microsoft excel format) in addition to a hard copy, mentioning the exact model/catalogue number and country of origin of the offered item(s), full technical description/specifications and any accessories or options included in the offer.**
Offer must clearly indicate the origin of the offered item and the country where the manufacturer of the offered items is based.
16. **Compliance sheets must be as per the tabular format of the technical specifications in the tender documents, listing the required specifications on one column and a Yes or NO response to each point in the adjacent column, with reference to page and line numbers in the relevant technical brochure. Offers not complying with this term shall be rejected.**
17. **Qualifications and after sales service:** The technical bid should contain all the necessary documents (training certificates) to prove the capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specifications of the manufacturer and the ability of the bidders for providing efficient after sales service conducted by authorized certified biomedical service engineers with minimum 2 years experience in the same field.
18. **Accessories and consumables:**
 - 18.1 **Any accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately.**
All offered accessories and consumables must be approved by the manufacturer.
 - 18.2 **Technical offers must include a priced list for all accessories and consumables related to the required equipment as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) with prices fixed for a period of five years from the date of installation and commissioning with a maximum annual increase of 2%, any essential item not listed will be considered free of charge.**
 - 18.3 **Accessories and consumables must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.**
 - 18.4 **Where applicable, a start-up kit of accessories and consumable items must be provided with each system on a free-of-charge basis.**

19. **Spare Parts:**



- 19.1 *Technical offers must include a comprehensive and priced list of all spare parts related to the awarded equipment (including rechargeable batteries) as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) valid for a minimum period of five years with a maximum annual increase of 2%, commencing at the end date of the warranty period, any essential item not listed will be considered free of charge.*
- 19.2 *Spare parts must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
- 19.3 *Prices of spare parts should be reasonable and will be taken into consideration during the purchasing process; the purchasing committee has the right to eliminate any offered item with unreasonable high prices of spare parts.*
- 19.4 *Delivery period of required spare parts should not exceed 2 months from the date of the final order.*
20. *Spare parts, consumables and accessories availability must be guaranteed for a minimum period of ten years starting from the date of installation and commissioning.*
21. *Local agent is committed to sign a service contract with Royal Medical Services to perform all relevant maintenance for the awarded equipment (whenever required by DRMS within a period that does not exceed one year from the end date of the warranty period and if mentioned clearly in the specifications) without exceeding the original mentioned cost and as per mentioned terms within minimum required period.*
22. **Tender Awards:**
- 22.1 *For the final list of offers having a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its' running cost (Total Cost of Ownership) over a period of seven years from the date of installation and commissioning. Only offers with the lowest total cost of ownership over a period of seven years from the date of installation and commissioning shall qualify for the award.*
- 22.2 *Running cost includes the value of consumables, accessories needed to operate the system over the same period as well as the cost of any service contract (where applicable).*



23. For PC/Laptop based systems:

- 23.1 Complete restoration medium (CD/DVD/etc.) of the operating system and the application software must be supplied.**
- 23.2 Purchased licenses, software keys & dongles must be provided at any time during and after the warranty period on free of charge basis whenever required by DRMS for a minimum period of ten years starting from the date of installation and commissioning.**
- 23.3 Where locally supplied computers, laptops & printers are offered, the offered model should be from well known manufacturer.**

24. Pricing must include services of sale, shipment, transportation, delivery from port to site or to Main Medical Stores, installation, pre-installation (if needed), training, commissioning, warranty and bringing the equipment into service.

25. Custom clearance of goods shall be the responsibility of the Jordanian Armed Forces (JAF), however, suppliers shall bear all costs incurred by handling charges and any demurrage charges or extra expenses incurred by the port's corporation (including expenses caused by delay in presenting the necessary shipment documents for either clearing or transporting the goods to the required location mentioned in the final order, delivery note issuing charges, unloading charges, local shipping charges etc.). The supplier is also responsible for providing of all relevant shipping documents, together with the delivery order(s).

26. a. DRMS has the right to increase the awarded quantities by a percentage not exceeding 35% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.

b. DRMS has the right to decrease the awarded quantities by a percentage not exceeding 50% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.

27. a. Bidder is not allowed to submit more than one offer for the same item whether that's solely or in coalition or partnership with other bidders.

b. Bidder is allowed to include within their offer optional alternatives for the same offered item from the same manufacturer.

28. The supplier must furnish DRMS with a guarantee stamped and legalized by the Notary Public equals to (115%) of the total value of the awarded equipment valid for twelve months from the date of final acceptance of the equipment by DRMS.

29. Training:



- 29.1 For items where abroad service training courses are required in technical specifications, offers must include a certified service training program for at least 3 working days at a reputable center abroad recognized by the manufacturer for at least one biomedical engineer or biomedical technician; all costs inclusive, air tickets, , boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.
- 29.2 For items where abroad user training courses are required in technical specifications, offers must include a certified operator training program at a reputable center abroad recognized by the manufacturer for at least one operator; all costs inclusive, air tickets, boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.
- 29.3 The period of the training courses must be according to the manufacturer's program excluding traveling days and must be stated clearly in the technical offer.
- 29.4 Training Programs must conform to the following standards:
- User training must comprise understanding and use of operation manual(s), correct and safe operation of the equipment, as well as user preventive maintenance and calibration.
 - Service training must comprise: theory, understanding and use of service manual(s), calibration, preventive maintenance procedure, and practical troubleshooting and repair exercises, and must be conducted by professional instructors employed or authorized by the system manufacturer.
 - Service training must be conducted on a system of identical make, model, and configuration to that purchased by DRMS, and designated by the manufacturer or the local agent for training purposes.
 - Certificates must be endorsed and officially sealed by the system manufacturer, legally empowering trainees to engage in user and service activities according to operation and service manual(s).
 - Where applicable, offers must include an on-site user and service training.
30. For offers submitted in Jordanian dinars, payment will be either by wire transfer or by cheque after final acceptance of good, any other way of payment will be rejected.



Attachment 1

#	Equipment
1	Adjustable Auto Pipettes
2	Resuscitation Bag
3	Laryngoscope Set
4	Oxygen Flow meter wall type/ single
5	Regulator Suction with canister, wall vacuum outlet
6	Oxygen Regulator for Oxygen Cylinders
7	Pulse Oximeter, Finger type
8	Oxygen Cylinder
9	Doppler, portable
10	Diagnostic set, Portable
11	Direct Ophthalmoscope, Portable
12	Otoscope, Portable
13	Air Mattress System, homecare
14	Stethoscope
15	Aneroid Sphygmomanometer
16	Video Assisted Laryngoscope, portable
17	Scale, Manual
18	Wood's Light
19	Cough Pressure, Normal Saline
20	Rehabilitation Walking Parallel Bars, non-powered
21	Therapy Mat
22	Medical Ball All Size
23	Dumbbells Rack with complete set of dumbbells
24	Crutches
25	Shoulder wheel
26	Mobile Mirror
27	Cuff Weights
28	Walker, different sizes
29	Patient Elbow Stick
30	Rehabilitation Training Ladder
31	Rehabilitation Suspension Frame
32	Exercise Band All Size (Theraband)



Annex 4: Physiotherapy Equipment



33	<i>Lens trial set</i>
34	<i>Wheel Chair</i>
35	<i>Commode Chair</i>
36	<i>Bassinet (Baby Cot)</i>
37	<i>Resuscitation Cart (Crash Cart)</i>
38	<i>Medication Cart</i>
39	<i>Cart, Drawers</i>
40	<i>Examination Couch, Manual</i>
41	<i>Gynaecology Examination Table, Manual</i>
42	<i>Examination Table, Neonates, Manual</i>
43	<i>Intravenous Pole, Mobile Stand</i>
44	<i>DDA Cabinet</i>
45	<i>Stainless steel Multipurpose Trolley</i>
46	<i>Cabinet, Instrument, Operation Theatres</i>
47	<i>Dressing Cart</i>
48	<i>Stainless steel wire shelving unit</i>
49	<i>Paper Trolley</i>
50	<i>Stainless Steel Sink (Clean up counter)</i>
51	<i>Scopes Cabinet</i>
52	<i>Mayo Table</i>
53	<i>Table, Instrument</i>
54	<i>Stool, Adjustable, Doctor</i>
55	<i>Stool, Adjustable, Operation Theatres</i>
56	<i>Carts, linen/laundry, soiled, Double</i>
57	<i>Closed distribution trolley</i>
58	<i>Step Ladder, Conductive, Double</i>
59	<i>Step, Surgeon, Single</i>
60	<i>Kick Bucket</i>
61	<i>Mobile Stand for Oxygen Cylinder</i>
62	<i>Stainless Steel Wire Basket, 1 STU</i>
63	<i>Cart, Plaster</i>



A: Dental Equipment

Item A-1	Dental Unit	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Heavy duty, robust from a well-known reputable manufacturer		
A	Dental Chair		
	1. All movements must be electrically motorized and operated type		
	2. Heavy-duty maintenance-free unit.		
	3. Microprocessor-controlled chair with all standard safety features including provisions for movement limiting when obstacles are present.		
	4. Seamless and replaceable upholstery with high-grade finish for highest level of hygiene.		
	5. Arm rests; both sides, right one can be swivelled up to ease entry and exit		
	6. Extendable jointed head rest		
	7. Lifting capacity must be at least 170 kg.		
	8. Dental chair movements must include the following:		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	a- Vertical seat adjustment		
	b- Tilt-able backrest.		
	c- At least 3 programmable positions.		
B	Dentist's element		
	1. To be mounted on an articulated delivery arm with drop down configuration.		
	2. Should include locking brake system.		
	3. Can accommodate at least 5 instrument places including the following:		
	a- Two High speed modules		
	b- Electric micro-motor module: brushless type and of the same brand of the dental unit, speed required power range up to (40,000 rpm)		
	c- Built in 3-way syringe module, offered unit must be round edged ergonomic in design with 2 autoclavable removable nozzles.		
	d- Built-in piezo scalar module with tapered triangle tips Qty. (4 tips)		
	4. All hoses must hang from the top to avoid entangling with patients or staff.		
	5. Autoclavable removable swivelling tray, size at least (30 cm * 20 cm)		
	6. One wired multifunctional foot control to control all chair movements and all hand pieces running.		
	7. Touch control panel to control all the following:		
	a- All Chair Movements		
	b- Dental light		
	c- Cup filling and spittoon rinsing		
C	Assistant's Element		
	1. Chair mounted spittoon (movable with chair vertical		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	movements).		
	2. All major controls and filters must be located inside the unit for surface hygiene.		
	3. Low and high volume suction to be included (tubing should be flexible, smooth and easy to clean and disinfect).		
	4. LED Light cure hand piece:		
	a. Power intensity of 2000 mW/cm ² or higher.		
	b. Wavelength: approximately 430-490 nm or better		
	5. Touch control panel to control all the following:		
	a. All Chair Movements		
	b. Cup filling and spittoon rinsing		
	6. Dry vacuum separation system: automatic operation must be located in the hydro-group. Dental unit should be equipped with central suction system connections.		
	7. Spittoon bowl should be made of ceramic or equivalent material, acid/alkaline resistant, and easy to clean. It should also be swivable, with a rinsing system, an adjustable time control, and a water-flow regulator.		
D	Dental Light:		
	1. Must be easy to clean and compact in size.		
	2. LED type.		
	3. The intensity of the light should be 50,000 Lux or greater.		
	4. At least 30,000 operating hours		
E	Water Container : A water container or reservoir that can be manually filled by staff members must be included in order to supply hand pieces (<u>as backup</u>)		
F	Dentist's and assistant's Stools:		
	1. One for dentist and one for assistant		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	2. Mounted on 5 castors		
	3. Adjustable height through gas spring.		
J	Dental Cabinet Qty.(1) with each clinic		
	1. Worktops material to be Corian (or equivalent)		
	2. Worktops to be approximately 55 cm depth and 90 cm height.		
	3. Each cabinet to include at least the following:		
	a- Qty. (2) unit with at least 3 medium size pull-out drawers and one deep storage drawer. Drawers to include all necessary partitions, trays etc....		
	b- Qty. (1) cupboard units: each cupboard unit to include double sandwich doors (hinged) and two adjustable shelves		
	c- Qty. (1) cupboard unit with one hinged door and three adjustable shelves.		
	d- Sink and faucet shall be an integral part of the counter top on one of the above units.		
	e- All the above items to be assembled in a straight position.		
K	Turbine Hand Piece Qty. (5) with each dental unit		
	a- Bien-Air, NSK, W&H or Sirona		
	b- Quick connect and disconnect type		
	c- Autoclavable up to 134 C		
	d- Speed: 320,000 rpm or more, power 18 watt or more		
	e- Internal cooling mechanism (INTERNAL IRRIGATION)		
	f- Push button bur locking mechanism		
	g- Ceramic Ball bearing		
	h- Quick coupling (4 holes) should be priced separately QTY (2)		
L	Low Speed Contra-angle Hand Piece Qty. (5) with each dental unit		
	a- Bien-Air, NSK, W&H or sirona.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b- Electrically driven hand piece		
	c- Contra-angle type		
	d- Blue ring; 1:1 transmission		
	e- Internal cooling mechanism		
	f- Universal E-type connection		
	g- Push button bur locking mechanism		
M	Low Speed Straight Hand Piece Qty. (1) with each dental unit		
	a- Bien-Air, NSK, W&H or sirona.		
	b- Electrically driven hand piece		
	c- Straight type		
	d- Blue ring; 1:1 transmission		
	e- Internal cooling mechanism		
	f- Universal E-type connection		
	g- Twist tension chuck system		
N			
	Service or maintenance application should be included from the date of insulation (including user name and full account)		



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Item A-2	Intraoral X-ray Unit	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty, robust from a well-known reputable manufacturer		
2	Wall mounted type.		
3	Generator type: high frequency constant potential technology (DC type)		
4	Focal spot: 0.4 mm or smaller.		
5	X-ray tube voltage 60 kv or higher.		
6	X-ray tube current ≥ 4 mA		
7	Exposure time is incrementally adjustable		
8	Pre-programmed exposure settings for adults and paediatrics.		
9	Pre-programmed exposure settings for multiple tooth positions		
10	Focus to skin distance: 20 cm. Please quote separately for optional higher distance		
11	Digital LCD display/ control panel that is either wall		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	mounted or on the remote control; display mounted on the x-ray generator is not acceptable		
12	Hand piece switch (push button): small size, cord length should be at least 3 meters long, wireless hand piece is acceptable.		
13	Arm length should be at least 80 cm length.		



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Item A-3	Amalgamator (amalgam mixer)	Qty. (5)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Robust and high quality design.		
2	Microprocessor controlled		
3	Soft key touch control panel.		
4	Vibration frequency: approximately 4000 impulse or more		
5	Digital display.		



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Item A-4	Rotary Heat Sealing Machine	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Table top type.		
2	Outer casing made of high quality stainless steel type 304 or better.		
3	Digital display located at the front side of the sealer.		
4	Fully automatic rotary operation.		
5	Seal seam width approximately 12 mm		
6	Feeding speed 10 meters/min or more		
7	Energy- saving; automatic shut off motor when not in use.		
8	To seal paper / plastic laminate bags and pouches		
9	Microprocessor controlled.		
10	Temperature adjustable to 220 °C maximum.		
11	Light weight; maximum 25 kg		



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Item A-5	Bench Top Autoclave	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Durable & heavy duty from a reputable well known manufacturer; The committee has the right to request for a sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification, any vendor rejects to deliver a sample unit will be eliminated		
1	Class B autoclave.		
2	The autoclave shall comply with EN 13060 for small autoclaves		
3	To include at least the following Cycles:		
	a- Class B (134 C°) cycle (wrapped instruments and porous materials).		
	b- Class B (121 C°) cycle (wrapped instruments and porous materials).		
	c- Vacuum leak Test Cycle		
	d- Bowie dick cycle		
4	Time for class B typical load universal program 134 C° should not exceed 50 minutes including drying phase.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
5	Manual Water feed (standalone); no need for external water connection.		
6	Built in steam generator, autoclaves with internal heater will be rejected.		
7	Built-in water quality sensor (conductivity sensor), cycle must not start in case of bad water quality.		
8	Chamber volume of at least 20 litres		
9	Chamber should be constructed from high quality material stainless steel 316		
10	High performance membrane Vacuum pump.		
11	Door lock to prevent door opening during the cycle.		
12	LCD screen to display program, phase, time and error messages.		
13	At least 3 original Trays and tray holder.		
14	Integrated built in feed water Tank and waste tank of size not less than 3 Litres each, units with external tanks will be rejected.		
15	External dimension: to fit over a regular bench (60 cm bench depth).		
16	Power rating ≤ 12 Ampere		
17	Water distiller with a storage bottle.		



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Item A-6	Dental Laboratory Micro-Motor	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable & heavy duty from a reputable well known brand; The committee has the right to request for a sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification, any vendor rejects to deliver a sample unit will be eliminated		
2	The unit should be suitable for the processing of all materials used in dental laboratories.		
3	Control unit: Knee operated model		
4	Adjustable speed to reach at least 40,000 rpm		
5	Reliable maintenance free handpiece with at least 2 meter cable length.		
6	Quiet operation handpiece and low weight		
7	Clockwise and anti-clockwise rotation		
8	Efficient and powerful motor handpiece of torque not less than 7 Ncm, torque should be stable over the		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	<u>whole speed range.</u>		
9	Low heat generation during operation		
10	Brushless induction micro-motor		
11	All accessories needed to run the unit should be included		
12	All options and accessories should be quoted separately including foot switch, handpiece stand, brackets, etc.....		



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Item A-7	Hand piece steam sterilizer	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The intended use of this unit is to: a- Wash the inner side and the outer side of the dental hand piece b- Lubricate the inner working parts c- Sterilize the hand piece (134 C°) from both inner and outer sides d- Drying the hand piece before ending the program		
2	Cycle time to be specified for the comparison purpose.		
3	Ability to process at least five hand pieces simultaneously.		
4	Microprocessor controlled with digital display.		
5	Fully automatic.		
6	Pre-defined programs.		
7	Ability to handle hand pieces from different manufacturers such as sirona, NSK, W&H, Bien air.		
8	Adaptors for fitting various hand pieces from different		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	manufacturers should be quoted separately		
9	Built-in water conductivity sensor.		
10	Complete with basic accessories. Additional optional accessories are to be stated and priced clearly.		
11	Water distiller with a throughput rate sufficient for the average daily routine use of the sterilizer.		
12	Consumables including lubricants and water filters or others should be priced separately and fixed for five years. Number of cycles per oil cartridge and per water filter should be specified clearly.		



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Item A-8	Composite Light-Cure	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	LED type		
2	Output intensity: 2000 mW/cm ² or higher		
3	Multiple programs		
4	Wavelength: approximately 430-490 nm or better		
5	Cordless design		
6	Ergonomic robust design.		



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Item A-9	Digital X-ray Panorama & Intraoral Digital Sensor	Panorama: Qty. (1) Sensor: Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Digital X-ray Panorama:		
1	Heavy duty, robust from a well-known reputable brand		
2	The system must be suitable for dental and maxillofacial examinations		
3	Two digital sensor for panoramic & cephalometric imaging procedures, sensors to be mounted on the unit at the same time		
4	Adult and paediatric panoramic and cephalometric programs		
5	Type of sensor: CMOS or CCD or CDTe		
6	Superior image quality		
7	Motorized patient positioning system of height: the unit must be adjustable for child and adult patients and of all patient sizes		
8	Wheelchair accessible		
9	Control of height and selection of program and settings from the workstation or from a panel on the unit		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
10	Floor mounted model		
11	Small in size and must fit in a small room		
12	Patient positioning: a- Face to face with mouth bite or b- Mirror type with 3 head temples and no more than 2 laser beams and mouth bite		
13	Maximum panoramic scan time ≤ 14 sec		
14	Maximum cephalometric scan time ≤ 10 sec		
15	Grayscale: ≥ 12 bits		
16	Magnification (True image size): ≤ 1.2		
17	X-ray Generator		
	a- DC technology		
	b- Focal spot size: 0.5 mm or smaller		
	c- Anode Voltage: adjustable 60- 90 kv or better		
	d- Anode current: adjustable 3-15 mA or better		
18	Diagnostic Imaging software to be included with artifact-free filters and image manipulation and annotation capabilities and ability to control the sharpness and brightness of the image		
19	Fast image reconstruction: bidders should specify the reconstruction time		
20	The system should be interfaced to the Dental Delivery Units PC's		
21	Full DICOM support to be included (Active/Ready) and worklist: the system must be able to be connected to HAKEEM hospital information system; all licences required should be included (lifetime)		
22	The PC workstation for image viewing must meet or transcend the following specifications:		
	a. Intel i7		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b. 16 GB RAM		
	c. 1 Tera byte hard drive		
	d. 2 network ports of at least 1 Gbps		
	e. Graphic card medical grade 2 GB		
	f. Original windows operating system		
	g. 19 inch LCD screen		
	h. PC's specifications must comply with the manufacturer requirements and with special terms		
B	Intraoral Digital Sensor (Qty.4)		
1	Heavy duty, robust from a well-known reputable brand and with superior image quality. The committee has the right to request for a sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification, any vendor rejects to deliver a sample unit will be eliminated		
2	PC based system.		
3	Regular size portable sensors of active surface approximately: 20*30 mm		
4	Rounded corners and smooth edge finishes.		
5	Compatible with X-ray generators DC types with kv range between 50-70 kv from different manufacturers.		
6	Instant image transfer (less than 5 seconds)		
7	CMOS technology.		
8	Theoretical resolution = 24 Lp/mm or higher		
9	Image transfer: via USB of at least 2.5 meters long (direct without any converters)		
10	Number of exposures to be indicated clearly, preferences will be given to high number of exposures.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
11	Imaging software must be included		
C	Qualifications and after sales service: The technical bid should contain all the necessary documents (training certificates) to prove the capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specifications of the manufacturer and the ability of the bidders for providing efficient after sales service conducted by at least two certified biomedical engineers/ technicians		



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Item A-10	Digital Apex Locator	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable & heavy duty from a reputable well-known brand; The committee has the right to request for a sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification, any vendor rejects to deliver a sample unit will be eliminated		
2	The unit must include large coloured digital LCD display that shows distance to the apical foramen (length of tooth canal) in tenth of millimetres.		
3	Measurements must be instant and accurate.		
4	Ability to work in wet canals; measurement is not affected by the presence or absence of blood or other fluids.		
5	Light weight compact unit.		
6	Operated by built in rechargeable batteries.		
7	External AC/DC adapter is acceptable		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
8	The unit must include all standard accessories (probes, file clip and lip clip hook electrodes, batteries, battery charger etc.)		
9	Different receptacles for charger and probes (charger cable can't be inserted in probe receptacle)		



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Item A-11	Endodontic rotary micro motor unit	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable & heavy duty from a reputable well-known brand; The committee has the right to request for a sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification, any vendor rejects to deliver a sample unit will be eliminated		
2	The main purpose of this unit is for root canal preparation. The unit must include at least the following:		
	a. Compact light weight control unit with LCD display to control speed and torque of the micro-motor.		
	b. Electric micro-motor, cordless type, hand-control		
	c. One Angled hand piece of 16:1 gear reduction, hand piece must be quick connect/disconnect model with push button chuck mechanism.		
	d. Hand piece charger (without any cable)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
3	The unit must include an auto reverse mode.		
4	All hand pieces and heads must be autoclavable at 134° C.		
5	The unit must be operated by built in rechargeable batteries.		
6	All necessary standard accessories to run the unit must be quoted.		



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Item A-12	Ultrasonic Scaler	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The unit can be used for periodontics, endodontics scaling applications		
2	Touch control panel to choose between periodontics, endodontics or general operations.		
3	Foot control (if needed)		
4	Ability to choose between dry or bottled solution.		
5	Adjustable power and irrigation flow settings.		
6	Piezo ultrasound base with frequencies between approximately 28.00-32.000Hz or better.		
7	At least one easily removable bottle (manually filled) which can be used for cooling and irrigation.		
8	Water supply pump for a constant irrigation flow.		
9	Totally portable unit; no external water or air supply needed.		
10	One scaling hand piece with three different size tips to be included.		
11	All standard accessories needed to operate the unit must be included and quoted in the price.		



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Item A-13	Dental laboratory furniture	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1.	Project elements:		
	a) Vendors participating in this item are required to obtain detailed two dimensional schematic drawings for the dental lab after visiting the site before submitting their offers.		
	b) Award will be given to bidders who will: i. Meet all of the requirements mentioned below. ii. Submit the best design concerning space efficiency and staff motion.		
	c) Any required electromechanical and civil works are the sole responsibility of the awarded bidder.		
2.	Equipment requirements:		
	a) Technician workstations:		
	i. Capacity: 2 technicians		
	ii. Single or double workstations are acceptable; All workstations must be joined and fused together side by side.		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
	iii. Installation of the workstations should be done in alignment to the side walls; installation must guarantee adequate space between technicians.		
	iv. The unit must be made from high quality powder coated steel with corian worktop, please specify available colours.		
	v. On each workstation the following are required:		
	a. Over bench light fixed on the outer edge of the bench to cover the entire working area.		
	b. Vacuum system with auto-vacuum switch		
	c. One upper shelf to be priced separately as an option.		
	d. Retractable air gun		
	e. Hole for micromotor hand-piece		
	f. One outlet for vacuum		
	g. One outlet for liquid gas petroleum (LGP) to be connected to Bunsen burners		
	h. One electrical output socket (3 pins British configuration).		
	i. One Bunsen burner		
	j. Three side storage drawers		
	k. One Stool with the following specifications:		
	i. Adjustable height		
	ii. Made from material that is easy to clean and disinfect.		
	iii. Backrest		
	iv. Mounted on five antistatic spokes		
	b) Remaining space in dental lab (alongside the walls) must be covered by benches with the following specifications:		
	i. Must be fused to the workstations		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
	ii. Corian top		
	iii. At least one of the benches must be with stainless steel sink complete with water taps, lower cabinets with double doors and stainless steel grate (for use with trimmer) and plaster strap.		
	iv. One other bench with stainless steel top (without sink) with lower cabinet		
	v. The rest of the benches should be equipped with lower cabinets, shelves and drawers.		
	vi. All benches to be with the same colour of the workstations.		
	c) At least one storage cabinet with the following specifications:		
	i. Standalone cabinet		
	ii. 2 lower and upper cabinets with double doors.		
	iii. Constructed from stainless steel or any equivalent robust anticorrosive material.		
	iv. Upper compartment with at least 3 adjustable shelves.		
	v. Lower compartment with at least 2 adjustable shelves.		
	vi. Approximate dimensions: (100 L * 40 D * 200 H)		
	vii. With the same colour of the workstations and benches.		



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Item A-14	Vibrator for Plaster Casting	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	To create vertical oscillations evenly on the whole surface		
2	Adjustment knob to adjust vibration level.		
3	To reach at least 5000 vibration per minute		
4	Capacity at least 4 large rings (surface dimensions: 20*30 cm approximately)		
5	Stainless steel construction		
6	Easy to clean		
7	Equipped with rubber feet.		
8	Equipped with a removable rubber surface and stainless steel handle.		



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Item A-15	Grinding Wheel for Plaster cast Models (trimmer)	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	A curved and pleasant design, which must also be dust and water repellent.		
2	Robust corrosion resistant durable housing.		
3	Continuous water flow that cools and washes the disc.		
4	The trimmer should have a solenoid valve and tap-flow regulator.		
5	Disc speed: At least 2500 rpm.		
6	At least 1000 watt motor power.		
7	Brushless induction motor.		
8	At least one meter feed water hose and drain hose		
9	Diamond disc		
10	All standard accessories needed to run the trimmer must be included in the offer.		



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Item A-16	Hydraulic press for Acrylic Flasks	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The hydraulic press can clamp at least 3 flasks (muffles)		
2	Manual type		
3	The hydraulic circuit must be completely sealed and should not require any maintenance.		
4	Ease of use and stable construction		
5	Full-metal structure to withstand heavy-duty usage		
6	Unit should have a working pressure gauge		
7	Uniform flow and excellent work results without damaging the flask		



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Item A-17	Polymerization unit (Overnight curing machine)	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	To be used for water bath polymerization (acrylic curing) in dental lab during the night		
2	Bench top unit.		
3	Stainless steel construction (tank, housing and lid)		
4	Capacity: approximately 20 litres tank capacity		
5	Fully automatic operation		
6	Overheat cut-out to protect heater.		
7	Drain outlet with drain hose		
8	Front panel to adjust time and temperature.		
9	Time adjustable up to 12 hours or more.		
10	Temperature adjustable to 95° C		
11	LED display (7 segments) of temperature and time, it should be well insulated from water and vapour		



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Item A-18	Night guard construction machine	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Vacuum former machine with built in heater to construct mouth guards.		
2	Bench top model, light weight and compact in size.		
3	Open system : Plates should be available by different manufacturers		



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Item A-19	Dental Lab Pressure Cooker	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	To be used for ortho-appliances in dental lab		
2	Maintenance-free and easy to use water filled pot that holds its pressure for hours		
3	Bench top unit.		
4	Stainless steel or aluminium construction		
5	Capacity: approximately 3 litres tank capacity		
6	Pneumatic operation: to work on external pressurized air		
7	Quick-release air valve		
8	Accurate and easy to read air pressure gauge		



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Item A-20	Polishing-lathe machine	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	For dental lab acrylic complete and partial dentures work, to remove adherent residual sand particles from work pieces		
2	Maintenance free low noise induction (brushless) motor.		
3	Compact bench top unit with powerful polishing capabilities.		
4	Anti-corrosion stainless steel housing with safety transparent screen and built in vacuum cleaner.		
5	Selectable speed of motor (at least 2 speeds)		
6	Left and right brush spindles		
7	Polishing troughs that can be removed very quickly and easily		



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Item A-21	Mobile Dental Unit, Operation Theatres	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty, robust from a well-known reputable manufacturer		
2	Cart type, mobile on at four large antistatic castors		
3	Plug and play standalone unit with minimum installation requirements; no need for domestic drain or water supply		
4	The unit should work on either built in silent air compressor or central hospital medical air, all hoses should be included		
5	Wired Foot control to control all hand pieces running		
6	Water Container : can be manually filled by staff members in order to supply hand pieces		
7	Instrument carrier with at least 5 instrument places and automatic selection of the instrument including the following:		
	A- One High speed module (4 hole): with quick coupling connection for high speed air turbine.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	B- Electric micro-motor module: brushless type and of the same brand of the dental unit, speed required power range up to (40,000 rpm), Universal type		
	C- Built in 3-way syringe hand piece		
	D- LED Light cure hand piece		
	E- Built-in piezo scalar module with tapered triangle tips Qty. (4 tips)		



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Item A-22	Dental Surgical Drill and Saw Unit	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Specifically designed for Oral, Maxillofacial surgeries.		
2	The system shall include at least the following:		
2.a	Console:		
	1) Flat touch control panel to control speed of all drills and saws.		
	2) To include irrigation pump either built in or as an external unit.		
	3) The unit must include multiple outlets for different saws and drills.		
2.b	Electric Cable of at least 3 meters long to connect console with the hand pieces.		
2.c	Foot switch:		
	1. Wired model		
	2. To activate micro drill in both directions; forward and reverse.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	3. To activate all saw hand pieces; sagittal, oscillating and reciprocating.		
2.d	Micro Drill Hand piece:		
	1. Speed approximately 30,000 rpm or above		
	2. Electrically controlled		
	3. Must include angled attachments, please quote for different sizes.		
	4. Autoclavable at 134° C		
	5. Different sizes of burs and drill bits must be quoted separately.		
2.e	Saw hand pieces:		
	1. The offer must include sagittal, oscillating and reciprocating saw handpieces.		
	2. Electrically controlled hand pieces		
	3. Autoclavable at 134° C		
	4. The offer must include different sizes of sagittal, oscillating and reciprocating cutting blades quoted separately.		
2.f	Original trolley with drawers <u>quoted separately</u>		
2.g	Sterilization case		
2.h	Oil spray if needed		



B: Ophthalmic Equipment

Item B-1	Surgical Microscope, Ophthalmic	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest model of the manufacturer that satisfy our specification.		
2	A floor-standing surgical microscope is dedicated for use in ophthalmic surgical procedures is required.		
3	Magnification system that features motorized zoom for anterior and posterior segment surgery.		
4	Focus: Internal motorized and/or manual		
5	X-Y Coupling		
6	Fixed working distance: 175 mm or 200 mm		
7	Magnification for eyepieces: 12.5x or 10x for main		
8	Binocular tubes for main surgeon and assistant with adjustable pupillary distance (PD) Assistance tube with Zero degree of the main binocular		
9	Wall mounted 55" monitor (local supplied acceptable).		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
10	Electromagnetic brake that guarantees easy and simple control		
11	Handgrip/ handgrips to be include		
12	Illumination system that provides LED illumination system or xenon light (with an integrated emergency lamp)		
13	Advanced ophthalmic Surgeon chair with following specs (other manufacturer is acceptable) • Motorized up and down • Rechargeable battery with charger • High stability brake system		
14	Motorized Fundus viewing system with lenses: (60° or 90°) and 120° or better. (optional and must be prices separately)		
15	multifunction foot switch control		
16	Local supplied medical recorder (priced separately)		
17	Any other additional features available in the system are to be mentioned for comparison purposes		
18	All accessories and options must be listed and priced separately.		
19	A list of standard accessories for the offered model		



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Item B-2	Cyclo Diode Laser	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the required range		
2	Infrared Diode laser: wavelength 810 nm		
3	Multifunctional photocoagulation and glaucoma procedures		
4	Auto-repeat mode		
5	Variable exposure time		
6	Continuous wave and long wave laser energy		
7	Aiming beam diode 650 nm		
8	Delivery device: cyclo-probes and Endo-probes (all types must be quoted)		
9	Equipment cart (other manufacturer is acceptable)		
10	Foot switch (wireless is preferable)		
11	All accessories and options must be listed and priced separately.		
12	Safety goggles qty. (2)		



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Item B-3	Ophthalmic Cryosurgical Unit	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The unit is dedicated for ophthalmic surgeries such as cryopexy for retinal detachment and other ophthalmic surgical interventions. It should be stated clearly in the original catalogue that the intended use for the system is ophthalmic.		
2	Coolant: the system should be used with either nitrous oxide or carbon dioxide		
3	Control Console:		
	a- Digital display of at least the freezing time and error codes		
	b- Connections for mains electricity, coolant gas, cryo-probe, foot switch and scavenging system.		
	c- Activation time should be displayed ability to adjust working temperature		
4	Footswitch: to control the freeze/defrost cycles; freeze cycle starts once the footswitch is pressed. The defrost starts once the footswitch is released.		
5	Original Trolley:		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	a- Sturdy design 4 antistatic castors or more		
	b- One upper shelf for the console		
	c- Secure holding mechanism for the gas cylinder		
6	Gas cylinder (N₂O or CO₂): must be included with the unit with all required adaptors and high pressure hoses, size of the cylinder must be compatible with the trolley.		
7	Probes must be autoclavable; a list of standard probes required for ophthalmic cryo-surgeries must be quoted separately		
8	Sterilization Box for the cryo-probes		
9	Gas filter for CO ₂ or N ₂ O		
10	A list of optional accessories for the offered model to be stated clearly and priced separately		



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Item B-4	Cassette or drawer sterilizer	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N),	Brochure Page No.
1	A steam sterilizer to be used to sterilize ophthalmic surgical tools and sets		
2	automatic operation (manual feed of water)		
3	Sterilization chamber volume: not less than 5L.		
4	Built in steam generator		
5	Microprocessor controlled, user friendly.		
6	Sterilization time required for a complete wrapped cycle: max of 18 minutes.		
7	Sterilization time required for a complete unwrapped cycle: max of 10 minutes.		
8	Digital display of parameters and error notifications		
9	Gaskets should be replaced freely during warranty period.		
10	Water distiller to feed the sterilizer should be supplied with each unit		



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Item B-5	Slit Lamp (LED)	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N),	Brochure Page No.
1	A steam sterilizer to be used to sterilize ophthalmic surgical tools and sets		
2	The latest model of the manufacturer that satisfy our specification		
3	Excellent sharp detailed images of the cornea, fundus, and endothelium		
4	Width of slight image: (0-12 mm) continuously or better		
5	Height of slit image: (1-12 mm) continuously or better		
6	Applanation tonometer (hagg-striet preferable)		
7	Motorized table		
8	Type: Galilean magnification charger or equivalent with converging binocular tubes		
9	Variable magnification selection (10x, 16x, 25x, 40x)		
10	Eyepiece: 12.5x		
11	Field of view: 7-34 mm or wider range		
12	Filters: Blue, Red free, UV cut, (other filter optional and must be priced separately-- IR cut, ND, Heat insulation, exciter/barrier)		



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	Minimum Requirements	Compliance (Y/N),	Brochure Page No.
13	LED Illumination lamp		
14	Chin rest with Vertical movement		
15	Fixation target: Red LED or white bulb		



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Item B-6	Ophthalmic Chart Screen	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the offered range		
2	Automatic remote controlled programmable projector to		
3	random access and high-resolution		
4	provide sharp clear images for accurate patient vision testing		
5	LCD or LED Monitor $\geq 21"$		
6	Automatic shut off		



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Item B-7	Auto Refracto-Keratometer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	LCD Display		
2	Automatic fogging and Minimal pupil size		
3	Capability to measure for patients with intra ocular lenses (IOL)		
4	Auto start or manual		
5	Wide range of sphere and cylinder calculations		
6	Wide range of pupillary distance		
7	Built-in printer		
8	Motorized table		
9	Automatic switch-off when not in use		



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Item B-8	Direct Ophthalmoscope, Wall Mounted	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Wall mounted type		
2	Power handle should be made from heavy duty, easy to clean, corrosion resistant material.		
3	LED illumination type		
4	Ophthalmoscope head:		
	a- Multi-lens auto step sealed- type optics		
	b- Multi aperture/filter combination		
	c- Full display of lens values		



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Item B-9	Indirect Ophthalmoscope, Wireless	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	LED Illumination type		
2	Adjustment of headband height, tilt & distance of optical system.		
3	Adjusts for a wide range of inter-pupillary distances and Variable Diameter of illuminated field		
4	Adjustment of illuminated field size		
5	Filters:red free, Cobalt blue (or yellow)		
6	Carrey case		
7	Charger unit		
8	Kindly quote for any available accessories		



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Item B-10	Retinoscope	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Streak type Retinoscope		
2	Wall mounted configuration		
3	User friendly external focusing mechanism		
4	LED illumination type		
5	Rugged, shock-proof design		



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Item B-11	Lensmeter, Auto	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Wide vertex power scale		
3	Wide prism power scale		
4	Auto shut off		



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Item B-12	Lens Trial Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Robust and high quality material		
2	Carrying case		



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Item B-13	Green Laser, Multi-Spot	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance)Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Fully integrated system.		
3	Laser wave length :Green 532nm.		
4	Power: 50 – 1500 mw or better		
5	Auto-repeat mode		
6	Safety filter included		
7	Monospot and Multi-spot included		
8	Aiming beam: Red diode laser		
9	Automatically Self-test.		
10	Micro pulse technology or equivalent		
11	Control throw joystick and footswitch		
12	Footswitch		
13	Motorized table		



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14	Safety goggles qty. (2)		
15	Delivery system: Slit lamp		
16	PRP Lens (VOLK is preferable) Qty(2)		
17	A list of standard accessories for the offered model should be included, also, other accessories and options must be listed and priced separately.		



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Item B-14	Yag Laser, SLT	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Bench top compact YAG laser treatment ophthalmic photo-disruptor		
3	The ability to reduce or eliminate the PCO from the IOL		
4	Output Energy: up to 10.0 mJ/pulse adjustable in increments of 0.1 mJ or better		
5	One-Touch Lock		
6	Treatment Laser Type: Nd: YAG 1064 nm SLT: 532nm		
7	Focal Shift: to include the range (± 150) μ m or better		
8	Aiming Laser Type: Diode laser		
9	Spot size: YAG: 8 microns SLT: 400 microns		
10	Pulse duration : YAG: 3ns (nanoseconds) SLT: 3ns (nanoseconds)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
11	Slit Lamp with Eye Piece 12.5x		
12	Magnification (field of view) to include: 32x, 20x, 12x, 8x, 5x or better		
13	Motorized electrical table		
14	Foot switch		
15	Safety goggles qty. (2)		
16	All accessories and items needed to operate the system must be listed and priced separately		



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Item B-15	Optical Biometer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	8" LCD touch screen or better		
3	Full anterior and posterior corneal surface measurement (total Keratometry measurement or equivalent)		
4	Measurement Method: Auto measurement using Swept-Source or equivalent		
5	IOL power and Post LASIK calculation using at least the following formulas or equivalent : * Hoffer * SRK/T * Haigais, * Barrat TK formula * Holladay		
6	Interfaces: DICOM		
7	Motorized table		
8	Laser printer (other manufacturers are acceptable)		
9	All standard and optional accessories should be listed and priced separately.		



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Item B-16	OCT Angio	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest end model of the manufacturer that satisfy our specification.		
2	Application: cross sectional and measurement of anterior and posterior ocular structure.		
3	Scan speed $\geq$ 85000 scan per second.		
4	Method: swept source or spectral domain or laser source.		
5	Deep penetration involving the choroid details.		
6	LCD or LED display to visualize cross sectional image.		
7	Anterior OCT segment measurment that show the layers and thickness of the cornea		
8	Noise reduction.		
9	Auto rescan.		
10	Auto focus.		
11	Easy DICOM compatibility (transfer image and video).		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
12	Fixation: internal and external.		
13	Light source: dual beam scanning system or super luminescent diode light.		
14	OCT modes: anterior/posterior OCT/macula/optic disc.		
15	High Accuracy eye tracking function.		
16	Extended Depth imaging (EDI)		
17	Latest PC & software version with minimum spec:		
	a- Intel i7 processor or better.		
	b- 8 GB DDR3 ECC RAM OR Better		
	c- 1 TB hard drive OR Better		
	d- Super drive		
	e- Windows 10 operating system or better		
	f- FHD or LED monitor of at least 21 inch size.		
	g- DVD Drive R/W, USB port, for storage purposes.		
	h- Color Laser printer (Data print out is required to be on A4 paper)		
18	Original motorized table.		
19	Any other additional features available in the system are to be mentioned for comparison purposes		
20	All standard and optional accessories should be quoted and priced separately.		



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Item B-17	Wide Field Fundus Camera	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements
1	The latest highest end model of the required range.
2	True color confocal camera visualization system or laser scanning system
3	User friendly software
4	High Resolution: at least 10 µm or better
5	Wide field imaging: 55 degree or better for fundus
6	Ultra-Wide field imaging: a- For laser scanning system: 85-degree measure from the pupil(or better) 130 degree measure from the eye centre (or better) b- For camera visualization system : 120 degree measure (or better)



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	Minimum Requirements
7	Image mode: a. FA b. Multi-color fundus c. AF d. Red-Free e. Choroidal (optional)
8	High resolution LCD or LED display
9	Working Distance: ≥ 13 mm between objective lens and cornea for laser scanning systems
10	Minimum Pupil Diameter in Non-mydriatic mode ≤ 4 mm
11	Flash for photography: white LED flash lamp, or laser scanning system
12	Internal Fixation Lamp: 9 fixed dots or equivalent.
13	Identification right or left eye.
14	External Fixation lamp or equivalent
15	Auto rescan or equivalent
16	fully automatic alignment and focusing or equivalent
17	Complete system with PC (supplied by the manufacturer) *SSD hard drive at least 1TB * 16 GB DDR3 ECC RAM OR Better * table. * DVD Drive R/W, USB port, for storage purposes
18	DICOM 3.0 compatibility
19	Color Printer (locally supply accepted)
20	A list of standard accessories for the offered model should be included, also, other accessories and options must be listed and priced separately.



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Item B-18	Lenses set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	PRP Lens Qty. (2)		
2	Focal lens Qty. (2)		
3	Goldman lens Qty.(4)		
4	Plus 20 lens Qty. (4)		
5	Super field lens Qty. (4)		
6	Yag laser lens Qty. (2)		



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Item B-19	Patient examination chair, Ophthalmology, Electric	Qty. (9)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty construction with stable base that resists tipping over when the patient orientation is altered		
2	Upholstery in durable material that is easy to clean and resistant to common hospital disinfectant solutions		
3	Electrically powered up/down with manual manoeuvres for backrest tilt		
4	Control for movements through footswitch		
5	All accessories and options and colour choices must be listed and priced separately		



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Item B-20	Bio Microscope Ultrasound (High Frequency)	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Latest model to include but limited to the following:		
2	11" LCD touch screen or better		
3	Patients database		
4	A-scan (biometry): - Probe not less than 10 MHz - Measurable value: AXL, ACD, Lens thickness - IOL Formulas: at least 3 formulas and post refractive formula - Immersion cup to be included. (specify the cup size)		
5	B-scan: - Probe frequency not less than 12 MHz - Gain up to 115 dB or better - Gray scale equal to 256 or better - Video recording should be included		
6	Ultrasound bio microscopy (UBM): Immersion probes (35) MHz		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	- Gray scale equal to 256 or better - Full adjustable scan control - Video recording should be included more than 30 patient. 3 immersion cups different sizes - Measurements: distance, angle, Area		
7	Imaging management system		
8	Printer		
9	Hard drive 128 GB or better		
10	All standard accessories, consumables for immersion scan procedure should be included in offer		



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Item B-21	Penta CAM	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	A Minimum of two software licences to be include in offer		
3	Upgradable software		
4	Camera : digital ccd camera		
5	Light source: blue LED		
6	Measurment range : - precision : ± 0.1 D or better - reproducibility : ± 0.1 D or better - operation distance : more than 70mm - automatic measurment activity		
7	Menimum faetures: - scheimpflug image - topography maps of the anterior and postirior corneal surface - pachymetry maps, absolute and relative - elevation maps of the anterior and posterior corneal surface 3D anterior champer analysis - Anterior segment tomography		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	- General overview display - Keratoconous detection and classification topometrically - Freely selectable Four maps, refractive - Comparative and differential analysis of two examination and side by side comparason - Freely selectable refrencees bodies for elivation maps - Corneal thikness progression analysis for early keratoconus detection - Side by side comparison of topometric and pachymetric data - Anterior champer angle in 0°, automaticaly - Four maps anterior champer and topometric - Anterior champer depth map - True net power - Cornial wavefront and Zemike analysis of the total cornea - Belin Ambroasio Enhanced Ectsia display - IOL calculation		
8	Original motorized table, model and manufactured to be stated clearly.		
9	Original laptop or PC with latest software version and high capacity memory: model and manufactured to be stated clearly.		
10	colored laser printer		
11	DICOM connectivity should be available with the system		
12	Integrated axial length measurement		
13	All standard accessories and optional accessories,, licences and software packages must be include in the offer and stated clearly.		



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Item B-22	Clinical Tonometer	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Hand held tonometer		
2	Suitable for all patients		
3	Accuracy ± 1.2 or better		
4	Measure in different position		
5	Automated positioning alignment		
6	Weight less than 400 g with batteries		
7	Standard size battery		
8	All necessary standard accessories and spares to be included.		



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Item B-23	Green laser for operation	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Application: for patients in ophthalmic operation rooms		
2	Safety filter for green laser (approximately 532 nm) to fit on ophthalmic microscope		
3	Laser wave length 532nm approximately.		
4	Power: 50 – 1500 mw or better		
5	Auto-repeat mode		
6	Monospot and Multi-spot included		
7	Aiming beam: Red diode laser		
8	Many Treatment mode.		
9	footswitch (Wireless preferable)		
10	Equipment cart		
11	Safety goggles qty. (2)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
12	Endo probe Delivery system: Qty.(10)		
13	<i>A list of standard accessories for the offered model should be included, also, other accessories and options must be listed and priced separately.</i>		

Item B-24	Lenses	Qty. (1 set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	PRP Lens Qty. (2)		
2	Focal lens Qty. (2)		
3	Goldman lens Qty.(4)		
4	Plus 20 lens Qty. (4)		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
5	Super field lens Qty. (4)		



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Item B-25	Different Ophthalmic items	Qty. (1 set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	Ishihara Book for colour vision Qty. (6)		
2	Hertel exophthalmometer Qty. (4)		
3	Titmus Stereopsis Test Qty.(6)		
4	Near Vision Test Qty. (2)		
5	Prism Bar Vertical and Horizontal Qty. (2 of each)		
6	Jackson Cross Cylinder 0.25 Qty. (2)		
7	Jackson Cross Cylinder 0. 5 Qty. (2)		



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Item B-26	Ophthalmic Perimeter	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	various tests strategies		
3	various test pattern		
4	Stimulus duration :200 ms Stimulus size : Goldmann III Maximum stimulus intensity : 10000 abs		
5	Progression Analysis		
6	Fast threshold test strategies		
7	Fixation control		
8	Retinal tracking or auto focus (no need for trial lens).		
9	Electrical patient chair (third party acceptable)		
10	Motorized chinrest		



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	Minimum Requirements	Compliance (Y/N) , Notes	Brochure Page No.
11	Latest PC & Software or equivalent		
12	Motorized table		
13	Colored laser printer (third party acceptable)		
14	Network : DICOM, Ethernet		



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Item C-1	ENT Treatment Unit with Patient Chair	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	All system components must be homogeneous and ergonomically designed with no sharp edges and small footprint. The unit must be equipped with a full set of standard instruments suitable for screening purposes.		
2	Suction System:		
	a- Non-vibrating, oil-free silent vacuum pump with all necessary attachments.		
	b- Adjustable vacuum level		
	c- Complete with hand pieces.		
	d- Vacuum pump capacity ≈ 30 L/m.		
	e- Suction jar(s) to be concealed within the unit and equipped with an over-flow protection device.		
	f- Suction hose rinsing system for cleaning of the hose.		
3	Pressurized Air System:		
	a- Oil-free silent air compressor automatic switching.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b- All necessary air attachments with adjustable pressure level and pressure gauge.		
	c- Complete with 2 medicament sprayers		
4	Console:		
	a- Mobile.		
	b- Lower cabinet.		
	c- Used instruments holder.		
	d- At least two upper shelves for instruments		
	e- Mirror pre-heater.		
	f- Build in or external cautery		
5	Doctor's stool chair:		
	a- Mobile on a strong stable base with five swivel castors.		
	b- Base to be constructed from (high quality material) and supplied with a foot ring.		
	c- Height adjustment through gas spring.		
	d- Supplied with back rest.		
	e- Padded with an easy to clean and disinfect material able to withstand common liquid disinfectants		
6	Patient Treatment Chair:		
	a- Electrical adjustment for height through footswitch.		
	b- Inclined back rest.		
	c- Upper part rotation capability		
	d- Two arm-rests.		
	e- Padded with an easy to clean and disinfect material able to withstand common liquid disinfectants.		
	f- Chair to be anchored to the floor, or to be equipped with a table base that resists tipping over.		
7	Wireless Head light		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
8	LED light source with headlight and fibre optic cable (Priced Separately)		
9	Built in holder for endoscope		
10	Clinical Microscope (to be priced separately)		



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Item C-2	ENT Surgical Microscope	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	A floor mounted dedicated surgical microscope for use in ENT surgeries.		
2	Latest model of microscope and mobile floor stand		
3	Magnification system that features motorized zoom with 1:6 ratio.		
4	Focus: Motorized with Auto Focusing		
5	Continuous motor driven working distance with a range of 225- 450 mm or wider		
6	Inclinable binocular tube for surgeon and assistant (please specify range of inclination for both)		
7	Magnification for eyepieces: 12.5x or better for main and 10x or better for assistant.		
8	Electromagnetic brakes		
9	Switches and controls should be protected against accidental setting changes, and should be sealed against penetration of liquids		
10	Handgrip/ handgrips that features control for zooming (any additional controls available to be mentioned)		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
11	LED lamp module or Xenon cold light illumination system that provides minimum of 300 watt with integrated emergency lamp\ Replacing lamps and modules should be easy and simple.		
12	Compatible high-resolution 1-chip CCD camera or better		
13	Wall mounted 55" monitor (local supplied acceptable).		
14	High resolution DVD Recorder		
15	Original Advanced ENT Surgeon chair with following specs: - Motorized up and down - Rechargeable battery with charger - High stability brake system		
16	Any other additional features available in the system are to be mentioned for comparison purposes.		
17	All accessories and options must be listed and priced separately.		
18	A list of standard accessories for the offered model (optional)		



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Item C-3	ENT Sinuscopy Surgical Tower	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	A top of the line diagnostic endoscope for an ENT for operating room is required to have the following minimum requirements		
B	Camera system (4k Resolution) : Provides electronic shutter function, automatic brightness control and optical zoom		
	1) 3 chip CCD or equivalent CMOS camera head		
	2) Compact, lightweight, easy to grip.		
	3) Resolution (4k): a minimum of 3840*2160.		
	4) Focal Distance with zoom lens 16-28 mm or better		
	5) plasma sterilizable, autoclavable preferable		
	6) Immersible in disinfections liquid.		
	7) Universal coupling mechanism to fit all standard endoscopes.		
	8) Camera cable 3m		
	9) Camera controller (4k resolution) • Clear function buttons and indicators • Hygienic • Provides colour bas test signal		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	HDMI and DVI output connection		
C	Light Source:		
	1) LED Light source (light intensity should be equivalent to 175 Watt xenon lamp)		
	2) Working hour $\geq$ 10,000 hours.		
	3) Automatic and manual adjustment of light intensity.		
	4) Front panel hygienic with convenient indicators for ease of operation.		
	5) Flexible fibre optic cable preferably autoclavable and not less than 230 mm.		
D	LCD / LED Color Monitor:		
	1) Medical grade type that is supplied by the same manufacturer		
	2) At least of 32 inch size that is mounted on the mobile cart		
	3) Resolution: 4k resolution minimum of 3840*2160		
	4) HDMI and DVI compatible.		
E	Mobile cart:		
	Original to suit the above systems and consists of the following:		
	1) 4 antistatic, anti-scratch castors. And four shelves		
	2) Locking brakes.		
	3) Cable channel with shockproof plugs.		
	4) Adjustable or fixed shelves.		
	5) At least one drawer.		
	6) All accessories (connect cable, plugs, etc.) needed for the offered system to be included.		
	7) All accessories (connect cable, plugs, etc.) needed for the offered system to be included.		
F	Medical Grade DVD Recorder.		
G	Rigid nasal telescopes (4k Resolution), sterilizable with		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	protection cover:		
	1) Degree (0), Diameter (4.00 mm), working length $\geq 15\text{cm}$ Qty. (2)		
	2) Degree (30), Diameter (4.00 mm), working length $\geq 15\text{cm}$ Qty. (2)		
	3) Degree (70-90), Diameter (4.00 mm), working length $\geq 15\text{cm}$ Qty. (1)		
H	Rigid ear telescope (4k Resolution) with the following specifications:		
	1) Zero degree		
	2) 4 mm inner diameter		
	3) Working length approx. 6cm		



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Item C-4	ENT Sinuscopy Diagnostic Tower	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
A	Camera system (Full HD) : Provides electronic shutter function, automatic brightness control and optical zoom		
	1) 3 chip CCD or equivalent CMOS camera head		
	2) Compact, lightweight, easy to grip		
	3) Resolution (Full HD): a minimum of 1920*1080		
	4) Focal Distance with zoom lens 16-28 mm or better		
	5) Gas sterilizable, autoclavable preferable		
	6) Immersible in disinfections liquid		
	7) Universal coupling mechanism to fit all standard endoscopes		
	8) Camera cable 3m		
	9) Camera controller (Full HD resolution) • Clear function buttons and indicators • Hygienic • Provides colour bas test signal • HDMI and DVI output connection		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
B	Light Source:		
	1) LED Light source (light intensity should be equivalent to 175 Watt xenon lamp)		
	2) Working hour $\geq$ 10,000 hours		
	3) Automatic and manual adjustment of light intensity		
	4) Front panel hygienic with convenient indicators for ease of operation		
	5) Flexible fibre optic cable preferably autoclavable and not less than 230 mm		
C	LCD / LED Colour Monitor:		
	1) Medical grade type that is supplied by the same manufacturer		
	2) At least of 24 inch size that is mounted on the mobile cart		
	3) Resolution: Full HD resolution minimum of 1920*1080		
	4) DVI compatible.		
D	Mobile cart:		
	Original to suit the above systems and consists of the following:		
	1) 4 antistatic, anti-scratch castors. And four shelves		
	2) Locking brakes.		
	3) Cable channel with shockproof plugs.		
	4) Adjustable or fixed shelves.		
	5) At least one drawer.		
	6) All accessories (connect cable, plugs, etc.) needed for the offered system to be included.		
	7) All accessories (connect cable, plugs, etc.) needed for the offered system to be included.		
E	Rhino-pharyngo-laryngo-fiberscope in an original case with the following specifications:		
	Qty. (1) with each tower		
	i. Direction of view: 0 degree		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	ii. Angle view ≥ 70 degree upward		
	iii. Deflection (130~ 160) degree or better		
	iv. Downward deflection (90 ~130) degree or better		
	v. Working length ≥ 30 cm approximately		
	vi. Outer diameter: 3.4 mm approximately		
F	Rigid nasal telescope (Full HD), sterilizable with protection cover:		
	i. Degree (0), Diameter (4.00 mm), working length ≥ 15 cm Qty. (2) with each tower		
	ii. Degree (30), Diameter (4.00 mm), working length ≥ 15 cm Qty. (2) with each tower		
G	Rigid ear telescope with the following specifications: Qty. (1) with each tower		
	i. Zero degree		
	ii. 4 mm diameter		
	iii. Working length approx. 6 cm		



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Item C-5	High speed Otologic Surgical Drill	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	Specially designed for ENT surgery		
3	Main Control Drive		
	a- Can fit all hand-pieces		
	b- The unit must include two outlets for different saws and drills or better		
	c- Capability to recognize hand-pieces		
	d- Capability to control speed and directions		
	e- Integrated irrigation pump		
	f- Filters to insure sterility		
	g- Footswitch must be included		
4	Electric Micro drill handpiece Qty. (2)		
	1- High Speed otologic drill 60,000 rpm or better operates nasal		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	&laryngeal in forward and oscillating way		
	2- Straight attachment Qty. (2)		
	3- Angled attachment Qty. (2)		
	4- Different types and sizes burs (priced separately)		
	5- Irrigation system must be included at integrated console pump		
	6- Speed and irrigation must be controlled from foot switch and main control drive		
	7- Irrigation cassette and clip must be included (priced separately)		
	8- Autoclavable 134°C		
5	Electric shaver handpiece Qty. (2)		
	1- Easy to fit blades without any tools		
	2- Speed 5000rpm or better		
	3- Different types of blades		
	4- Irrigation cassette and clip must be included		
	5- Autoclavable 134°C		
6	Special drill for middle Ear surgery (Skeeter) or equivalent Qty. (1)		
7	Sterilization container for all hand pieces and attachments, burs and blades to be included.		
8	Standard original trolley with all accessories		
9	Consumable and accessories required for ENT operations must be quoted separately.		
10	A list of standard accessories of stainless steel (cutting burs, blade, Skeeter burs etc.), must be offered (reusable or disposable)		



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Item C-6	Intra-Operative Nerve Locator/Stimulator, ENT	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The latest highest end model of the required range.		
2	NIM-Response System with Printer		
3	NIM-Response Mainframe		
4	Patient Interface for NIM-Pulse and NIM-Response		
5	Muting Detector probe		
6	Patient Simulator for NIM-Pulse and/or NIM-Response		
7	Monopolar Stimulator Probes		
8	Paired sub-dermal needle electrodes, 5 sets		
9	Printer		
10	Other accessories to be priced separately		
11	A list of standard accessories for the offered model		



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Item C-7	Wireless ENT Head Light	Qty. (4)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Portable, light weight, and compact design		
2	Wireless headband with integrated rechargeable battery		
3	Adjustable light intensity and spot size		
4	Rapid adjustment of cross-headband		
5	LED illumination type with light intensity up to 30,000 lux or better		
6	LED operating life time 30,000 hours or better		
7	Rechargeable battery operation not less than 3-hrs or better with fully charged battery		
8	Battery charger device		
9	Two backup rechargeable batteries to be included and priced separately.		
10	All accessories or options should be quoted and priced separately		



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Item C-8	Otoscope	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Handle should be made from heavy duty, easy to clean, corrosion resistant material.		
2	Wall mounted		
3	LED illumination.		
4	Three sizes reusable specula to be included.		
5	Two spare lamps must be included.		
6	Kindly quote for all sizes and types of specula		



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Item C-9	Pure Tone Audiometer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Two separate channels diagnostic audiometer must including the following features, tests and accessories:		
2	Air conduction and bone conduction testing		
3	Frequency range (250-8000 Hz)		
4	Continuous, pulsated and Warble tone, WB noise, NB Noise. Reverse option for masking and tone presentation		
5	Using 1 and 5 dB step size attenuation		
6	ABLB, SISI, high frequency tests		
7	Speech tests with tape recorder.		
8	Two External loudspeaker for free field audiometry with maximum output 100 dB SPL at 1000 Hz measured at 1 meter from the loudspeaker		
9	Reinforcer toys		
10	Able to stimulate via sound field, insert ear phone, head phones and bone conduction		
11	Full system of Visual Reinforcement		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
12	Insert earphone with 3 meter cable, 3 sets with tips for children and adult.		
13	TDH-39P or TDH-49 headphone, 3 sets		
14	Bone vibrator 2 sets		
15	Possibility to connect the audiometer to a PC/Laptop		



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Item C-10	Middle Ear Analyzer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Diagnostic for children and adults		
2	Contra lateral and Ipsilateral Stapedial reflex with connections		
3	Reflex decay		
4	Eustachian tube function test		
5	Insert earphone or headphone for contra lateral stapedial reflex; Maximum output 120 dB SPL at 500, 1000, 2000, 4000, Hz		
6	Multi frequency probe tone 226 Hz and 1000 Hz		
7	Complete handset for tympanometry		
8	Different size of ear tips		
9	Test cavity of 2 cc, 0.05 cc and HF probe		



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Item C-11	Otoacoustic Emission	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Diagnostic otoacoustic emission must include the following tests and all accessories required for the tests these tests:		
	a- TEOAE		
	b- DPOAE		
	c- Spontaneous OAE		
	d- Probe with cables for testing infants, children and adult		
	e- Ear tips for infants and children and adult		



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Item C-12	Portable Otoacoustic Emission	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Portable otoacoustic emission must include the following tests and all accessories required for the tests these tests:		
2	Screening TEOAE		
3	Ear tips for infants and children and adult		



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Item C-13	Portable Pediatric Audiometer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Portable hand held paediatric audiometer		
2	Must include:		
	a- Frequency range 250-4000 Hz		
	b- Hearing intensity 20- 80 dB		
	c- Warble tone.		
	d- Pure tone		
	e- Narrow band Noise		
	f- Possibility to attach to a headphone		
	g- Light indicator		
	h- Different distraction toys		



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Item C-14	Portable Tympanometer	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Portable tympanometry must show the following parameters:		
	a- Ear canal Volume		
	b- Middle ear pressure between (200 - 400 daPa)		
	c- Tympanic membrane compliance		
	d- Stapedial reflexes		
2	Printer and papers for printing		



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Item D-1	Computerized Voice Lab with Nasometer & Facilitator	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	The System Shall Include at least the following:		
A	Computerized Voice Lab: Qty. (1)		
	1. CSL hardware/software system		
	2. Includes professional quality hardware and software		
	3. Advanced hardware should be designed for the most measurement applications		
	4. Latest specifications.		
	5. System includes latest core CSL software which includes: acquisition, playback, editing, and analysis (sonograms, LPC, pitch, intensity, FFT, editing tools, digital filtering, IPA transcription, data log features, etc.)		
	6. Windows MDI and CUI compliance with user configurable workspace, flexible access to commands, and user-definable macros/keys.		
	7. Software: Disordered voice database, Multi-Speech main program, MDVP advanced, Motor Speech Profile advanced, Real Time Pitch		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
B	Nasometer: Qty. (1)		
	1. hardware/software system for assessment and treatment of patients with nasality problems		
	2. Uses an innovative headset or Hand-held device, worn by the patient, which separates the oral and nasal cavities with a baffle plate.		
	3. Microphones mounted on the top and bottom of the plate collect acoustic energy during speech.		
	4. Degrading auditory feedback & real-time visual feedback		
	5. Built-in calibration procedure		
	6. Built-in stimuli, normative data, & statistical analysis of collected data		
C	Facilitator hardware module and accessories: Qty. (1) Five modes of auditory feedback including speech voice amplification ,looping playback ,delayed auditory feedback (DAF), speech noise masking ,and metronomic .Included facilitator hardware module ,one set of rechargeable batteries, external power supply ,wearable waist-pack to house unit when used as portable assistive device , microphone ,and headphones/include extra microphone ,and extra headphone set rechargeable batteries		
D	Computer: Qty. (1)		
	1. Intel i7 processor or better.		
	2. 8 GB RAM or better.		
	3. 500 GB hard drive or better.		
	4. 1 Gbps network port		
	5. Windows operating system		
	6. LCD/LED monitor of at least 19 inch size.		
	7. PC's specification must comply with the manufacturer requirements and with special terms		



SPECIAL TERMS

- *Offers not complying with any of the special terms or the technical specifications shall be considered non-conforming with tender requirements.*
 - *Any vendor providing FORGED documents shall be disqualified from the current tender and banned from participating in any future RMS tenders.*
 - *Wherever term “based” is mentioned it refers to the country where the manufacturing company is founded & established.*
1. *All equipment must be the most recently released model/version which is equal to or higher than the range of the specifications of the required system (low, mid or high) and equal to or higher than the level of technology and required options mentioned in the technical specifications.*
 2. *Required certificates (must be submitted with the technical offer):*
 - 2.1 *FDA clearance (510K) for equipment of USA based companies.*
 - 2.2 *MDR (EU) 2017/745 certificate for equipment of EU (European Union) based companies.*
 - 2.3 *UKCA certificate For Equipment of Great Britain based companies (England, Scotland, Northern Ireland, and Wales).*
 - 2.4 *ARTG (Australian Register of Therapeutic Goods) certification or approval for Australian and New Zealand based companies.*
 - 2.5 *Establishment License with the relevant Device License issued by the Therapeutic Products Directorate for Equipment of Canadian based companies.*
 - 2.6 *PMDA (Pharmaceuticals and Medical Devices Agency) certification or approval for equipment of Japanese based companies.*
 - 2.7 *Swissmedic (Swiss agency for therapeutic products) certification or approval for equipment of Swiss based companies.*
 - 2.8 *Norwegian Medicines Agency certification or approval for equipment of Norwegian based companies.*
 - 2.9 *Only for class I medical equipment manufactured by companies based in one of the countries mentioned above, submission of either one of the certificates mentioned above or a free sale certificate in any of these countries shall be accepted.*

- 2.10 *For the following equipment:*



- All X-ray equipment, MRI, ultrasound, and nuclear medicine systems (regardless where the manufacturing companies are based).
- Where the manufacturing companies are based in other origins than the mentioned in terms 2.1 - 2.8.

The following are required:

- a- At least two of the certificates mentioned above, one of which has to be FDA clearance (510K) (Only for class I medical equipment submission of certificates mentioned in 2.9 shall be accepted).
- b- Evaluation certificate from the Royal Medical Services for the same offered model with at least 80% passing grade.

If the evaluation is not applicable (based on purchasing committee perspective) bidder should submit a list of installation basis of the same offered model and/or previous models in at least two of the following hospitals (King Hussein Cancer Center, National Center for Diabetes Endocrinology and Genetic Diseases, Jordan University Hospital or King Abdullah University Hospital) with at least three years of operation, list should include: Name of hospital, Model installed, Quantity, and date of installation.

The purchasing committee has the right to officially contact any of these hospitals and disqualify any offer where the feedback is negative in operation, after sales service or local agent performance.

2.11 *The vendor is responsible to ensure through official documents that classified medical devices are manufactured in conformity with applicable quality system standards (ISO, IEC); (the international quality systems standard for medical device manufacturing ISO 13485) or ISO9001.*

2.12 *With each offer, bidders must provide a formally endorsed document issued by the manufacturer stating that the bidder is the sole certified agent for the offered item.*

2.13 *In all of the above cases (except 2.12) certificates must be formally endorsed by JFDA.*

2.14 *Any vendor not submitting all required certificates will be eliminated.*

- 3.** *Official website of the manufacturer must be provided. The website must clearly demonstrate the history profile and manufacturing features of the company including the same offered model and its brochure.*

In case of inconsistency between the information on the website with the provided information of the local agent regarding any offered product, the committee has the right to eliminate that product from the awarding process.



4. *Offered items should be from reputable well known manufacturers and excellent experience in the field and shall have multiple installations of the same offered model and/ or previous models in RMS main hospitals with at least two years of operation and excellent experience in operation, after sales service & local agent performance; otherwise the purchasing committee has the right to request any of the following:*

- a) An evaluation certificate as mentioned in term 2.10.b.*
- b) A sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification; any vendor rejects to deliver a sample unit will be eliminated. Evaluation duration will be determined by the purchasing committee.*

Any offered item fail in the evaluation/assessment process will be rejected

- 5. *Vendors must specify the origin of the offered items and accessories in the technical offer.*
- 6. *Bidders must submit their reservations/queries regarding tender specifications and/or special terms within the first half of the tender closing period starting from the tender announcement date. Reservations/queries submitted after the end of this period shall be rejected.*
- 7. *Goods are to be brand new; manufacturing date of the delivered products should not exceed 18 months from the date of the final award.*
- 8. *Delivery period should be mentioned clearly; the purchasing committee has the right to reject any offer with delivery time exceeding 4 months.*
- 9. **Warranty:**

- a- Offers must include a full warranty for a period of a minimum of 24 months from the date of installation or 30 months from the date of receiving the items at the agreed location mentioned in the final order (whichever comes first).*

Warranty must include corrective & preventive maintenance activities as per manufacturer recommendations including:

- Required spare parts (free of charge)*
- Labour*
- Hardware*
- Software*
- Rechargeable batteries*

At the end of the warranty period, The supplier commits to implement final inspection of the submitted goods and submit the reports signed by the site chief engineer stating that the equipment are working properly as well as all preventive maintenance reports during the warranty period.



Warranty & installation are excluded for items mentioned in Attachment no.1 the purchasing committee has the right to exclude any other item not listed in the attachment and does not required installation and warranty.

- b- In the case where a delay in installation has occurred as a result of the supplier's dereliction and has exceeded a period of one month from the date of receiving the items, the approved warranty period will automatically be considered as 24 months from the date of installation.***
- c- If at any time during the warranty period the item becomes inoperative due to a technical fault the item must then be repaired by the supplier /local agent within a period of 5 working days from written notification, warranty will be extended according to downtime period.***
- d- If the delay exceeds 30 days the supplier must replace the item with a new identical functioning one (within the same delivery period mentioned in the final offer). In case the item was replaced by a new one, the warranty period mentioned in 9.a) above will start from the installation and commissioning date of the new item.***
- e- Local agent/ supplier is committed to transport and install any awarded item during the warranty period on free of charge basis to any location inside the country whenever required by Royal Medical Services, this should not include pre-installation requirements in the new site.***

10. All offered items (main unit) should be fully designed, manufactured, and labelled by their real original manufacturer in which all related testing, research, development and approvals went through.

Any relabelled products for the main unit (white-label manufacturing, OEM, or repackaging) are rejected.

11. One set of operation manual(s) and one set of service manual(s) including schematics and a spare-part list must be delivered with each unit, CD/DVD is acceptable. For large tenders, a certain agreed percentage of manuals per item may be agreed upon.

12. Where applicable, pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include removal of old system(s), any civil work, electrical work or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s).



13. *Power requirements: where applicable either single phase 220V, 50Hz or 3-phase 380V. Systems with external transformers are considered conforming only if clearly stated in the technical specifications.*
14. *Technical offers must include clear original technical brochures/catalogues for all offered items.*
15. *Offers must include fully detailed technical offers and compliance sheets as a soft copy (either Microsoft office or Microsoft excel format) in addition to a hard copy, mentioning the exact model/catalogue number and country of origin of the offered item(s), full technical description/specifications and any accessories or options included in the offer.*
Offer must clearly indicate the origin of the offered item and the country where the manufacturer of the offered items is based.
16. *Compliance sheets must be as per the tabular format of the technical specifications in the tender documents, listing the required specifications on one column and a Yes or NO response to each point in the adjacent column, with reference to page and line numbers in the relevant technical brochure. Offers not complying with this term shall be rejected.*
17. *Qualifications and after sales service: The technical bid should contain all the necessary documents (training certificates) to prove the capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specifications of the manufacturer and the ability of the bidders for providing efficient after sales service conducted by authorized certified biomedical service engineers with minimum 2 years experience in the same field.*
18. *Accessories and consumables:*
 - 18.1 *Any accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately.*
All offered accessories and consumables must be approved by the manufacturer.
 - 18.2 *Technical offers must include a priced list for all accessories and consumables related to the required equipment as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) with prices fixed for a period of five years from the date of installation and commissioning with a maximum annual increase of 2%, any essential item not listed will be considered free of charge.*
 - 18.3 *Accessories and consumables must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
 - 18.4 *Where applicable, a start-up kit of accessories and consumable items must be provided with each system on a free-of-charge basis.*

19. Spare Parts:



- 19.1 *Technical offers must include a comprehensive and priced list of all spare parts related to the awarded equipment (including rechargeable batteries) as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) valid for a minimum period of five years with a maximum annual increase of 2%, commencing at the end date of the warranty period, any essential item not listed will be considered free of charge.*
- 19.2 *Spare parts must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
- 19.3 *Prices of spare parts should be reasonable and will be taken into consideration during the purchasing process; the purchasing committee has the right to eliminate any offered item with unreasonable high prices of spare parts.*
- 19.4 *Delivery period of required spare parts should not exceed 2 months from the date of the final order.*
20. *Spare parts, consumables and accessories availability must be guaranteed for a minimum period of ten years starting from the date of installation and commissioning.*
21. *Local agent is committed to sign a service contract with Royal Medical Services to perform all relevant maintenance for the awarded equipment (whenever required by DRMS within a period that does not exceed one year from the end date of the warranty period and if mentioned clearly in the specifications) without exceeding the original mentioned cost and as per mentioned terms within minimum required period.*
22. **Tender Awards:**
- 22.1 *For the final list of offers having a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its' running cost (Total Cost of Ownership) over a period of seven years from the date of installation and commissioning. Only offers with the lowest total cost of ownership over a period of seven years from the date of installation and commissioning shall qualify for the award.*
- 22.2 *Running cost includes the value of consumables, accessories needed to operate the system over the same period as well as the cost of any service contract (where applicable).*



23. For PC/Laptop based systems:

- 23.1 Complete restoration medium (CD/DVD/etc.) of the operating system and the application software must be supplied.**
- 23.2 Purchased licenses, software keys & dongles must be provided at any time during and after the warranty period on free of charge basis whenever required by DRMS for a minimum period of ten years starting from the date of installation and commissioning.**
- 23.3 Where locally supplied computers, laptops & printers are offered, the offered model should be from well known manufacturer.**

24. Pricing must include services of sale, shipment, transportation, delivery from port to site or to Main Medical Stores, installation, pre-installation (if needed), training, commissioning, warranty and bringing the equipment into service.

25. Custom clearance of goods shall be the responsibility of the Jordanian Armed Forces (JAF), however, suppliers shall bear all costs incurred by handling charges and any demurrage charges or extra expenses incurred by the port's corporation (including expenses caused by delay in presenting the necessary shipment documents for either clearing or transporting the goods to the required location mentioned in the final order, delivery note issuing charges, unloading charges, local shipping charges etc.). The supplier is also responsible for providing of all relevant shipping documents, together with the delivery order(s).

26. a. DRMS has the right to increase the awarded quantities by a percentage not exceeding 35% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.

b. DRMS has the right to decrease the awarded quantities by a percentage not exceeding 50% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.

27. a. Bidder is not allowed to submit more than one offer for the same item whether that's solely or in coalition or partnership with other bidders.

b. Bidder is allowed to include within their offer optional alternatives for the same offered item from the same manufacturer.

28. The supplier must furnish DRMS with a guarantee stamped and legalized by the Notary Public equals to (115%) of the total value of the awarded equipment valid for twelve months from the date of final acceptance of the equipment by DRMS.

29. Training:



- 29.1 For items where abroad service training courses are required in technical specifications, offers must include a certified service training program for at least 3 working days at a reputable center abroad recognized by the manufacturer for at least one biomedical engineer or biomedical technician; all costs inclusive, air tickets, , boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.
- 29.2 For items where abroad user training courses are required in technical specifications, offers must include a certified operator training program at a reputable center abroad recognized by the manufacturer for at least one operator; all costs inclusive, air tickets, boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.
- 29.3 The period of the training courses must be according to the manufacturer's program excluding traveling days and must be stated clearly in the technical offer.
- 29.4 Training Programs must conform to the following standards:
- User training must comprise understanding and use of operation manual(s), correct and safe operation of the equipment, as well as user preventive maintenance and calibration.
 - Service training must comprise: theory, understanding and use of service manual(s), calibration, preventive maintenance procedure, and practical troubleshooting and repair exercises, and must be conducted by professional instructors employed or authorized by the system manufacturer.
 - Service training must be conducted on a system of identical make, model, and configuration to that purchased by DRMS, and designated by the manufacturer or the local agent for training purposes.
 - Certificates must be endorsed and officially sealed by the system manufacturer, legally empowering trainees to engage in user and service activities according to operation and service manual(s).
 - Where applicable, offers must include an on-site user and service training.
30. For offers submitted in Jordanian dinars, payment will be either by wire transfer or by cheque after final acceptance of good, any other way of payment will be rejected.



Attachment 1

#	Equipment
1	Adjustable Auto Pipettes
2	Resuscitation Bag
3	Laryngoscope Set
4	Oxygen Flow meter wall type/ single
5	Regulator Suction with canister, wall vacuum outlet
6	Oxygen Regulator for Oxygen Cylinders
7	Pulse Oximeter, Finger type
8	Oxygen Cylinder
9	Doppler, portable
10	Diagnostic set, Portable
11	Direct Ophthalmoscope, Portable
12	Otoscope, Portable
13	Air Mattress System, homecare
14	Stethoscope
15	Aneroid Sphygmomanometer
16	Video Assisted Laryngoscope, portable
17	Scale, Manual
18	Wood's Light
19	Cough Pressure, Normal Saline
20	Rehabilitation Walking Parallel Bars, non-powered
21	Therapy Mat
22	Medical Ball All Size
23	Dumbbells Rack with complete set of dumbbells
24	Crutches
25	Shoulder wheel
26	Mobile Mirror
27	Cuff Weights
28	Walker, different sizes
29	Patient Elbow Stick
30	Rehabilitation Training Ladder
31	Rehabilitation Suspension Frame
32	Exercise Band All Size (Theraband)



33	<i>Lens trial set</i>
34	<i>Wheel Chair</i>
35	<i>Commode Chair</i>
36	<i>Bassinet (Baby Cot)</i>
37	<i>Resuscitation Cart (Crash Cart)</i>
38	<i>Medication Cart</i>
39	<i>Cart, Drawers</i>
40	<i>Examination Couch, Manual</i>
41	<i>Gynaecology Examination Table, Manual</i>
42	<i>Examination Table, Neonates, Manual</i>
43	<i>Intravenous Pole, Mobile Stand</i>
44	<i>DDA Cabinet</i>
45	<i>Stainless steel Multipurpose Trolley</i>
46	<i>Cabinet, Instrument, Operation Theatres</i>
47	<i>Dressing Cart</i>
48	<i>Stainless steel wire shelving unit</i>
49	<i>Paper Trolley</i>
50	<i>Stainless Steel Sink (Clean up counter)</i>
51	<i>Scopes Cabinet</i>
52	<i>Mayo Table</i>
53	<i>Table, Instrument</i>
54	<i>Stool, Adjustable, Doctor</i>
55	<i>Stool, Adjustable, Operation Theatres</i>
56	<i>Carts, linen/laundry, soiled, Double</i>
57	<i>Closed distribution trolley</i>
58	<i>Step Ladder, Conductive, Double</i>
59	<i>Step, Surgeon, Single</i>
60	<i>Kick Bucket</i>
61	<i>Mobile Stand for Oxygen Cylinder</i>
62	<i>Stainless Steel Wire Basket, 1 STU</i>
63	<i>Cart, Plaster</i>



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Annex 6: Medical Furniture

Item 1	Haemodialysis Electric Chair	Qty. (8)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	To be used as a haemodialysis chair, it should be stated clearly in the catalogue that the offered model is suitable for haemodialysis therapy		
2	Heavy-duty maintenance-free unit		
3	Seamless upholstery with high-grade finish for highest level of hygiene, 220 * 60 * 10 cm approximately.		
4	Over all dimensions (Length X Width X Height) 230 x 90 x 60 cm approximately		
5	Minimum of two independent electric motors for adjustment of back and foot sections		
6	Sitting , Bed, and Trendelenburg Positions		
7	Safe working load not less than 200 Kg		
8	The chair should be designed for patient safety & comfort		
9	The chair should be constructed from a hygienic material which can be easily cleaned		
10	Rotatable Armrests, folding upwards on both sides		
11	Removable footrest board ,Adjustable (manually or electrically),		
12	Upholstery of visco foam armrest for patient comfort		



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Annex 6: Medical Furniture

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
13	Head bolster pillow.		
14	Twin swivel castors with locking system		



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Annex 6: Medical Furniture

Item 2	Medical/ Surgical Ward Bed, Electrical	Qty. (142)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Durable & heavy duty bed from a reputable well known manufacturer		
A	Patient bed		
	1- Heavy-duty construction suitable for rugged use		
	2- Safe working load of the bed to be at least 220 Kg.		
	3- The dimensions of the sleeping surface platform to be minimum of (87*200) cm.		
	4- Bed extension		
	5- Mattress for bed extension to be prices separately (for 20 beds only)		
	6- Flat sleep surface made from heavy duty material, at least head section should be radiolucent		
	7- The bed must comply with the international standard IEC/ EN 60601-2-52		
	8- Configuration: Four sections platform: - Backrest (head of bed) section - Seat section		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	- Thigh section - Foot (calf section)		
	9- The bed should be fully electrically operated; the following manoeuvres must be included: - a- Height adjustment of the bed: ≤ 40 cm to ≥ 75 cm. (measured without mattress from floor to the top of the platform) - b- Backrest adjustable: 0° to $\geq 60^\circ$ - c- Trendelenburg/ Reverse trendelenburg: $+12^\circ/-12^\circ$ or more		
	10- Height adjustment technique: Scissors type		
	11- Clearance between dropped-down side rails and the floor on bed's lowest position (under-bed clearance) should be at least 10 cm		
	12- Easy released manual CPR, it should be fully accessible even when side rails are in lowest position.		
	13- Backrest (head of bead) angle display		
	14- Left and right side rails: • Split and heavy duty model • With embedded integrated caregiver control panels on both sides of the bed (upper left and upper right) on the outer sides of the rails. • At least one embedded patient control panel at the inner side of the side rail. • The side rails can be manually raised up and dropped down with damping and top locking mechanism. • With safe gap concept that prevents patient head or limbs entrapment (free of hazardous gaps). • Side rails must cover at least $\frac{2}{3}$ of the sleeping platform		
	15- Heavy duty non-metallic Headboard and Footboard, at least headboard should be removable.		
	16- Four heavy-duty medical grade electro-conductive, non-marking castors of not less than 15 cm diameter.		



Annex 6: Medical Furniture

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	17- Central brake system with steering function		
	18- Four original protective revolving rubber bumpers: Two of which should be located at the corners of the bed end, the other two should be located at the head of the bed.		
	19- At least two IV-pole sockets		
	20- One compatible IV pole with double hooks		
	21- Drainage bag hook located at each side of the bed		
	22- Sleeping surfaces: - a- Must cover the whole sleeping surface platform - b- Pressure ulcer preventive - c- Foam core - d- At least 14 cm thickness - e- Maximum patient weight limit ≥ 150 kg - f- Fire retardant, anti-microbial and anti-fungus - g- Complete with non-latex, fluid resistant and washable cover, welded or with concealed zip		
	23- All available options and accessories must be offered and priced separately.		
	24- A list of standard accessories for the offered model		
B	Bedside Cabinet		
	1- Standalone.		
	2- Heavy-duty and robust.		
	3- Complete with a minimum of one drawer.		
	4- Lower cabinet.		
	5- Mounted on four heavy-duty castors.		
	6- Material, colour and design must be compatible with the beds and all available colours to be submitted with the offered.		
C	Over-bed table.		
	1- Standalone		



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Annex 6: Medical Furniture

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	2- Heavy-duty and robust.		
	3- Mounted on four heavy-duty castors.		
	4- Material, colour and design must be compatible with the beds and all available colours to be submitted with the offered.		
D	All three components (patient bed, bed side cabinet and over bed table should be from the same manufacturer.		
E	Abroad service training for 2 biomedical engineers/ technicians as per special terms		



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Annex 6: Medical Furniture

Item 3	ICU Patient Bed, Electric	Qty. (18)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Durable & heavy duty bed from a reputable well known manufacturer		
A	Patient bed		
	1- High acuity ICU bed: It must be stated clearly in the original catalogue that the offered item is intended for critical care.		
	2- Heavy-duty construction suitable for rugged use.		
	3- Safe working load of the bed to be at least 240 Kg		
	4- The dimensions of the sleeping surface platform to be a minimum of (87 x 200) cm (without bed extension).		
	5- Bed extension with mattress must included		
	6- The dimensions of the mattress (sleeping surface) to cover the whole sleeping platform		
	7- Flat sleep surface made from heavy duty material		
	8- Configuration: Four sections platform: - Backrest (head of bed) section - Seat section		



Annex 6: Medical Furniture

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	- Thigh section - foot (calf section)		
	9- Radiolucent back section (head of bed)		
	10- The bed should be fully electrically operated; the following manoeuvres must be included:		
	a- Height adjustment of the bed: ≤ 45 cm to ≥ 80 cm. (measured without mattress from floor to the top of the platform)		
	b- Backrest adjustable: 0° to $\geq 65^\circ$		
	c- Knee gatch (break): 0° to $\geq 15^\circ$		
	d- Foot: 0° to $\geq 20^\circ$		
	e- Trendelenburg/ Reverse trendelenburg: $+14^\circ/-14^\circ$ or more		
	f- Cardiac chair position (one button activation)		
	11- Zero clearance between mattress and headboard		
	12- Backrest and leg section movements are accompanied by auto-regression to reduce pressure on the abdomen.		
	13- Clearance between dropped-down side rails and the floor on bed's lowest position (under bed clearance) should be at least 10 cm		
	14- CPR, manual, easy released. CPR should be fully accessible even when side rails are in lowest position.		
	15- Liquid spill proof of IPX 4 degree or higher		
	16- Back-up battery		
	17- Regular Ac operation must be independent of battery status.		
	18- Built in electronic weighing scale with a digital readout on an LCD display; display should be integrated in the bed control panel		
	19- Integrated patient exit alarm		
	20- Backrest angle digital display		



Annex 6: Medical Furniture

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	21- Left and right side rails: - Split and heavy duty model - With embedded integrated caregiver control panels on both sides of the bed (upper left and upper right) on the outer side of the rails. - The side rails can be manually raised up and dropped down with damping and top locking mechanism. - With safe gap concept that prevents patient head or limbs entrapment (free of hazardous gaps). - Maximum height of side rail above the sleep surface platform ≥ 40 cm to prevent patient fall - Side rails must cover at least $\frac{2}{3}$ of the sleeping platform and at the same time does not cover the whole sleeping surface to facilitate patient exit in emergency cases (stuck side rails).		
	22- Heavy duty non-metallic removable Headboard and Footboard.		
	23- Four heavy-duty medical grade electro-conductive, non-marking castors of not less than 14 cm diameter.		
	24- Central brake system with steering function		
	25- Override backup pedal to control bed height.		
	26- Four original protective revolving heavy duty bumpers		
	27- At least two IV-pole receptacles to be located at two sides of the bed.		
	28- One compatible IV pole with double hooks		
	29- Drainage bag hook located at each side of the bed		
	30- Sleep Surface: a. Must cover the whole sleeping surface platform b. Must be suitable to ICU patients (visco-elastic foam core) c. Foam core d. At least 14 cm thickness		



Annex 6: Medical Furniture

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	e. Foam density should be suitable to ICU patients to prevent pressure ulcers f. Maximum patient weight limit ≥ 150 kg g. Fire retardant, anti-microbial and anti-fungus h. Complete with non-latex, fluid resistant and washable cover, welded or with concealed zip		
	31- All available options and accessories must be offered and priced separately.		
	32- A list of standard accessories for the offered model (optional).		
B	Bedside Cabinet		
	1- Standalone.		
	2- Heavy-duty and robust.		
	3- Complete with a minimum of one drawer.		
	4- Lower cabinet.		
	5- Mounted on four heavy-duty castors.		
	6- Material, colour and design must be compatible with the beds and all available colours to be submitted with the offered.		
C	Over-bed table.		
	1- Standalone		
	2- Heavy-duty and robust.		
	3- Mounted on four heavy-duty castors.		
	4- Material, colour and design must be compatible with the beds and all available colours to be submitted with the offered.		
D	All three components (patient bed, bed side cabinet and over bed table should be from the same manufacturer.		
E	Abroad service training for 2 biomedical engineers/ technicians as per special terms		



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Annex 6: Medical Furniture

Item 4	Delivery Bed	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	From a reputable well-known brand		
2	Multi-positions birthing bed designed to meet all labour, delivery, recovery and post-partum needs.		
3	Foot section can easily retracted down to transform the bed to delivery position from a regular hospital bed position (without detaching the foot section)		
4	Safe working load ≥ 220 kg		
5	Electrically operated model with adjustable height (≤ 60 cm to ≥ 100 cm) and backrest (0° to 60° or better)		
6	Trendelenburg position		
7	Automatic seat (pelvic) tilt		
8	Easy released manual CPR		
9	Seat section with cut-out area		
10	Battery back-up type		
11	Left and right side rails: With embedded integrated caregiver & patient		



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Annex 6: Medical Furniture

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	control panels The side rails can be manually raised up and dropped down with damping and top locking mechanism.		
12	Foot supports.		
13	At least one IV pole		
14	Heavy duty non-metallic removable headboard		
15	Large antistatic castors with central brake and steer.		
16	Fluid basin.		
17	Mattress: - a- Dimensions (L*W*H): approximately 195*90*12 cm or better - b- Foam core - c- Washable cover		



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Annex 6: Medical Furniture

Item 5	Transport Stretcher, Mobile, Hospital	Qty. (63)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The stretcher shall be used as a Transport Stretcher to transfer patients between different hospital departments. It shall provide a high level of comfort and safety for the patient while providing the caregiver with an advanced patient transport system having advanced mobility features.		
2	From a well-known manufacturer, heavy duty design; the stretcher should be well constructed to withstand typical abuse and cleaning		
3	Dual column design		
4	Height adjustable via a foot operated hydraulic pump at each side of the trolley		
5	Backrest and trendelenburg adjustable via pneumatic cylinders.		
6	Overall length: ≈ 210 cm		
7	Overall width: min ≈ 75 cm. (side rails down)		
8	Patient surface should be at least: $65 * 190$ cm		
9	Safe working load: ≥ 300 Kg.		
10	It shall have controls for the following:		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	a- Height range adjustment (foot operated): Low ≤ 60 cm High ≥ 85 cm.		
	b- Backrest: 0° to 90° .		
	c- Trendelenburg and reverse Trendelenburg (hands-free control): $\geq \pm 15^{\circ}$.		
11	It shall include an 8 cm thick patient mattress that is conductive and flame resistant.		
12	Push handles.		
13	Foldable side rails.		
14	Rubber bumpers		
15	Four integrated IV receptacles.		
16	One IV pole with dual IV hooks.		
17	Integrated oxygen bottle holder		
18	Large (min ≈ 20 cm diameter) swivel/steerable medical grade antistatic castors with brakes.		
19	Central brake system		
20	A list of standard accessories for the offered model		



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Annex 6: Medical Furniture

Item 6	Wheel Chair, Adult	Qty. (51)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Heavy duty design		
A	Wheels:		
	i. The user propelled wheels should be 24 inches in diameter mounted into the rear of both side frames and should have a push rim attached with toggle or lever wheel locks		
	ii. Swivel casters (five to eight inches in diameter) should be mounted to the front of both side frames.		
	iii. Wheels shall be tubeless or air free.		
B	Seat and Backrest:		
	1- The wheelchair should have collapsible seat and backrest.		
	2- The wheelchair should have some type of armrest, and these armrests shall be adjustable in height and pivoting or removable for ease of transfers.		
	3- The wheelchair should have leg rests or footrests, and they shall have adjustable lengths and either detachable or swing-away features for ease of transfer. Footrests should either flip-up or fold and should have impact guards.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	4- The wheelchair should have anti-tip devices and should not tip on inclines with slopes of up to 15°.		
	5- The wheelchair upholstery should pass applicable standards for flame resistance.		
	6- Approximate overall dimensions (w x L x h): 65 x 95 x 80 cm.		



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Annex 6: Medical Furniture

Item 7	Wheel Chair, Paediatric	Qty. (13)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
*	Heavy duty design		
A	Wheels:		
	1- The user propelled wheels should be 24 inches in diameter mounted into the rear of both side frames and should have a push rim attached with toggle or lever wheel locks		
	2- Swivel casters (five to eight inches in diameter) should be mounted to the front of both side frames.		
	3- Wheels shall be tubeless or air free.		
B	Seat and Backrest:		
	1- The wheelchair should have collapsible seat and backrest.		
	2- The wheelchair should have some type of armrest, and these armrests shall be adjustable in height and pivoting or removable for ease of transfers.		
	3- The wheelchair should have leg rests or footrests, and they shall have adjustable lengths and either detachable or swing-away features for ease of transfer. Footrests should either flip-up or fold and should have impact guards.		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	4- The wheelchair should have anti-tip devices and should not tip on inclines with slopes of up to 15°.		
	5- The wheelchair upholstery should pass applicable standards for flame resistance.		
	6- Approximate overall dimensions (w x L x h): 50 x 75 x 80 cm.		



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Annex 6: Medical Furniture

Item 8	Bassinet, Hospital (Baby Cot)	Qty. (34)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	Dedicated for hospital use		
3	The bassinet shall be constructed of a seamless transparent shock absorbent acrylic/ plastic material or equivalent.		
4	The cart shall be constructed from epoxy-coated steel or stainless steel, bassinet should fit securely on the cart and can be removed easily for cleaning and disinfection purposes.		
5	The bassinet shall have front and back handgrips.		
6	The bassinet shall have a nameplate holder.		
7	The mattress shall be made of a material that is durable and with washable cover.		
8	The mattress shall fit snugly in the bassinet without gaps between it and the sides.		
9	Four swivel castors of at least 70 mm diameter, at least 2 with brakes		
10	Any other options to be quoted separately (i.e. storage cabinets, drawers, etc...)		



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Annex 6: Medical Furniture

Item 9	Resuscitation Cart (Crash Cart)	Qty. (29)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	This cart should be an advanced design that manoeuvrable, tightly organized with easy access to all of its parts.		
3	Heavy duty design		
4	It should be constructed from polymer material		
5	It should be mounted on full-swivel casters with brakes with at least 10 cm diameter		
6	Ergonomic handle		
7	It should have a quick release master security latch/lock mechanism with plastic seals that secures the entire cart		
8	All-round or corner bumpers		
9	It should include at least 5 drawers as following:		
	a- One small size medication drawer (3" height) with dividers		
	b- Three (or more) multipurpose medium size		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	drawers (6" height) with dividers.		
	c- One (or more) large drawer (9" height) with dividers.		
10	It should have the following features and accessories as a minimum:		
	a- Defibrillator shelf for mounting Defibrillator/Monitor		
	b- Oxygen tank holder with oxygen cylinder with regulator		
	c- Sharps container with holder		
	d- Waste bin with holder		
	e- Back board mounted to the front or back of cart		
	f- One IV pole		



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Annex 6: Medical Furniture

Item 10	Medication Cart	Qty. (11)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	The medication cart shall be a unit-dose cart with individual bins or drawers for each patient's dosage.		
3	Ergonomic heavy duty design		
4	It should be constructed from polymer material		
5	It should include a work upper surface.		
6	At least 30 large storage space bins of approximate size 20 cm*10 cm*14 cm (L*W*H)		
7	Large lower utility drawer with removable adjustable dividers (3 longitudinal sections)		
8	Master lock or locking mechanism that secures the entire cart and that must be unlocked before any individual compartment can be opened		
9	A push handle.		
10	All-round or corner bumpers		
11	Waste container		
12	The cart shall be mobile on large swivel casters with locks		



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Annex 6: Medical Furniture

Item 11	Cart, Drawers	Qty. (10)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Ergonomic heavy duty design		
2	It should be constructed from corrosion proof polymer material		
3	Supply cart with 5 drawers: - Three small drawers with dividers - One Medium size drawer - Large lower utility drawer		
4	A push handle.		
5	Master lock or locking mechanism		
6	The cart shall be mobile on large swivel casters with locks		
7	Wrap around bumper		
8	Waste container		
9	All-round or corner bumpers		



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Annex 6: Medical Furniture

Item 12	Examination Couch	Qty. (21)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Fixed type examination couch		
2	Heavy-duty design and construction		
3	Stainless steel or epoxy-coated steel frame		
4	Approximate overall dimensions (H x W x L): 85 x 60 x 200 cm		
5	The surface shall be at least 5 cm thick, padded and upholstered with wear-resistant and disinfectant tolerant material upholstered should be well padded with surface made from durable easy-to-clean and disinfect PVC or similar material.		
6	Adjustable back rest with secure locking mechanism		



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Annex 6: Medical Furniture

Item 13	Gynaecology Examination Table	Qty. (5)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	It shall be constructed from steel /stainless steel or epoxy coated steel.		
2	Height adjustable (electric or hydraulic): ≤ 60 cm to ≥ 95 cm or better		
3	It shall have adjustable, spring assisted backrest (0° - 65° or better) with self-locking mechanism		
4	Seat section with cut-out area for gynaecology procedures		
5	The surface shall be 5 cm thick, padded and upholstered with wear-resistant and disinfectant tolerant material.		
6	Approximate overall dimensions of the mattress: 140 * 60 cm		
7	Safe working load ≥ 200 kg		
8	Large swivel castors with brakes (preferable)		
9	It shall include the following accessories:		
	a- Leg Support (pair), height & angle adjustable		
	b- Paper roll holder		
	c- Stainless steel pan		



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Annex 6: Medical Furniture

Item 14	Examination Table, Neonates	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Working height: approximately 90 cm		
2	Table top length: approximately 100 cm		
3	Table top width: approximately 50 cm		
4	Upholstered table top and end panels to keep children safe and secured from rolling off during examination, upholstery should be ultra-comfort and seamless		
5	Built-in weighing scale: - With digital readout in Kg - Range from 500g up to 10 Kg or better		
6	Paper roll holder at one end		
7	At least one large drawer		
8	Lower cabinet with double hinged doors		
9	Constructed entirely from a high quality corrosion resistant material with no sharp edges		



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Annex 6: Medical Furniture

Item 15	Intravenous Pole, Mobile stand	Qty. (236)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	Constructed entirely from high-quality stainless steel.		
3	Equipped with at least four Ram's Horn style hooks.		
4	Height adjustable by means of a telescoping upright rod.		
5	The selected height to be securely fixed via a twist lock, knob handle		
6	Mounted 5 antistatic anti-scratch swivel-type castors.		



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Annex 6: Medical Furniture

Item 16	DDA Cabinet, Double Door, Wards	Qty. (21)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The unit should be constructed from heavy duty epoxy powder coated steel with enamelled finish & rounded corners		
2	The unit should have double doors (inner and outer) with a secure independent and different lock for each door		
3	The unit should have at least two shelves.		
4	The unit should be securely mounted on wall.		
5	No sharp edges		
6	Dimensions: 60*50*35 cm (H*W*D) approximately		



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Annex 6: Medical Furniture

Item 17	DDA Cabinet, Double Door, Pharmacy	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The unit should be constructed from heavy duty epoxy powder coated steel with enamelled finish & rounded corners		
2	Floor Mounted Unit		
3	One upper cabinet for Dangerous drugs with double doors (inner and outer) with a secure independent and different lock for each door and at least 3 adjustable shelves		
4	One lower cupboard with hinged doors for files with at least one adjustable shelf		
5	The unit should have double doors (inner and outer) with a secure independent and different lock for each door		
6	No sharp edges		
7	Dimensions: 180*100*40 cm (H*W*D) approximately		



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Annex 6: Medical Furniture

Item 18	Medication Cabinet (Non-Narcotics), Single Door, Wall mounted	Qty. (18)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	The unit should be constructed from heavy duty epoxy powder coated steel with enamelled finish & rounded corners		
2	The unit should have single door with a secure lock		
3	At least two shelves.		
4	The unit should be securely mounted on wall.		
5	No sharp edges		
6	Dimensions: 60*50*35 cm (H*W*D) approximately		



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Annex 6: Medical Furniture

Item 19	Multipurpose Trolley, Stainless Steel, 60 x 40 cm	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Entirely made from high quality stainless steel (304 or better)		
2	Heavy duty construction		
3	Four strong legs with heavy duty swivel castors.		
4	Two shelves with upper edges.		
5	No sharp edges allowed.		
6	Push handle.		
7	Dimensions for each shelf $\approx 60 \times 40$ cm (L*W).		



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Annex 6: Medical Furniture

Item 20	Stainless steel Multipurpose Trolley, 100 x 60 cm	Qty. (41)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	Entirely made from high quality stainless steel (304 or better)		
3	Four strong legs with heavy duty swivel castors.		
4	Two shelves with upper edges.		
5	No sharp edges allowed.		
6	Push handle.		
7	Dimensions for each shelf $\approx 100 \times 60$ cm (L*W).		



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Annex 6: Medical Furniture

Item 21	Cabinet, Instrument, Operation Theatres	Qty. (8)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Durable, compact, heavy duty construction, ergonomic design		
2	Stainless steel construction		
3	Two double hinged doors: stainless steel frame with glass window		
4	Heavy duty handles with key lock		
5	Inner stainless steel shelves with adjustable positions		
6	Lower cabinet with double hinged doors, handles, key lock and one stainless steel shelf		
7	No sharp edges		
8	Dimensions approximately (H*W*D): 180*100*40 cm		



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Annex 6: Medical Furniture

Item 22	Dressing Cart, 900 X 600	Qty. (18)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details			
Name of Manufacturer			
Model/ catalogue number			
Country of Origin for the offered model			
Country where the manufacturer is based			
Delivery time			
Full warranty period			

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	Should be designed to transport dressing supplies and instruments		
3	It shall not have side panels.		
4	Approximate overall dimensions approximately (W x D x H): 900 x 600 x 900 mm with 4-leg frame construction.		
5	It shall be made completely of medical grade stainless steel 304 or better with high quality finish to assure durability.		
6	Removable waste container		
7	The cart should have two shelves, the upper shelf should guard rails on 3 sides		
8	One large utility drawer under the top shelf		
9	It shall be mounted on 4 castors with brakes (at least 2)		



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Annex 6: Medical Furniture

Item 23	Dressing Cart, 700 X 500	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	Should be designed to transport dressing supplies and instruments		
3	It shall not have side panels.		
4	Approximate overall dimensions approximately (W x D x H): 700 x 500 x 900 mm with 4-leg frame construction.		
5	It shall be made completely of medical grade stainless steel 304 or better with high quality finish to assure durability.		
6	Removable waste container		
7	The cart should have two shelves, the upper shelf should guard rails on 3 sides		
8	One large utility drawer under the top shelf		
9	It shall be mounted on 4 castors with brakes (at least 2)		



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Annex 6: Medical Furniture

Item 24	Stainless steel wire shelving unit	Qty. (34)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Made entirely in stainless steel		
2	5 wire shelves.		
3	Heavy duty construction		
4	Approx. dimensions: 100*60*200 cm (L*D*H) each shelf should fit at least 3 standard baskets (30*30*60 cm).		
5	Both models should be quoted separately; mobile and fixed		



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Annex 6: Medical Furniture

Item 25	Paper Trolley	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Mobile on four castors with brake.		
2	Stainless steel construction.		
3	Width not less than 125 cm.		
4	To securely hold standard sterilization paper		



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Annex 6: Medical Furniture

Item 26	Stainless Steel Sink (Clean up counter)	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Constructed entirely of medical grade stainless steel (304 or 316).		
2	Floor stand model.		
3	Rear stainless steel rim (Back splash guard) (folded edge).		
4	Double tubs model, each tub approximate size: 600*450*350 mm (L*W*D).		
5	Adequate right working surface area must be available		
6	Hot and cold water connections for each tub.		
7	One mixer tap (swivel spout) <u>on each tub</u>		
8	One extractable water shower mounted over one mixer tap		
9	Two holes for the installation of cleaning guns		
10	Pressure rinsing gun:		
	a. Supplied complete with a variety of nozzles		



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Annex 6: Medical Furniture

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
	b. Wall mounted on heavy duty brackets.		
	c. Fingertip operation.		
	d. Heavy duty hose at least 1.5 meters long.		
	e. One gun to be connected to air only, the other one to be connected to both air and water.		
11	Lower cabinets (cupboards) with hinged or sliding doors with stainless steel shelves inside.		



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Annex 6: Medical Furniture

Item 27	Scopes Cabinet	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	It should be made of polymer or stainless steel frame.		
2	It should contain two lockable hinged doors.		
3	It should contain at least 6 scope brackets with label Holder for accepting two flexible endoscopes with their accessories.		
4	It should be mounted as recessed or as floor standing.		
5	Approximate overall dimensions : 2200x 600x550 mm		



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Annex 6: Medical Furniture

Item 28	Mayo Instrument Table	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design; should be well constructed to withstand typical abuse and cleaning		
2	Table top, support column and foot pedal should be constructed from heavy-duty stainless steel		
3	T-shape base that is constructed from heavy duty, shock resistant material that is easy to clean		
4	Height adjustable by foot operated hydraulic pump from 950 up to 1200 mm or more with damping mechanism when lowering the table		
5	Removable stainless steel tray with raised edges approx. 700 x 450 mm.		
6	Height and swivel blocking system		
7	Rounded corners and edges		
8	Double antistatic medical grade swivel castors with diameter of 75 mm or more		
9	Safe working load: 25 kg or more		



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Annex 6: Medical Furniture

Item 29	Table, Instrument	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Design: As per figure 		
2	Ergonomic heavy duty design that is suitable to transport heavy surgical instruments (up to 150 kg) inside the OR department		
3	It should be constructed from heavy duty medical grade stainless steel type 304 or better		
4	It should include two stainless steel solid shelves, solid and completely open without raised edges		
5	Without push handles		



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	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
6	All-round bumper or 4 corner bumpers		
7	It should be easy to clean and disinfect		
8	Antistatic castors with diameter of around 7.5 cm (2 with brakes)		
9	Approximate dimensions (L*W*H): 90*50*100 cm		



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Annex 6: Medical Furniture

Item 30	Stool, Adjustable, Doctor	Qty. (46)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Rolling swivel stool with round seat and backrest, heavy duty design		
2	The stool main frame should be constructed from stainless steel material with base and castors from an equivalent durable material		
3	The stool seat should be circular with 360 degree swivel and of minimum 15" diameter and made from high density foam with manually adjustable backrest.		
4	The seating should be hygienic and easy to clean		
5	Height adjustment from 500–700 mm approximately, hand operated		
6	It shall be mounted on five double swivel castors of 50 mm approximate diameter, at least two of them should be electrically conductive		
7	The stool should be without hand rests		
8	Loading capacity at least 120 kg		
9	The stool should have full circle heel rest.		



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Annex 6: Medical Furniture

Item 31	Stool, Adjustable, Operation Theatres	Qty. (12)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Rolling swivel stool with round seat and backrest, heavy duty design		
2	The stool main frame should be constructed from stainless steel material with base and castors from an equivalent durable material		
3	The stool seat should be circular with 360 degree swivel and of minimum 15" diameter and made from high density foam with manually adjustable backrest.		
4	The seating should be hygienic and easy to clean		
5	Height adjustment from 500–700 mm approximately, foot operated		
6	It shall be mounted on five double swivel castors of 50 mm approximate diameter, at least two of them should be electrically conductive		
7	The stool should be without hand rests		
8	Loading capacity at least 120 kg		
9	The stool should have full circle heel rest.		



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Annex 6: Medical Furniture

Item 32	Mobile Stool, Physiotherapist	Qty. (10)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Rolling swivel stool with round seat, heavy duty design		
2	The stool main frame should be constructed from stainless steel material with base and castors from an equivalent durable material		
3	The stool seat should be circular with 360 degree swivel and of minimum 15" diameter and made from high density foam with manually adjustable backrest.		
4	The seating should be hygienic and easy to clean		
5	Height adjustment from 500–700 mm approximately, hand operated		
6	It shall be mounted on five double swivel castors of 50 mm approximate diameter		
7	The stool should be without backrest and hand rests		
8	The stool should have full circle heel rest.		



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Annex 6: Medical Furniture

Item 33	Closed distribution trolley	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	Entirely made from heavy duty stainless steel.		
3	Four heavy duty swivel castors.		
4	Protective bumpers.		
5	Two inner shelves.		
6	Two hinged doors with heavy duty securing locking handle.		
7	No sharp edges allowed.		
8	Push handle.		
9	Dimensions for each shelf $\approx 60 \times 90$ cm.		
10	Height ≈ 100 cm		



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Annex 6: Medical Furniture

Item 34	Kick Bucket	Qty. (6)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Constructed entirely from high quality stainless steel.		
2	Mounted on at least 4 castors		
3	Single bucket.		
4	Minimum capacity 10 litres		



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Annex 6: Medical Furniture

Item 35	Mobile Stand for Oxygen Cylinder	Qty. (42)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Heavy duty design		
2	Stand with two castors.		
3	Push / pull handle.		
4	Variable size stands to suit several capacity cylinders should be quoted (1,2 & 7 cubic meters cylinders)		
5	Securing mechanism		



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Annex 6: Medical Furniture

Item 36	Stainless Steel Wire Basket, 1 STU	Qty. (90)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Made entirely in stainless steel medical grade 304 or better		
2	STU size: 28*28*58 cm approximately		
3	Heavy duty construction		



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Annex 6: Medical Furniture

Item 37	Cart, Plaster	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Compliance (Y/N), Notes	Brochure Page No.
1	Dedicated to plaster rooms		
2	Made entirely in stainless steel, medical grade 304 or better		
3	Two shelves, the upper one with anti-drip raised edges		
4	With stainless steel bowl holder on one side of the cart or with an aperture on the upper shelf for plaster bowl		
5	Removable stainless steel bowl/ bucket should be included of size at least 10 litres and should fit securely on the holder or the aperture		
6	At least 3 stainless steel drawers of different sizes (3" & 6" height) with dividers		
7	Four corner or all around bumpers		
8	Mounted on four large castors of at least 125 mm, at least two of the m with brakes		
9	Over all dimensions: 120*60*90 cm approximately		



Annex 6: Medical Furniture

SPECIAL TERMS

- Offers not complying with any of the special terms or the technical specifications shall be considered non-conforming with tender requirements.
 - Any vendor providing FORGED documents shall be disqualified from the current tender and banned from participating in any future RMS tenders.
 - Wherever term “based” is mentioned it refers to the country where the manufacturing company is founded & established.
1. All equipment must be the most recently released model/version which is equal to or higher than the range of the specifications of the required system (low, mid or high) and equal to or higher than the level of technology and required options mentioned in the technical specifications.
 2. Required certificates (must be submitted with the technical offer):
 - 2.1 FDA clearance (510K) for equipment of USA based companies.
 - 2.2 MDR (EU) 2017/745 certificate for equipment of EU (European Union) based companies.
 - 2.3 UKCA certificate For Equipment of Great Britain based companies (England, Scotland, Northern Ireland, and Wales).
 - 2.4 ARTG (Australian Register of Therapeutic Goods) certification or approval for Australian and New Zealand based companies.
 - 2.5 Establishment License with the relevant Device License issued by the Therapeutic Products Directorate for Equipment of Canadian based companies.
 - 2.6 PMDA (Pharmaceuticals and Medical Devices Agency) certification or approval for equipment of Japanese based companies.
 - 2.7 Swissmedic (Swiss agency for therapeutic products) certification or approval for equipment of Swiss based companies.
 - 2.8 Norwegian Medicines Agency certification or approval for equipment of Norwegian based companies.
 - 2.9 Only for class I medical equipment manufactured by companies based in one of the countries mentioned above, submission of either one of the certificates mentioned above or a free sale certificate in any of these countries shall be accepted.



Annex 6: Medical Furniture

2.10 For the following equipment:

- All X-ray equipment, MRI, ultrasound, and nuclear medicine systems (regardless where the manufacturing companies are based).
- Where the manufacturing companies are based in other origins than the mentioned in terms 2.1 - 2.8.

The following are required:

- a- At least two of the certificates mentioned above, one of which has to be FDA clearance (510K) (Only for class I medical equipment submission of certificates mentioned in 2.9 shall be accepted).
- b- Evaluation certificate from the Royal Medical Services for the same offered model with at least 80% passing grade.

If the evaluation is not applicable (based on purchasing committee perspective) bidder should submit a list of installation basis of the same offered model and/or previous models in at least two of the following hospitals (King Hussein Cancer Center, National Center for Diabetes Endocrinology and Genetic Diseases, Jordan University Hospital or King Abdullah University Hospital) with at least three years of operation, list should include: Name of hospital, Model installed, Quantity, and date of installation.

The purchasing committee has the right to officially contact any of these hospitals and disqualify any offer where the feedback is negative in operation, after sales service or local agent performance.

2.11 *The vendor is responsible to ensure through official documents that classified medical devices are manufactured in conformity with applicable quality system standards (ISO, IEC); (the international quality systems standard for medical device manufacturing ISO 13485) or ISO9001.*

2.12 *With each offer, bidders must provide a formally endorsed document issued by the manufacturer stating that the bidder is the sole certified agent for the offered item.*

2.13 *In all of the above cases (except 2.12) certificates must be formally endorsed by JFDA.*

2.14 *Any vendor not submitting all required certificates will be eliminated.*

3. *Official website of the manufacturer must be provided. The website must clearly demonstrate the history profile and manufacturing features of the company including the same offered model and its brochure.*

In case of inconsistency between the information on the website with the provided information of the local agent regarding any offered product, the committee has the right to eliminate that product from the awarding process.



Annex 6: Medical Furniture

4. *Offered items should be from reputable well known manufacturers and excellent experience in the field and shall have multiple installations of the same offered model and/ or previous models in RMS main hospitals with at least two years of operation and excellent experience in operation, after sales service & local agent performance; otherwise the purchasing committee has the right to request any of the following:*

- a) An evaluation certificate as mentioned in term 2.10.b.*
- b) A sample of the same offered model at any time during the purchasing process, the sample unit shall be delivered within three weeks from the date of a written notification; any vendor rejects to deliver a sample unit will be eliminated. Evaluation duration will be determined by the purchasing committee.*

Any offered item fail in the evaluation/assessment process will be rejected

5. *Vendors must specify the origin of the offered items and accessories in the technical offer.*
6. *Bidders must submit their reservations/queries regarding tender specifications and/or special terms within the first half of the tender closing period starting from the tender announcement date. Reservations/queries submitted after the end of this period shall be rejected.*
7. *Goods are to be brand new; manufacturing date of the delivered products should not exceed 18 months from the date of the final award.*
8. *Delivery period should be mentioned clearly; the purchasing committee has the right to reject any offer with delivery time exceeding 4 months.*
9. **Warranty:**

- a- Offers must include a full warranty for a period of a minimum of 24 months from the date of installation or 30 months from the date of receiving the items at the agreed location mentioned in the final order (whichever comes first).*

Warranty must include corrective & preventive maintenance activities as per manufacturer recommendations including:

- Required spare parts (free of charge)*
- Labour*
- Hardware*
- Software*
- Rechargeable batteries*

At the end of the warranty period, The supplier commits to implement final inspection of the submitted goods and submit the reports signed by the site chief engineer stating that the equipment are working properly as well as all preventive maintenance reports during the warranty period.



Annex 6: Medical Furniture

Warranty & installation are excluded for items mentioned in Attachment no.1 the purchasing committee has the right to exclude any other item not listed in the attachment and does not required installation and warranty.

- b- In the case where a delay in installation has occurred as a result of the supplier's dereliction and has exceeded a period of one month from the date of receiving the items, the approved warranty period will automatically be considered as 24 months from the date of installation.***
- c- If at any time during the warranty period the item becomes inoperative due to a technical fault the item must then be repaired by the supplier /local agent within a period of 5 working days from written notification, warranty will be extended according to downtime period.***
- d- If the delay exceeds 30 days the supplier must replace the item with a new identical functioning one (within the same delivery period mentioned in the final offer). In case the item was replaced by a new one, the warranty period mentioned in 9.a) above will start from the installation and commissioning date of the new item.***
- e- Local agent/ supplier is committed to transport and install any awarded item during the warranty period on free of charge basis to any location inside the country whenever required by Royal Medical Services, this should not include pre-installation requirements in the new site.***

10. All offered items (main unit) should be fully designed, manufactured, and labelled by their real original manufacturer in which all related testing, research, development and approvals went through.

Any relabelled products for the main unit (white-label manufacturing, OEM, or repackaging) are rejected.

11. One set of operation manual(s) and one set of service manual(s) including schematics and a spare-part list must be delivered with each unit, CD/DVD is acceptable. For large tenders, a certain agreed percentage of manuals per item may be agreed upon.

12. Where applicable, pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include removal of old system(s), any civil work, electrical work or site modification(s) necessary to accommodate the new system(s) according to manufacturers' specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s).



Annex 6: Medical Furniture

13. *Power requirements: where applicable either single phase 220V, 50Hz or 3-phase 380V. Systems with external transformers are considered conforming only if clearly stated in the technical specifications.*
14. *Technical offers must include clear original technical brochures/catalogues for all offered items.*
15. *Offers must include fully detailed technical offers and compliance sheets as a soft copy (either Microsoft office or Microsoft excel format) in addition to a hard copy, mentioning the exact model/catalogue number and country of origin of the offered item(s), full technical description/specifications and any accessories or options included in the offer.*
- Offer must clearly indicate the origin of the offered item and the country where the manufacturer of the offered items is based.*
16. *Compliance sheets must be as per the tabular format of the technical specifications in the tender documents, listing the required specifications on one column and a Yes or NO response to each point in the adjacent column, with reference to page and line numbers in the relevant technical brochure. Offers not complying with this term shall be rejected.*
17. *Qualifications and after sales service: The technical bid should contain all the necessary documents (training certificates) to prove the capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specifications of the manufacturer and the ability of the bidders for providing efficient after sales service conducted by authorized certified biomedical service engineers with minimum 2 years experience in the same field.*
18. *Accessories and consumables:*
- 18.1 *Any accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately.*
- All offered accessories and consumables must be approved by the manufacturer.*
- 18.2 *Technical offers must include a priced list for all accessories and consumables related to the required equipment as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) with prices fixed for a period of five years from the date of installation and commissioning with a maximum annual increase of 2%, any essential item not listed will be considered free of charge.*
- 18.3 *Accessories and consumables must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
- 18.4 *Where applicable, a start-up kit of accessories and consumable items must be provided with each system on a free-of-charge basis.*



Annex 6: Medical Furniture

19. Spare Parts:

- 19.1 *Technical offers must include a comprehensive and priced list of all spare parts related to the awarded equipment (including rechargeable batteries) as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) valid for a minimum period of five years with a maximum annual increase of 2%, commencing at the end date of the warranty period, any essential item not listed will be considered free of charge.*
- 19.2 *Spare parts must be priced according to their delivery destination either to Queen Alia International Airport or to RMS Main Medical Stores.*
- 19.3 *Prices of spare parts should be reasonable and will be taken into consideration during the purchasing process; the purchasing committee has the right to eliminate any offered item with unreasonable high prices of spare parts.*
- 19.4 *Delivery period of required spare parts should not exceed 2 months from the date of the final order.*

20. Spare parts, consumables and accessories availability must be guaranteed for a minimum period of ten years starting from the date of installation and commissioning.

21. Local agent is committed to sign a service contract with Royal Medical Services to perform all relevant maintenance for the awarded equipment (whenever required by DRMS within a period that does not exceed one year from the end date of the warranty period and if mentioned clearly in the specifications) without exceeding the original mentioned cost and as per mentioned terms within minimum required period.

22. Tender Awards:

- 22.1 *For the final list of offers having a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its' running cost (Total Cost of Ownership) over a period of seven years from the date of installation and commissioning. Only offers with the lowest total cost of ownership over a period of seven years from the date of installation and commissioning shall qualify for the award.*
- 22.2 *Running cost includes the value of consumables, accessories needed to operate the system over the same period as well as the cost of any service contract (where applicable).*



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23. For PC/Laptop based systems:

- 23.1 Complete restoration medium (CD/DVD/etc.) of the operating system and the application software must be supplied.**
- 23.2 Purchased licenses, software keys & dongles must be provided at any time during and after the warranty period on free of charge basis whenever required by DRMS for a minimum period of ten years starting from the date of installation and commissioning.**
- 23.3 Where locally supplied computers, laptops & printers are offered, the offered model should be from well known manufacturer.**

24. Pricing must include services of sale, shipment, transportation, delivery from port to site or to Main Medical Stores, installation, pre-installation (if needed), training, commissioning, warranty and bringing the equipment into service.

25. Custom clearance of goods shall be the responsibility of the Jordanian Armed Forces (JAF), however, suppliers shall bear all costs incurred by handling charges and any demurrage charges or extra expenses incurred by the port's corporation (including expenses caused by delay in presenting the necessary shipment documents for either clearing or transporting the goods to the required location mentioned in the final order, delivery note issuing charges, unloading charges, local shipping charges etc.). The supplier is also responsible for providing of all relevant shipping documents, together with the delivery order(s).

- 26. a. DRMS has the right to increase the awarded quantities by a percentage not exceeding 35% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.**
b. DRMS has the right to decrease the awarded quantities by a percentage not exceeding 50% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.
- 27. a. Bidder is not allowed to submit more than one offer for the same item whether that's solely or in coalition or partnership with other bidders.**
b. Bidder is allowed to include within their offer optional alternatives for the same offered item from the same manufacturer.
- 28. The supplier must furnish DRMS with a guarantee stamped and legalized by the Notary Public equals to (115%) of the total value of the awarded equipment valid for twelve months from the date of final acceptance of the equipment by DRMS.**



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29. Training:

- 29.1** *For items where abroad service training courses are required in technical specifications, offers must include a certified service training program for at least 3 working days at a reputable center abroad recognized by the manufacturer for at least one biomedical engineer or biomedical technician; all costs inclusive, air tickets, , boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.*
- 29.2** *For items where abroad user training courses are required in technical specifications, offers must include a certified operator training program at a reputable center abroad recognized by the manufacturer for at least one operator; all costs inclusive, air tickets, boarding, commuting, accommodation (minimum 3 star hotel on full board basis) and any extra costs.*
- 29.3** *The period of the training courses must be according to the manufacturer's program excluding traveling days and must be stated clearly in the technical offer.*
- 29.4** *Training Programs must conform to the following standards:*
- *User training must comprise understanding and use of operation manual(s), correct and safe operation of the equipment, as well as user preventive maintenance and calibration.*
 - *Service training must comprise: theory, understanding and use of service manual(s), calibration, preventive maintenance procedure, and practical troubleshooting and repair exercises, and must be conducted by professional instructors employed or authorized by the system manufacturer.*
 - *Service training must be conducted on a system of identical make, model, and configuration to that purchased by DRMS, and designated by the manufacturer or the local agent for training purposes.*
 - *Certificates must be endorsed and officially sealed by the system manufacturer, legally empowering trainees to engage in user and service activities according to operation and service manual(s).*
 - *Where applicable, offers must include an on-site user and service training.*

30. *For offers submitted in Jordanian dinars, payment will be either by wire transfer or by cheque after final acceptance of good, any other way of payment will be rejected.*



Attachment 1

#	Equipment
1	Adjustable Auto Pipettes
2	Resuscitation Bag
3	Laryngoscope Set
4	Oxygen Flow meter wall type/ single
5	Regulator Suction with canister, wall vacuum outlet
6	Oxygen Regulator for Oxygen Cylinders
7	Pulse Oximeter, Finger type
8	Oxygen Cylinder
9	Doppler, portable
10	Diagnostic set, Portable
11	Direct Ophthalmoscope, Portable
12	Otoscope, Portable
13	Air Mattress System, homecare
14	Stethoscope
15	Aneroid Sphygmomanometer
16	Video Assisted Laryngoscope, portable
17	Scale, Manual
18	Wood's Light
19	Cough Pressure, Normal Saline
20	Rehabilitation Walking Parallel Bars, non-powered
21	Therapy Mat
22	Medical Ball All Size
23	Dumbbells Rack with complete set of dumbbells
24	Crutches
25	Shoulder wheel
26	Mobile Mirror
27	Cuff Weights
28	Walker, different sizes
29	Patient Elbow Stick
30	Rehabilitation Training Ladder
31	Rehabilitation Suspension Frame
32	Exercise Band All Size (Theraband)



33	<i>Lens trial set</i>
34	<i>Wheel Chair</i>
35	<i>Commode Chair</i>
36	<i>Bassinet (Baby Cot)</i>
37	<i>Resuscitation Cart (Crash Cart)</i>
38	<i>Medication Cart</i>
39	<i>Cart, Drawers</i>
40	<i>Examination Couch, Manual</i>
41	<i>Gynaecology Examination Table, Manual</i>
42	<i>Examination Table, Neonates, Manual</i>
43	<i>Intravenous Pole, Mobile Stand</i>
44	<i>DDA Cabinet</i>
45	<i>Stainless steel Multipurpose Trolley</i>
46	<i>Cabinet, Instrument, Operation Theatres</i>
47	<i>Dressing Cart</i>
48	<i>Stainless steel wire shelving unit</i>
49	<i>Paper Trolley</i>
50	<i>Stainless Steel Sink (Clean up counter)</i>
51	<i>Scopes Cabinet</i>
52	<i>Mayo Table</i>
53	<i>Table, Instrument</i>
54	<i>Stool, Adjustable, Doctor</i>
55	<i>Stool, Adjustable, Operation Theatres</i>
56	<i>Carts, linen/laundry, soiled, Double</i>
57	<i>Closed distribution trolley</i>
58	<i>Step Ladder, Conductive, Double</i>
59	<i>Step, Surgeon, Single</i>
60	<i>Kick Bucket</i>
61	<i>Mobile Stand for Oxygen Cylinder</i>
62	<i>Stainless Steel Wire Basket, 1 STU</i>
63	<i>Cart, Plaster</i>



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Annex 7: Surgical Instruments

A: Dental Instruments

Item A-1	Maxillofacial Instruments, Operation Theatres	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Forceps for anterior upper teeth	2		
2	Forceps for anterior for lower teeth	2		
3	Forceps for Upper Premolar(Universal)	2		
4	Forceps for Lower Premolar(Universal)	2		
5	Forceps for Upper Right Molar	2		
6	Forceps for Upper Left Molar	2		
7	Forceps for Lower Molar(Universal)	2		
8	Forceps for Upper 3rd Molar(Universal) Bayonat	2		
9	Forceps for Lower 3rd Molar(Universal)	2		
10	Cryer Forceps for Upper(Anterior, Premolar, Root)	2		
11	Cryer Forceps for Lower(Anterior, Premolar, Root)	2		
12	Forceps for Upper Anterior Root	2		
13	Forceps for Lower Anterior & Premolar Root	2		
14	Forceps for Upper Posterior Root	2		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Forceps for Lower Posterior Root	2		
16	Forceps for Upper 3rd Molar Root	2		
17	Forceps for Lower 3rd Molar Root	2		
18	Straight Elevator Size 1,2,3	2		
19	Straight Elevator Coupland's Size 1,2,3	2		
20	Warwick James elevator Right	2		
21	Warwick James elevator Left	2		
22	Cryer Regular Elevator	2		
23	Freer Elevator	2		
24	Bone Rongeur	2		
25	Bone Chisel	2		
26	Surgical Wire Cutter	2		
27	Metal Cheek Retractor	2		
28	Variable Retractor	2		
29	2 KocherLangen pick Retractor	2		
30	3 Malleable Retractor	2		
31	Mitchel Trimer	2		
32	Dental Blade Handle	2		
33	Long Surgical Scissor curve	2		
34	Long Surgical Scissor straight	2		
35	Dental Surgical Mallet (Hammer) 200 gm	2		
36	Dental Surgical Mallet (Hammer) 300 gm	2		
37	Surgical Hardwire Cutter Max 2.2mm	2		
38	Long Needle Holder	2		
39	Dental Osteotome	2		
40	Dental Plate Cutter	2		
41	Tissue Forceps	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
42	Tissue Retractor	2		
43	Lower Border Retractor	2		
44	Anterior Ramus Retractor	2		
45	Iliac crest curette with stop	2		
46	Obwegeser wire twister	2		
47	Obwegeser wire loop forceps	2		
48	Dingman bone hold forceps, Shape (35.15.18)	2		
49	Dingman bone hold forceps, Shape (35.15.19)	2		
50	Obwegeser iliac crest retractor	2		
51	Weitlaner Wullstein retractor	2		
52	Tobold tongue depressor	2		
53	Tongue depressor	2		
54	Lip and cheek retractor with tongue depressor	2		
55	Dingman raspatory	2		
56	Obwegeser raspatory, Different sizes	2		
57	Obwegeser Mandible rim retractor	2		
58	Obwegeser retractor	2		
59	Obwegeser nasal spine retractor	2		
60	Obwegeser ramus clamp, Right	2		
61	Obwegeser ramus clamp, Left	2		
62	Bone bow spacer	2		
63	X-ray ruler	2		
64	Kretschmer reference pin	2		
65	Kretschmer fixation, 16m m	2		
66	Kretschmer fixation, 66m m	2		
67	Mini Lambotte Osteotomes 13cm Set Of 7	2		
68	Lambotte Osteotomes straight 10mm 24 cm	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
69	Smith bone spreader	2		
70	Rowe reposition, Right	2		
71	Rowe reposition, Left	2		
72	Tessier Maxillary mobilizer, Right	2		
73	Tessier Maxillary mobilizer, Left	2		
74	Luniatschek gauze packer	2		
75	Steinhauser bone hold forceps, 13cm	2		
76	Steinhauser bone hold forceps, 17.5cm	2		
77	Aufricht nasal retractor	2		
78	Obwegeser maxilla mobilizer	2		
79	Walsham universal septum forceps	2		
80	Obwegeser nasal septum osteotome	2		
81	Lip retractor maxilla	2		
82	Obwegeser soft tissue retractor	2		
83	Obwegeser chin retractor	2		
84	Bone Clamp, different sizes	4		
85	Wire Twister, different sizes	4		



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Annex 7: Surgical Instruments

Item A-2	Dental Instruments, Clinics	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
Maxillofacial Clinic				
1	Forceps for anterior upper teeth	4		
2	Forceps for anterior lower teeth	4		
3	Forceps for Upper Premolar(Universal)	4		
4	Forceps for Lower Premolar(Universal)	4		
5	Forceps for Upper Right Molar	4		
6	Forceps for Upper Left Molar	4		
7	Forceps for Lower Molar(Universal)	4		
8	Forceps for Upper 3rd Molar(Universal)	4		
9	Forceps for Lower 3rd Molar(Universal)	4		
10	Cryer Forceps for Upper(Anterior, Premolar, Root)	4		
11	Cryer Forceps for Lower(Anterior, Premolar, Root)	4		
12	Forceps for Upper Anterior Root	4		
13	Forceps for Lower Anterior & Premolar Root	4		
14	Forceps for Upper Posterior Root	4		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Forceps for Lower Posterior Root	4		
16	Forceps for Upper 3rd Molar Root	4		
17	Forceps for Lower 3rd Molar Root	4		
18	Straight Elevator Size 1,2,3	8		
19	Straight Elevator Coupland's Size 1,2,3	6		
20	Warwick James elevator Right	4		
21	Warwick James elevator Left	4		
22	Cryer Regular Elevator	4		
23	Freer Elevator	4		
24	Dental Blade Handle	4		
25	Long Surgical Scissor curve	4		
26	Long Surgical Scissor straight	4		
27	Surgical Hardwire Cutter Max 2.2mm	2		
28	Long Needle Holder	2		
29	Lip and cheek retractor with tongue depressor	2		
Orthodontics Clinic				
1	BAND PUSHER	5		
2	MOLAR BAND SEATER	5		
3	BAND REMOVER PLIER	5		
4	REYNOLDS PLIER	3		
5	BRACKET POSITIONING TWEEZER	5		
6	BUCCAL TUBE TWEEZER	3		
7	BRACKET REMOVER PLIER	5		
8	LIGATURE DIRECTOR TUCKER	3		
9	ORTHODONTIC PLIER FOR DENTELASTICS CURVED	40		
10	SEPARATING PLIER	5		
11	PLIER WEINGART	3		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
12	PIN AND LIGATURE CUTTER	10		
13	Hard Wire CUTTER	10		
14	Hard Wire CUTTER	3		
15	Distal End Cutter	10		
16	ADAMS PLIER	5		
17	BIRD BEAKS PLIER	5		
18	ADERER LONG PLIER	3		
19	PLIER CRIMPABLE	3		
20	ROUND TIPS SHORT PLIE	5		
21	Tweed ribbon arch pliers	3		
22	Tweed loop forming pliers	3		
Periodontics Clinic				
1	Periodontal Probes	10		
2	Naber probe (furcation)	4		
3	Manual sickle scaler single	4		
4	Manual sickle scaler double	4		
5	Manual sickle scaler curve	4		
6	Hoes manual scaler	2		
7	Chisel scaler	2		
8	PERIODONTAL FILES	2		
9	Surgical curettes single	2		
10	Surgical curettes double	2		
11	Universal curettes	5		
12	Gracey curettes kits of different sizes	2		
13	PERIODONTAL CHISELS small	2		
14	PERIODONTAL CHISELS large	2		
15	PERIODONTAL CHISELS curve	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	Bone file	2		
17	PERIODONTAL KNIVES Orben	2		
18	PERIODONTAL KNIVES Kirkland	2		
19	PERIODONTAL KNIVES Goldman & Fox	2		
20	TWEEZER CRANE-KAPLAN (POCKET MARKER) R	2		
21	TWEEZER CRANE-KAPLAN (POCKET MARKER) L	2		
22	Delicate Scissor straight	2		
23	Delicate Scissor curve	2		
General Dental Practice Clinic				
1	MIRROR HANDLE: Stainless steel single end.	60		
2	Mirror head Single Sided Has a single reflective surface	100		
3	EXPLORERS Double End	50		
4	EXPLORERS Double End sickle	60		
5	Tweezers	60		
6	Excavator	60		
7	Mixing spatula single end	10		
8	Mixing spatula double end	10		
9	Glass slab	10		
10	Alginate mixing spatula	10		
11	Alginate mixing bowl	5		
12	Metal Brush Cleaning Stainless steel Dental instrument	5		
13	Napkin holder	8		
14	Dental Cotton dispenser	8		
15	Dental Dappen Dish	8		
16	Dental Anesthesia Syringe	10		
17	Liner Applicator	8		
18	Amalgam Carriers	8		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
19	Matrix band ToffleMire	8		
20	Matrix band Universal	8		
21	Matrix band Ivory	8		
22	Amalgam Condensers different sizes	20		
23	Amalgam Burnisher	20		
24	Amalgam Carvers	20		
25	Composite Applicators (Different sizes)	20		
26	Endodontic explorers	6		
27	Rubber Dam Clamp placement plier	2		
28	Rubber Dam Puncher	2		
29	Rubber Dam Frame	2		
30	Endodontic Plugger different sizes	6		
31	MTA carrier	2		
32	MTA pluggers	2		
33	Dental bridge remover	2		
Pedodontics Clinic				
1	Forceps for Anterior Upper teeth (pedo)	3		
2	Forceps for Anterior Lower teeth (pedo)	3		
3	Forceps for Posterior Upper teeth (pedo)	3		
4	Forceps for Posterior Lower teeth (pedo)	3		
5	Forceps for Anterior Upper Root (pedo)	3		
6	Forceps for Anterior Lower Root (pedo)	3		
7	Forceps for Posterior Upper Root (pedo)	3		
8	Forceps for Posterior Lower Root(pedo)	3		
9	Mouth Props metal	3		
10	Mouth Props rubber or plastic	3		
11	Finger protector	3		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
12	Stainless steel crown curved scissors	2		
13	Stainless steel crown crimping plier	2		
Prosthodontics Clinic				
1	Wax knife	6		
2	Molding wax carver gritman	2		
3	Lecron wax carver knife- spoon	6		
4	Plaster knife	2		
5	Plaster spatula	4		
6	Dental flask universal	6		
7	Dental flask compressor clamp single	1		
8	Dental flask compressor clamp Hydrolyic	1		
9	Articulator simple hinge joint	6		
10	Articulator semi adjustable	1		
11	Metal dental tray dentate full upper different sizes	15		
12	Metal dental tray dentate full lower different sizes	15		
13	Edentulous Upper Metal Tray different sizes	15		
14	Edentulous Lower Metal Tray different sizes	15		
15	Dental Stone Saw	1		



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Annex 7: Surgical Instruments

Item A-3	Orthognathic Surgical Set	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Coronoid retractor	1		
2	Smiths spreader	1		
3	Tunnel retractor	1		
4	soft tissue retractors : a. Langen tissue retractor qty:4 b. malleable retractor qty:4 c.kocher langen pick retractor qty:4			
5	osteotoms : a. obwegeser nasal septal osteotome qty:2 b. lateral nasal osteotome qty:2			
6	soft tissue retractor : a. lip retractor maxilla qty:2 b. obwegeser soft tissue retractor qty:4 c. obwegeser chin retractor qty:2 d. tobold tongue depressor qty:3 e. tongue depressor qty:3 f. lip and cheek retractor with tongue depressor qty:3			



Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
7	muco-periosteal elevators: a. dental priosteal elevators qty:4 b. dingmanraspatory qty:2			
8	Diathermy	1		
9	Bone and ramus clamp: a. steinhauser bone hold forceps 13cm qty:1 b. steinhauser bone hold forceps 17.5cm qty:1			
10	Scalpel handle	1		
11	Special instrument to determine facial vertical dimension	1		
12	Hammer mallet	1		
13	ostetoms including splitting osteotoms: a. Mini lambotte osteotomes 13 cm qty: 3 b. Lambotte osteotomes straight 10mm 24 cm qty:3 c. obwegeser blade osteotome qty:1 d. obwegeser pterygoid osteotome qty:1			
14	Bone separator forceps smiths or equivalent.	1		
15	Row desimpaction forceps: a. right qty:1 b. left qty:1			
16	Maxilla mobilizer : a. Tessier maxillary mobilize (qty:1 right & qty:1 left) b. Obwegeser maxilla mobilize qty:2			
17	Wire cutter (heavy duty).	1		
18	Wire instruments : a. obwegeser wire twister qty:2 b. obwegeser wire loop forceps qty:2			
19	Bone holding forceps	1		
20	Nasal retractor	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
21	Wilsham's elevator (forceps)	1		
22	Original Sterilization Tray	1		



Annex 7: Surgical Instruments

B: Dressing Instruments

Item B-1	Dressing Set	Qty. (26)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Kidney Dish 20 cm (Medium)	1		
2	Gallipot 150 ml (Medium)	1		
3	Clamp, 16 cm	1		
4	Forceps 16 cm, Toothed	1		
5	Forceps 16 cm, Non-toothed	1		
6	Bandage Scissor 16 cm	1		



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Annex 7: Surgical Instruments

Item B-2	Dressing Set, Advanced	Qty. (22)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Dressing Scissor, 14.5 cm	1		
2	Bandage Scissor 16 cm	1		
3	Forceps 16 cm, Toothed	1		
4	Forceps 16 cm, Non-toothed	1		
5	Clamp, 16 cm	1		
6	Knife Handle #3	1		
7	Kidney Dish 20 cm (Medium)	1		
8	Gallipot 150 ml (Medium)	1		



Annex 7: Surgical Instruments

C: Gynecology Surgical Instruments

Item C-1	Total Abdominal Hysterectomy Set (TAH)	Qty. (3 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Sponge fcp.	2		
2	Towel clips	6		
3	Handle knife size: 10 short	1		
4	Handle knife size: 20 long.	1		
5	Needle holder short	1		
6	Needle holder long.	1		
7	Forceps tooth short	1		
8	Forceps tooth long	1		
9	Forceps non tooth short	1		
10	Forceps non tooth medium	2		
11	Forceps non tooth long	1		
12	Scissors tissue thin, long, curved	1		
13	Scissors tissue thin, short, curved	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
14	Scissors tissue wide, long	1		
15	Scissors tissue wide, short	1		
16	Stitch short	1		
17	Stitch long	1		
18	5 inches CVD.(Curved)	8		
19	7 inches STR. (Straight)	4		
20	9 inches STR. (Straight)	4		
21	Heavy kochers STR	2		
22	Heavy kochers CVD	2		
23	Papchoch FCP	2		
24	Tenaculum	1		
25	Mymectomy screw, medium	1		
26	Rushin forceps.	1		
27	yankauer suction tube (M).	1		
28	Abdominal suction tube (M).	1		
29	Kidney dishes, medium	1		
30	Kidney dishes large	1		
31	Self-retaining Retractor, Large, Round, Wide tips	1		
32	Doyen small	1		
33	Doyen medium	1		
34	Doyen large	1		
35	Morris Retractor small	1		
36	Morris Retractor medium	1		
37	Morris Retractor, large	1		
38	Deaver Retractor, small	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
39	Deaver Retractor, medium	1		
40	Deaver Retractor, large	1		
41	Farabove Retractor, small	1		
42	Farabove Retractor, medium	1		
43	Farabove Retractor, large	1		
44	RT angle FCP, short	1		
45	RT angle FCP, long	1		
46	Original sterilization tray	4		



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Annex 7: Surgical Instruments

Item C-2	TVH (Total Vaginal Hysterectomy Set)	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Sponge forceps	2		
2	Handle Knife (size 10), short.	1		
3	Handle Knife (size 20), long.	1		
4	Towel clips	8		
5	Needle holder (CVD, long)	1		
6	Needle holder (CVD, short)	1		
7	Needle holder (STR, long)	1		
8	Needle holder (STR, short).	1		
9	FCP tooth, short	1		
10	FCP tooth, long	1		
11	FCP Non tooth, short	1		
12	FCP Non tooth, medium	2		
13	FCP Non tooth, long	1		
14	Metallic catheter	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Sound.	1		
16	Scissors tissue (mayo), thin, long	1		
17	Scissors tissue (mayo), thin, short)	1		
18	Scissors tissue (mayo), wide, long	1		
19	Scissors tissue (mayo), wide, short.	1		
20	Stitch, short.	1		
21	Stitch, long.	1		
22	5 inches CVD.	12		
23	7 inches STR.	2		
24	9 inches STR.	2		
25	Fine kochers STR	3		
26	Heavy kochers CVD	3		
27	Vulsellum	2		
28	Tenaculum	2		
29	Alises	4		
30	yankauer suction tube (m)	1		
31	Papchoch	2		
32	RT angle FCP (long, fine tip).	1		
33	Breisky, thin blades	2		
34	Breisky, wide blades.	2		
35	Bladder retractor, thin blades	2		
36	Bladder retractor, wide blades	2		
37	Morris retractor long with thin blade.	2		
38	Speculum Sims, small	1		
39	Speculum Sims, large.	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
40	Kidney dishes, medium	1		
41	Kidney dishes, large	1		
42	Original sterilization tray	4		



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Annex 7: Surgical Instruments

Item C-3	Caesarean Section set	Qty. (8 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Lotion Bowel	1		
2	Scalpel Handle	2		
3	Sponge Holding Forceps	2		
4	Towel Forceps	4		
5	Mayo Higger Needle Holder	2		
6	Toothed Forceps	1		
7	Non-toothed Forceps	1		
8	Stitch Scissors	1		
9	Scissors Curved	1		
10	Suction	1		
11	Artery Forceps	4		
12	Morris Retractor	1		
13	Doyen Handle	1		
14	Green Armytage	4		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Wrigley Mid-Forceps	1		
16	Umbilical Cord Forceps	1		
17	Babcock Tissue Forceps	2		
18	Allis Forceps	2		
19	5 inches	6		
20	Fetal outlet forceps	1		
21	Original sterilization tray	2		



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Annex 7: Surgical Instruments

Item C-4	Episiotomy	Qty. (10 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Scalpel HDL no:3	1		
2	Blads NO.10	1		
3	Episiotomy scissor	1		
4	Mayo scissors STR 5.5"	1		
5	Mosquito FCP STR 5"	3		
6	Needle holder	2		
7	Original sterilization tray	1		



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Annex 7: Surgical Instruments

Item C-5	Intra-Uterine contraceptive device IUCD	Qty. (4 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Uterine sciss CVD 9"	1		
2	Forceps STR 9"	1		
3	Sponge holder FCP 9.5"	1		
4	Cusco spec MED	1		
5	Vulsellum FCP 9.5"	1		
6	Uterine sound 12"	1		
7	IUCD hook	1		
8	Sims speculum, medium size	1		
9	Original sterilization tray	1		



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Annex 7: Surgical Instruments

Item C-6	D & C	Qty. (8 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Sponge forceps	2		
2	Metallic catheter (Foleys) size 5	1		
3	Sims speculum, small	1		
4	Sims speculum, large.	1		
5	Vulsellum.	2		
6	Tenaculum.	1		
7	Hegars dilators: sizes: 3-12m. Required quantity :1 (from each size of the mentioned range)			
8	Sound.	1		
9	Sims curette double ended : Different sizes: a. very small qty:1 b. small qty:1 c. medium qty:1 d. large qty:1			
10	Ovum forceps, small	1		
11	Ovum forceps, large	1		
12	Ovum forceps, curved	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
13	Bunch biopsy forceps	1		
14	Non-tooth forceps	1		
15	Basket curette	1		
16	Kidney dish	1		
17	Original sterilization tray	1		



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Annex 7: Surgical Instruments

Item C-7	Laparotomy set	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Gross-maier dress fcps w rat	2		
2	Backhaus towel forceps	6		
3	Tohoku towel forceps	4		
4	Scalpel handle no 4	1		
5	Scalpel handle no 4l	1		
6	Scalpel handle no 3	1		
7	Tc metzenbaum scissors cvd	1		
8	Tc metzenbaum scissors cvd	1		
9	Tc metzenbaum scissors cvd	1		
10	Tc metzenbaum scissors cvd	1		
11	Tc metzenbaum scissors cvd	1		
12	Tc metzenbaum scissors cvd	1		
13	Tc suture scissors	1		
14	Tc suture scissors	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Tc mayo-lexer scissors bl-bl cvd	1		
16	Standard scissors bl-sh cvd	1		
17	Dressing forceps narrow	1		
18	Tissue forceps 1x2 t narrow	2		
19	Tissue forceps 1x2 t	2		
20	Tissue forceps 1x2 t	2		
21	De bakey atrauma fcps 2,0mm	2		
22	De bakey atrauma fcps 2,0mm	2		
23	De bakey atrauma fcps 2,0mm	2		
24	Gerald tissue fcps 1x2 t	1		
25	Ochsner haem fcps 1x2 t str	6		
26	Rochester-pean haem fcps str	6		
27	Halsted-mosquito fcps 1x2 t	6		
28	Halsted-mosquito fcps cvd	10		
29	Halsted-mosquito fcps	2		
30	Halsted-mosquito fcps 1x2 t	2		
31	Ochsner haem fcps 1x2 t str	2		
32	Ochsner haem fcps 1x2 t str	2		
33	Gross-maier dress fcps w rat	4		
34	Mikulicz perit clamp forceps	6		
35	Overholt-geissendoerfer fcps	2		
36	Overholt-geissendoerfer fcps	2		
37	Overholt-geissendoerfer fcps	2		
38	Mixter haemost forceps fig 1	2		
39	Deschamps ligat needle blunt	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
40	Koenig ligat.conduct. 19,5cm	1		
41	Tc crile-wood needleholder	2		
42	Tc mayo-hegar needleholder	2		
43	Tc wangensteen ndlh slend	1		
44	Tc de bakey needleholder	2		
45	Tc de bakey needleholder	2		
46	Roux retractor fig. 1	1		
47	Roux retractor fig 2	1		
48	Roux retractor fig 3	1		
49	Langenbeck retractor	2		
50	Langenbeck retractor	2		
51	Kocher-langenbeck retr 55x11	2		
52	Volkman retractor semisharp	2		
53	Fritsch a domin retr 45x75mm	2		
54	Mikulicz abdom retr 120x50mm	2		
55	Mikulicz abdom retr 85x35mm	2		
56	Haberer abdom spat 37/45mm	1		
57	Kirschner abdominal retractor	1		
58	Organ seizing fcps medium	2		
59	Nelaton grooved direct.16 cm	1		
60	Probe 20 cm/8"	1		
61	Needle case perforated	1		
62	Container 600x300x160 mm	1		
63	Perforated tray 480x260x50 mm	2		
64	Ident.label with text without hole	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
65	Frame, colour coded red	1		
66	Original sterilization tray	5		



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Annex 7: Surgical Instruments

Item C-8	Fine Surgical Set (Plastic Surgical Set)	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	FOERSTER swab forceps serrated, 240 mm	14		
2	BACKHAUS towel forceps, 110 mm	35		
3	Scalpel handle no. 3, 125 mm	14		
4	Scissors, fine, 115 mm, straight	7		
5	Scissor, 115 mm, sharp-sharp, curved	7		
6	METZENBAUM fino scissors,cvd., 145 mm	14		
7	ADSON forceps 1x2 teeth, 120 mm	14		
8	ADSON forceps serrated, 120 mm	14		
9	Mcindoe forceps serrated, 150 mm	7		
10	GILLIES forceps 1x2 teeth, 150 mm	7		
11	HALSTED mosquito forceps 125 mm,cvd.	42		
12	ROCH.OCHSNER hemostat.forceps str.,160mm	14		
13	BABY-MIXTER hemostatic forceps 180 mm	7		
14	HALSEY needleholder serrated, 130 mm	14		
15	CRILE WOOD needleholder 150 mm	14		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	Probe buttoned 1 mm	7		
17	GILLIES retractor, small, 180 mm	7		
18	SENN-MILLER retractor double sharp,160mm	7		
19	FREER septum elevat.shp/blunt, 185 mm	7		
20	Round bowl 18/8 diam. = 100 mm	14		
21	METZENBAUM scissors cvd. 180 mm	7		
22	OVERHOLT fino forceps Fig.3, 225 mm	7		
23	LERICHE hemostatic forceps,150 mm,cvd.	42		
24	MATHIEU retractor double pair	7		
25	WEITLANER retract.sharp 115 mm	7		
26	WEITLANER retract.blunt 115 mm	7		
27	MARTINI double curette 0/1	7		
28	Kidney bowl 18/10 small 20 cm	7		
29	Mcdonald elevator double 19 cm	7		
30	FRAZIER Suction tube 3 mm, 130 mm	7		
31	Round bowl 18/8 diam. = 150 mm	7		
32	KOCHER LANGENBECK retr.25x 6mm, 220 mm	7		
33	KOCHER LANGENBECK retr.35x 8mm, 220 mm	7		
34	MAYO 'safety needle' 14 cm	14		
35	Forceps DEBAKEY,str.,160mm, 1,5 mm	7		
36	Forceps DEBAKEY,str.,160mm, 1,5 mm	7		
37	ALLIS tissue forceps 15cm 4x5t	14		
38	BABCOCK seizing forceps 160 mm	14		
39	FOERSTER swab forceps serrated, 240 mm	14		
40	BACKHAUS towel forceps, 110 mm	35		



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Annex 7: Surgical Instruments

Item C-9	Minor Set, Gynecology	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	MAYO 'safety needle' 14 cm	2		
2	RAMPLEY sponge holding forceps 180 mm	2		
3	BACKHAUS towel forceps, 110 mm	4		
4	STANDARD scissors, sh/sh, 115 mm, curved	1		
5	MAYO scissors straight, 170 mm	1		
6	METZENBAUM scissors cvd. 18 cm	1		
7	Iris scissors 11 cm, curved	1		
8	METZENBAUM scissors cvd. 145 mm	1		
9	ADSON forceps 1x2 teeth, 120 mm	2		
10	Forceps dressing 14,5 cm	1		
11	Forceps tissue 1x2 t.130 mm	1		
12	Forceps DEBAKEY, str., 200mm, 2,0 mm	1		
13	SPENCER WELLS hemost. Forceps cvd., 130mm	4		
14	HALSTED mosquito forceps 1x2t.	4		
15	US Army retractor double pair	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	Roch. Ochsner hemostat.forceps	2		
17	Gemini mini diss/ligat.forceps	1		
18	WEITLANER retract.sharp 11,5cm	1		
19	THOMS ALLIS forceps 6x7 t.20cm	2		
20	BABCOCK seizing forceps 20 cm	2		
21	SENN-MILLER retractor double sharp,160mm	2		
22	CRILE WOOD needleholder 150 mm	1		
23	Mcdonald elevator double 19 cm	1		
24	CRILE MURRAY needleholder	1		
25	Scalpel handle no. 3, 125 mm	1		
26	Round bowl 18/8 diam. = 80 mm	1		
27	Kidney bowl 18/10 small 17 cm	1		
28	Wire basket 255x245x50 mm	1		
29	Round bowl 18/8 diam. = 60 mm	1		
30	VOLKMANN double curette sharp	1		
31	Container accessories , stainless steel screen basket 255 x 245 x 65 mm	1		



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Annex 7: Surgical Instruments

Item C-10	Instrument Set For Obstetrics/ Gynaecology Clinics	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Spaculum, bivalve, small	5		
2	Spaculum, bivalve, medium	15		
3	Spaculum, bivalve, large	10		
4	Ovum Forceps, straight	10		
5	Uterine sound	5		
6	Forceps, tooth	4		
7	Forceps, non-tooth	6		
8	Original sterilization tray	2		



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Annex 7: Surgical Instruments

Item C-11	Miscellaneous Instruments Set For Gynaecology	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Sims Spaculum, large	1		
2	Sims Spaculum, medium	2		
3	Sims Spaculum, small	1		
4	Vaginal Retractor, curved, large	1		
5	Vaginal Retractor, curved, medium	2		
6	Vaginal Retractor, curved, small	1		
7	Vaginal Retractor, straight, large	1		
8	Vaginal Retractor, straight, medium	2		
9	Vaginal Retractor, straight, small	1		
10	Fetal outlet forceps	4		
11	Original sterilization tray	1		



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Annex 7: Surgical Instruments

Item C-12	Gynaecology Laparoscopic Set	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Trocar, size 11 mm	3		
2	Trocar, size 6 mm	4		
3	Reduction sleeve, 11/5 mm	2		
4	Thread sleeve, for trocar size 6 mm	4		
5	Thread sleeve, for trocar size 11 mm	3		
6	Uterine grasping forceps, blunt jaws, with length 24 cm	2		
7	Uterine grasping forceps, for fixation and elevation of the uterus	2		
8	Grasping forceps, rotating, with multiple teeth, with manhes style ratchet, with connector pin for unipolar coagulation	2		
9	Dissecting and grasping forceps, Rotating, atraumatic, with connector pin for unipolar coagulation	3		
10	Kelly dissecting and grasping forceps, rotating, without ratchet, with connector pin for unipolar coagulation	3		
11	Grasping forceps, atraumatic, dismantling, u-spring handle, with connector pin for unipolar coagulation	3		



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	Minimum requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
12	Forceps, rotating, single action jaws, size 10 mm, length approx. 33-36 cm	2		
13	Scissors, rotating, serrated, Without ratchet, with connector pin for unipolar coagulation	2		
14	Hook scissors, rotating, without ratchet, with connector pin for unipolar coagulation	2		
15	Metzenbaum scissors, rotating, curved jaws, without ratchet, insulated, with connector pin for unipolar coagulation	2		
16	Biopsy punch forceps, rotating, with 2 Teeth, without ratchet	2		
17	Spoon forceps, rotating, without ratchet	2		
18	Bipolar coagulating forceps, width of jaws 1 mm, with connector pin for bipolar coagulation	3		
19	Bipolar coagulating forceps, width of jaws 3 mm, with connector pin for bipolar coagulation	3		
20	High frequency needle, insulated, for splitting and coagulation	2		
21	Coagulating and dissecting electrode, l-shaped, with connector pin for unipolar coagulation	2		
22	Puncture needle, luer-lock, diameter 1.6 mm	1		
23	Needle holder curved left, straight Handle, with ratchet	2		
24	T needle holder curved right, straight handle, without ratchet	2		
25	Needle holder and suture grasper, with automatic back spring straight , size 5 mm	2		
26	Endo loop ligature, with roeder knot, with absorbable synthetic thread, for single use, sterile, package of 12	2 Packs		
27	Knot tier, for extracorporeal knotting, size 5 mm, length approx. 30-33 cm	1		
28	Veress pneumoperitoneum needle, autoclavable, diameter	2		



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	Minimum requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
	2.1 mm, length 13 cm			
29	Veress pneumoperitoneum needle, autoclavable, diameter 2.1 mm, length 15 cm	2		
30	Grasping forceps, size 5 mm, length 30 cm	4		
31	Lymph node grasping forceps, size 5 mm, length approx. 33-36 cm	2		
32	Kelly dissecting and grasping forceps, rotating, Size 5 mm, length approx. 33-36 cm, with connector pin for unipolar coagulation	2		
33	Scissors, rotating, size 5 mm, approx. 33-36 cm, with Connector pin for unipolar coagulation	2		
34	Bipolar coagulating forceps, size 5 mm, length 33 cm	2		
35	Bipolar coagulating forceps, size 5 mm, length 33 cm	2		
36	Grasping forceps, rotating, size 5 mm, length approx. 33-36 cm, with connector pin for bipolar coagulation	2		
37	Suction and irrigation tube, with lateral holes, size 5, length approx. 30cm30cm with two-way tap	4		
38	Suction and irrigation tube, with lateral holes, size 5 mm, length approx. 30-36 cm with two-way tap	2		
39	Coagulating and dissecting electrode, spatula-shaped, blunt, size 5 mm, length approx. 33-36 cm with connector pin for unipolar coagulation	1		
40	Unipolar high frequency cord, length 300 cm	2		
41	Bipolar high frequency cord, length 300 cm	2		
42	Plastic container for sterilizing and storage, for two telescopes, perforated	1		
43	Uterine manipulator	2		
44	Cohen uterine cannula, with luer-lock connection for cleaning with one small and one large cervical cone	1		
45	Olsen suction and irrigation tube, size 10 mm	2		



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Annex 7: Surgical Instruments

	Minimum requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
46	Myoma fixation instrument, screw-shaped (spiral), size 5 mm	1		
47	Electronic morcellator complete system 12, 15	1		
48	Vaginal extractor tube, diameter 40 mm and instrument port with bayonet lock inner diameter 2 x 10 mm approximately	1		
49	Forceps, rotating, single action jaws, size 10 mm, length approx. 33-36 cm	2		
50	Adhesion forceps, one jaw fenestrated, length 33-36 cm, size 5 mm.	2		
51	Oviduct forceps, one jaw fenestrated, length 33-36 cm, size 5 mm.	1		



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Annex 7: Surgical Instruments

Item C-13	Gynaecology Office Hysteroscopy Set	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Scissors, blunt, semi-rigid, 5 fr, length 34 cm	1		
2	Scissors, pointed, semi-rigid, 5 fr, length 34 cm	1		
3	Biopsy and grasping forceps, semi-rigid, 5 fr., length 34 cm	1		
4	Punch, through-cutting, semi-rigid, 5 fr., length 34cm	2		
5	Biopsy spoon forceps, semi-rigid, 5 fr, length 34cm	2		
6	Polypectomy loop, unipolar, 5 fr, length 34cm	2		
7	Needle electrode, unipolar, 5 fr, length 34 cm	1		
8	Biopsy and grasping forceps double action jaw 5 fr., length 34 cm	2		
9	Scissors, blunt single action jaws, 5 fr length 34 cm	2		
10	Punch, through, cutting single action jaws 5 fr., 34 cm	2		
11	Biopsy spoon forceps, double action jaws 5 fr., 34 cm	2		
12	Needle electrode 5 fr., 34 cm	2		
13	Polypectomy loop unipolar 5 fr., 34 cm	2		
14	Rigid colposcope	1		



Annex 7: Surgical Instruments

D: General Surgical Instruments

Item D-1	Major Basic Set	Qty. (5 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	FOERSTER SPONGE FORCEPS	4		
2	GROSS-MAIER DRESS FCPS W RAT	3		
3	ALLIS FORCEPS 4/5 TEETH, 6"	2		
4	BACKHAUS TOWEL FORCEPS	8		
5	SCALPEL HANDLE NO 3	2		
6	SCALPEL HANDLE NO 4	1		
7	TC METZENBAUM SCISSORS CVD, 18 CM	2		
8	TC METZENBAUM SCISSORS CVD	1		
9	TC LEXER-FINO SCISSORS CVD, 16 CM	1		
10	STANDARD SCISSORS BL-SH CVD	1		
11	DRESSING FORCEPS	2		
12	DRESSING FORCEPS	2		
13	TISSUE FORCEPS 1X2 T	2		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
14	TISSUE FORCEPS 1X2 T	2		
15	DE BAKEY ATRAUMA FCPS 1,5 MM	2		
16	POTTS-SMITH TISS FCPS 1X2 T	1		
17	HALSTED-MOSQUITO FCPS STR	10		
18	HALSTED-MOSQUITO FCPS CVD	10		
19	OCHSNER HAEM FCPS 1X2 T STR	2		
20	OVERHOLT-GEISSENDOERFER FCPS	1		
21	OVERHOLT-GEISSENDOERFER FCPS	1		
22	MIKULICZ PERIT CLAMP FORCEPS	4		
23	VOLKMANN RETRACTOR SHARP	2		
24	VOLKMANN RETRACTOR SHARP	2		
25	KOERTE RETRACT SHARP 23,5 CM	1		
26	LANGENBECK RETRACTOR	2		
27	LANGENBECK RETRACTOR 50X11MM	2		
28	MIKULICZ ABDOM RETR 120X50MM	1		
29	SIMON RETRACTOR 115X22MM	1		
30	ROUX RETRACTOR FIG. 1	1		
31	ABDOMINAL SPATULA 30 MM	1		
32	GROOVED DIRECTOR 14,5 CM	1		
33	PROBE WITH EYE, 5 1/2", 14,5 CM	1		
34	MARTIN HERNIA DIRECTOR	1		
35	KOENIG LIGAT.CONDUCT. 19,5CM	1		
36	DESCHAMPS LIGAT NEEDLE BLUNT	1		
37	DESCHAMPS LIGAT NEEDLE BLUNT	1		
38	POOLE SUCTION TUBE 10 MM	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
39	TC CRILE-WOOD NEEDLEHOLDER	1		
40	TC MAYO-HEGAR NEEDLEHOLDER	2		
41	TC MAYO-HEGAR NEEDLEHOLDER	1		
42	MIXING BOWL SATIN 80X40 MM	1		
43	MIXING BOWL SATIN 0,375 LTR	1		
44	NEEDLE CASE PERFORATED	1		
45	CONTAINER	1		
46	PERFORATED TRAY	4		
47	IDENT.LABEL WITH TEXT WITHOUT HOLE	1		
48	FRAME, COLOUR CODED RED	1		



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Annex 7: Surgical Instruments

Item D-2	Minor Basic Set	Qty. (6 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	GROSS-MAIER DRESS FCPS W RAT	4		
2	GROSS-MAIER DRESS FCPS W RAT	2		
3	ALLIS FORCEPS 5/6 TEETH, 6"	2		
4	BACKHAUS TOWEL FORCEPS	6		
5	TOWEL FORCEPS W CLIP	1		
6	SCALPEL HANDLE NO 3	1		
7	SCALPEL HANDLE NO 4	1		
8	KLING-EX BLADE REMOVER	2		
9	DRESSING FORCEPS	3		
10	DRESSING FORCEPS	2		
11	TISSUE FORCEPS 1X2 T	3		
12	TISSUE FORCEPS 1X2 T	2		
13	TAYLOR DRESS FCPS W SCRAPER	1		
14	METZENB-NELSON SCS BL-BL CVD	2		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	METZENB-NELSON SCS BL-BL CVD	1		
16	STANDARD SCISSORS BL-SH STR	1		
17	TC LIGATURE SCISSORS CURVED 17 CM SERRAT	1		
18	IRIS SCISSORS CURVED	1		
19	STRABISMUS SCISSORS CVD	1		
20	HALSTED-MOSQUITO FCPS 1X2 T	4		
21	HALSTED-MOSQUITO FCPS 1X2 T	4		
22	HALSTED-MOSQUITO FCPS CVD	4		
23	ROCHESTER-PEAN HAEM FCPS STR	2		
24	OVERHOLT-GEISSENDOERFER FCPS	2		
25	MIKULICZ PERITONEAL CLAMP	4		
26	KOCHER RETRACTOR BLUNT	2		
27	KOCHER RETRACTOR BLUNT	2		
28	CUSHING RETRACTOR 12MM 20 CM	2		
29	ROUX RETRACTOR FIG. 1	1		
30	LANGENBECK RETRACTOR	2		
31	TC MAYO-HEGAR NEEDLEHOLDER	3		
32	TC DE BAKEY NEEDLEHOLDER	1		
33	DESCHAMPS LIGAT NEEDLE BLUNT	1		
34	KOENIG LIGAT.CONDUCT. 19,5CM	1		
35	DOYEN GROOVED DIRECT.14 CM	1		
36	KRONECKER LIGAT NEEDLE	1		
37	PROBE 16 CM/6-1/4"	1		
38	GUIDE NEEDLE LANC.TP CHAR 8	1		
39	GUIDE NEEDLE CVD CHARR 12	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
40	GROSS-MAIER DRESS FCPS W RAT	1		
41	BOWL SATIN 0,3 LTR	2		
42	NEEDLE CASE PERFORATED	1		
43	CONTAINER 300X300X140	1		
44	PERFORATED TRAY 260X260X50 MM	1		
45	IDENT.LABEL WITH TEXT WITHOUT HOLE	1		
46	FRAME, COLOUR CODED RED	1		
47	Original sterilization tray	4		



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Annex 7: Surgical Instruments

Item D-3	Suture Set, Small	Qty. (6 sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	SCALPEL HANDLE NO 3	1		
2	TISSUE FORCEPS 1X2 T	2		
3	ADSON DRESSING FCPS SERRATED	1		
4	MICRO-MOSQUITO HAEM FCPS CVD	2		
5	GROSS-MAIER DRESS FCPS W RAT	1		
6	TC CRILE-WOOD NEEDLEHOLDER	1		
7	MIXING BOWL SATIN 40X19 MM	1		
8	MINISET CONTAINER 310X189X65MM	1		
9	WIRE TRAY, 260X170X28 MM	1		
10	IDENT.LABEL WITH TEXT WITHOUT HOLE	1		
11	FRAME, COLOUR CODED RED	1		
12	ORIGINAL STERILIZATION TRAY	1		



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Annex 7: Surgical Instruments

Item D-4	Suture Set, Large	Qty. (6 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	SCALPEL HANDLE NO 3	2		
2	DRESSING FORCEPS	1		
3	TISSUE FORCEPS 1X2 T	2		
4	MICRO-MOSQUITO HAEM FCPS CVD	4		
5	GROSS-MAIER DRESS FCPS W RAT	1		
6	RETRACTOR FINE BLUNT 16 CM	2		
7	WEITLAN LOKT RETR BLUNT 2/3T	1		
8	TC MAYO-HEGAR NEEDLEHOLDER	1		
9	TC LEXER-FINO SCISSORS CVD, 16 CM	1		
10	STRABISMUS SCISSORS CVD	1		
11	STANDARD SCISSORS BL-SH CVD	1		
12	MIXING BOWL SATIN 80X40 MM	1		
13	ADSON TISSUE FORCEPS 1X2 T	1		
14	MINISET CONTAINER 310X189X65MM	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	WIRE TRAY, 260X170X28 MM	1		
16	IDENT.LABEL WITH TEXT WITHOUT HOLE	1		
17	FRAME, COLOUR CODED RED	1		
18	ORIGINAL STERILIZATION TRAY	1		



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Annex 7: Surgical Instruments

Item D-5	Thyroid Instrument Set	Qty. (4 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	DE BAKEY ATRAUMA FCPS 1,5 MM	2		
2	DE BAKEY ATRAUMA FCPS 1,5 MM	2		
3	ZENKER RETRACTOR 35X 8MM	1		
4	ZENKER RETRACTOR 60X12MM	1		
5	ZENKER RETRACTOR 75X12MM	1		
6	HEISS HAEMOST FORCEPS FIG 2	1		
7	HEISS HAEMOST FORCEPS FIG 3	1		
8	BABY-ADSON HAEM FORCEPS	1		
9	BABY-MIXTER HAEM FORCEPS	1		
10	OCHSNER HAEM FCPS 1X2 T STR	8		
11	MICRO-MOSQUITO HAEM FCPS CVD	8		
12	TC METZENBAUM-FINO SCISSORS BL-BL CVD	1		
13	TC METZENBAUM-FINO SCISSORS BL-BL CVD	1		
14	TC METZENBAUM-FINO SCISSORS BL-BL CVD	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	KOENIG LIGAT.CONDUCT. 19,5CM	1		
16	KOENIG LIGAT.CONDUCT. 19,5CM	1		
17	DESCHAMPS LIGAT.NEEDLE BLUNT	1		
18	DESCHAMPS LIGATURE NEEDLE BL	1		
19	LIGATURE NEEDLE FLEXIBLE	1		
20	YASARGIL SUCTION TUBE 2 MM	1		
21	YASARGIL SUCTION TUBE 2.5MM	1		
22	GUIDE NEEDLE LANC.TP CHAR 8	1		
23	CONTAINER 300X300X110	1		
24	PERFORATED TRAY 260X260X50 MM	1		
25	IDENT.LABEL WITH TEXT WITHOUT HOLE	1		
26	FRAME, COLOUR CODED RED	1		
27	ORIGINAL STERILIZATION TRAY	2		



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Annex 7: Surgical Instruments

Item D-6	Laparotomy Set	Qty. (4 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	GROSS-MAIER DRESS FCPS W RAT	2		
2	BACKHAUS TOWEL FORCEPS	6		
3	TOHOKU TOWEL FORCEPS	4		
4	SCALPEL HANDLE NO 4	1		
5	SCALPEL HANDLE NO 4L	1		
6	SCALPEL HANDLE NO 3	1		
7	TC METZENBAUM SCISSORS CVD	1		
8	TC METZENBAUM SCISSORS CVD	1		
9	TC METZENBAUM SCISSORS CVD	1		
10	TC METZENBAUM SCISSORS CVD	1		
11	TC METZENBAUM SCISSORS CVD	1		
12	TC METZENBAUM SCISSORS CVD	1		
13	TC SUTURE SCISSORS	1		
14	TC SUTURE SCISSORS	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	TC MAYO-LEXER SCISSORS BL-BL CVD	1		
16	STANDARD SCISSORS BL-SH CVD	1		
17	DRESSING FORCEPS NARROW	1		
18	TISSUE FORCEPS 1X2 T NARROW	2		
19	TISSUE FORCEPS 1X2 T	2		
20	TISSUE FORCEPS 1X2 T	2		
21	DE BAKEY ATRAUMA FCPS 2,0MM	2		
22	DE BAKEY ATRAUMA FCPS 2,0MM	2		
23	DE BAKEY ATRAUMA FCPS 2,0MM	2		
24	GERALD TISSUE FCPS 1X2 T	1		
25	OCHSNER HAEM FCPS 1X2 T STR	6		
26	ROCHESTER-PEAN HAEM FCPS STR	6		
27	HALSTED-MOSQUITO FCPS 1X2 T	6		
28	HALSTED-MOSQUITO FCPS CVD	10		
29	HALSTED-MOSQUITO FCPS	2		
30	HALSTED-MOSQUITO FCPS 1X2 T	2		
31	OCHSNER HAEM FCPS 1X2 T STR	2		
32	OCHSNER HAEM FCPS 1X2 T STR	2		
33	GROSS-MAIER DRESS FCPS W RAT	4		
34	MIKULICZ PERIT CLAMP FORCEPS	6		
35	OVERHOLT-GEISSENDOERFER FCPS	2		
36	OVERHOLT-GEISSENDOERFER FCPS	2		
37	OVERHOLT-GEISSENDOERFER FCPS	2		
38	MIXTER HAEMOST FORCEPS FIG 1	2		
39	DESCHAMPS LIGAT NEEDLE BLUNT	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
40	KOENIG LIGAT.CONDUCT. 19,5CM	1		
41	TC CRILE-WOOD NEEDLEHOLDER	2		
42	TC MAYO-HEGAR NEEDLEHOLDER	2		
43	TC WANGENSTEEN NDH SLEND	1		
44	TC DE BAKEY NEEDLEHOLDER	2		
45	TC DE BAKEY NEEDLEHOLDER	2		
46	ROUX RETRACTOR FIG. 1	1		
47	ROUX RETRACTOR FIG 2	1		
48	ROUX RETRACTOR FIG 3	1		
49	LANGENBECK RETRACTOR	2		
50	LANGENBECK RETRACTOR	2		
51	KOCHER-LANGENBECK RETR 55X11	2		
52	VOLKMANN RETRACTOR SEMISHARP	2		
53	FRITSCH A DOMIN RETR 45X75MM	2		
54	MIKULICZ ABDOM RETR 120X50MM	2		
55	MIKULICZ ABDOM RETR 85X35MM	2		
56	HABERER ABDOM SPAT 37/45MM	1		
57	KIRSCHNER ABDOMINL RETRACTOR	1		
58	ORGAN SEIZING FCPS MEDIUM	2		
59	VOLKMANN BONE CURETT FIG 0	1		
60	NELATON GROOVED DIRECT.16 CM	1		
61	PROBE 20 CM/8"	1		
62	INNER BOX TO 55-309-65 ONLY	1		
63	NEEDLE CASE PERFORATED	1		
64	MIXING BOWL SATIN 80X40 MM	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
65	MIXING BOWL SATIN 0,45 LTR	1		
66	KIDNEY BOWL 250X140X40 MM	1		
67	GUIDE NEEDLE LANC.TP CHAR 12	1		
68	GUIDE NEEDLE LANC.TP CHAR 14	1		
69	CONTAINER 600X300X160 MM	1		
70	PERFORATED TRAY 480X260X50 MM	2		
71	IDENT.LABEL WITH TEXT WITHOUT HOLE	1		
72	FRAME, COLOUR CODED RED	1		
73	ORIGINAL STERILIZATION TRAY	6		



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Annex 7: Surgical Instruments

Item D-7	Vascular Set	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Vascular debakey atraumatic forceps 16 cm 1.5m	1		
2	Vascular debakey atraumatic forceps 16 cm 2m	1		
3	Vascular debakey atraumatic forceps 20 cm 1.5m	1		
4	Vascular debakey atraumatic forceps 20 cm 2m	1		
5	Vascular debakey atraumatic forceps 24 cm 1.5m	1		
6	Vascular debakey atraumatic forceps 24 cm 1.5m	1		
7	Coolley atraumatic vascular fcp 14	2		
8	Coolley delicate vascular clamp 17.5 cm	2		
9	Debakey peripheral vascular fcp 19 cm	1		
10	Kay aortic clamp	2		
11	Debakey tangen tial occlus fcp 20.5 cm	2		
12	Debakey tangen tial clamp fcp 24.5 cm no.2	2		
13	Debakey multi purpose fcp 16.5 cm angle 30°	2		
14	Vascular micro forceps	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Forceps tooth 18 cm	1		
16	Debakey vascular scissors 45	1		
17	Debakey vascular scissors 125	1		
18	Potts-smith tooth	1		
19	Potts-smith non tooth	1		
20	Adson tooth micro	1		
21	Adson non tooth micro	1		
22	Micro Castroviejo needle holder	1		
23	Needle holder mayo heger 20cm tc	1		
24	Needle holder mayo heger 24 cm	1		
25	Needle holder micro ryder tc 7	1		
26	Needle holder healsy tc 5	1		
27	Weitlaner retractor 5	2		
28	Weitlaner retractor 7	2		
29	Weitlaner retractor 10	1		
30	Micro freer eleator	1		
31	Adson nerve hook sharp	1		
32	Adson nerve hook blunt	1		
33	Dandy hook	1		
34	Nerve root retractor straight	1		
35	Nerve root retractor angle	1		
36	Nerve root retractor curved	1		
37	Love spatula	1		
38	Hoen elevator	1		
39	Brain suction set of 1/1.2/1.5 mm	3		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
40	Fraizer suction FG.6/FG.8/FG.10	3		
41	Scissor mayo curved 17 cm	1		
42	Scissor mayo straight 17 cm	1		
43	Scissor sh/sh straight 11 cm	1		
44	Scissor sh/sh curved 11 cm	1		
45	Scissor metzenbume curved 14 cm	1		
46	Original sterilization tray	2		



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Annex 7: Surgical Instruments

Item D-8	External Chest Set	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Rip spreader ,de bakey , modif: Small blades 44 mm wide x 38 mm deep max spread 135 mm	1		
2	Rip spreader ,de bakey , modif: medium blades 62 mm wide x 52 mm deep max spread 135 mm	1		
3	Rip spreader ,de bakey , modif: medium blades 65 mm wide x 85 mm deep max spread 135 mm	1		
4	Baily – gibbon rib contractor: 200 mm	1		
5	Allison lung spatula: Extra wide 26 cm long blade 132 mm wide	1		
6	Allison lung spatula: Blade 40 mm wide 27 cm long	1		
7	Allison lung spatula: Blade 65 mm wide 32 cm long	1		
8	Davedson scapular retactor: Blade 50 mm wide x 75 cm deep	1		
9	Davedson scapular retactor: Blade 90 mm wide x 75 cm deep	1		
10	Rib shears (Bethune): Slightly s-shape 35 cm long	1		
11	Rib shears (Collin): 30 cm long right	1		
12	Rib shears (lebsche):30 cm long left	1		
13	Rib shears (lebshe): 33 cm curved	1		
14	Rib shears (brunner): Baxkward curved 32 cm long rt side open	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Rib shears (brunner): Baxkward curved 32 cm long rt side open	1		
16	Sernal cutter (Schumacher): 22 cm long	1		
17	Lebche sternum chisel: 200 mm	1		
18	Hajek mallet of metal	1		
19	Bruner rib shears: 340 mm	1		
20	Doyn raspatory: Adult size left side	1		
21	Doyn raspatory: Adult size left side	1		
22	Lambotte raspatory: 15 mm board	1		
23	Semp raspatory: Size 2.231 mm	1		
24	Semp raspatory: Size 3.230 mm	1		
25	Semb rib and bone golding foreceps: 190 mm	1		
26	Liston bon cutting foreceps cvd: 240 mm	1		
27	Luer – stille bone rongeur: 225 mm curved	1		
28	Reill wire cutter: 175 mm curved	1		
29	Hand drill stainless with 3-jaw chuck to fill any size of shank up to 6.35 diameter no key needed cannulated spindle to fit kirschner wire drills with stop device for locking the spindle and crank when fitting and clanging drills 260 mm	1		
30	Anderson-adson: Self –retaning retractor sharp / sharp 190mm	1		
31	Norfol; and Norwich: Self –retaning retractor sharp / sharp 220 mm	1		
32	Adson: Self –retaning retractor sharp / sharp 265 mm	1		
33	Osteotom 12 mm, 140 mm long	1		
34	Chisel 20 mm, 205 mm long	1		
35	Farabeuf- collin periosteal elevator 11 mm, 160 mm long	1		
36	Schneider periostel elevator 13 mm, 175 mm long	1		
37	Lambotte raspatory 20 mm, 205 mm long	1		
38	Freer yasargil: sharp / sharp 183 mm curved	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
39	Allen freer: Osteophyte chisel and scarper 3.5 mm 230 mm long	1		
40	Major thoracotomy set	1		
41	Maier polupus forceps (sponge forceps): With ratchet cvd 265 mm	1		
42	Maier polupus sponge and dress forceps	1		
43	Atrauma polupus and ovum forceps: Non traumatic ovum forceps str 250 mm	1		
44	Backhaus towel holding forceps: 110 mm	1		
45	Backhaus towel holding forceps: 135 mm	1		
46	Towel clamp: 115 mm long	1		
47	Scalpel handle: No.4 for blades 18-37	1		
48	Scalpel handle: No .3 for blades 10-15	1		
49	Scalpel handle: No .3 for blades 10-15	1		
50	Metzenbaum, diss , sciss: Durotip cvd 200 mm curved	1		
51	Metzenbaum, diss , sciss: Durotip cvd 230 mm curved	1		
52	Nelson-metzenbaum,diss, sciss: Durotip 260 mm curved	1		
53	Nelson-metzenbaum,diss, scissors: Durotip 300 mm curved	1		
54	Dissecting scissors: Curved 230 mm	1		
55	Curved 170 mm Mayo scissors	1		
56	Dissecting scissors: Curved 140 mm	1		
57	Diss, sciss,mayo lexer: Durotip cvd 165 mm	1		
58	Dissecting forceps: Slend patt 145 mm	1		
59	Tissue forceps: Std patt 1x2t 145 mm	1		
60	Tissue forceps: Medium size 1x2t 200 mm	1		
61	Forceps: Straight 2 mm jaw atrauma . 150 mm	1		
62	Forceps: Straight 2 mm jaw atrauma . 200 mm	1		
63	Forceps: Straight 2 mm jaw atrauma . 240 mm	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
64	Forceps: Straight 2 mm jaw atrauma . 300 mm	1		
65	Halsted mosquito forceps: Curved 125 mm	1		
66	Halsted mosquito forceps: Straight 125 mm	1		
67	Baby mosquito: Curved 100 mm	1		
68	Kocher forceps: Str 1x2 teeth 140 mm	1		
69	Kocher forceps: Str 240 mm	1		
70	Rt angel forceps: 185 mm s-shape	1		
71	Rt angel forceps: 210 mm s-shape	1		
72	Rt angel forceps: 215 mm s-shape	1		
73	Rt angel forceps: 220 mm s-shape	1		
74	Rt angel forceps (Gemini): 200 mm	1		
75	Rt angel forceps (Gemini): 280 mm	1		
76	Rt angel forceps (kantrowitz): 190 mm	1		
77	Rt angel forceps (kantrowitz): 265 mm	1		
78	Rt angel forceps (rumel): 250 mm	1		
79	De , baky vessel clamp: Jaw 54 mm . 270 mm	1		
80	De , baky vessel clamp: Jaw 38 mm . 220 mm	1		
81	De , baky aneurism clamp: 315 mm	1		
82	Atraumata clamp de bakey: 255 mm , 70 mm 90 degree	1		
83	De bakey vessel forceps: Jaw 65 mm 280 mm 60 degree	1		
84	De bakey lig carrier: Acute curved 265 mm	1		
85	Durogrip crile wood needle holder: 145 mm	1		
86	Durogrip hegar mayo needle holder: 205 mm	1		
87	Durogrip de bakey needle holder: 180 mm	1		
88	Durogrip de bakey needle holder: 250 mm	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
89	Durogrip de bakey needle holder: 305 mm	1		
90	Masson durogrip needle holder: 265 mm	1		
91	Inerior box for bl 930	1		
92	Laboratory dish: 0.16 L	1		
93	Laboratory dish: 0.4 L	1		
94	Kidney tray: 250 mm	1		
95	Redon spike char 16 slig cvd triang tip	1		
96	Russian foreceps: 150 mm	1		
97	Russian foreceps: 250 mm	1		
98	Collin atraumatic lung foreceps: 195 mm	1		
99	Collin atraumatic lung foreceps: 230 mm	1		
100	Babcock foreceps: 160 mm	1		
101	Babcock foreceps: 230 mm	1		
102	Bronchial foreceps (price Thomas): Pins nlt jaw 200 mm	1		
103	Bronchial foreceps (price Thomas): Pins nlt jaw 200 mm	1		
104	Bone curette (volkman): Standard pattern oval 170 mm no 6	1		
105	Bone curette (volkman): Standard pattern oval 1270 mm no 6	1		
106	Kellt retractor (moris): 210 mm	1		
107	Kellt retractor (moris): 75 * 65 mm	1		
108	Deaver retractor: 75 * 90 mm	1		
109	Deaver retractor: 35 cm length 25 mm wide	1		
110	Harrington retractor: 30 cm length 50 mm wide	1		
111	Balfur abdominal retractor: 32 cm /62 mm wide x 172 mm deep	1		
112	Balfur abdominal retractor: Fenestrated blades 85 x 65 mm	1		
113	Ochsner ribbon retractor: Fenestrated blades 70 x 100 mm	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
114	Abdominal suction tube: Malleable copper silver plated 30 x300 mm	1		
115	Yankauer suction: Malleable copper silver plated 75 x300 mm	1		
116	Nelson metzenbaum dissecting scissor: 22 cm , 10 mm	1		
117	Klenkenbergh artery and dissecting scissor: 28 cm chrome plated	1		
118	Dressing forceps: s-shape 23 cm	1		
119	Dressing forceps: Medium width str 25	1		
120	Debakey needle holder: Medium width str 30	1		
121	Debakey needle holder: Slender pattern hm tungsten carbide inserts gold plated ring handles 30 cm	1		
122	Original sterilization tray	5		



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Annex 7: Surgical Instruments

Item D-9	Dressing Set (Operation Theatres)	Qty. (20 sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Crile hemostatic forceps 5 14 cm CVD	1		
2	Suture scissors sh/bl 14 cm	1		
3	Tissue forceps 14 cm tooth	1		
4	Galli pots s	1		
5	Kidney dish medium	1		



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Annex 7: Surgical Instruments

Item D-10	Haemorrhoid Set	Qty. (2 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Mayo sciss str 17 cm	1		
2	Mayo sciss cvd 17 cm	1		
3	Rochester pean fcps cvd 16 cm	6		
4	Kocher haem fcps fine str 16 cm	4		
5	Halsted mosquito srt 12 cm	6		
6	Backhaus towel forceps 13 cm	6		
7	Forster fcps str serr 25 cm	2		
8	Dress fcps stand str 14.5 cm	2		
9	Tissue fcps stand 1x2t 1405 cm	2		
10	Scalpel handle no 3	1		
11	Scalpel handle no 4	1		
12	Probe with eye 18 cm	1		
13	Grooved director 18 cm	1		
14	Mayo hegar needle 18 cm	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Allis forceps 5x6 teeth 15 cm	6		
16	Pratt rectal specula 20.5 cm	1		
17	Hirschmann anusc 16x 65 mm	1		
18	Instrument tray	1		
19	Kidney dishl	1		
20	gallipotsm	1		
21	Proctoscope set : a. proctoscope: - pediatric (12mm diameter x 40mm length) qty:2 - medium (20mm diameter x70mm length) qty:3 - large (22mm diameter x 70 mm length) qty:3 b. cable qty:3 c. light with adapter qty:3			
22	Original sterilization tray	2		



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Annex 7: Surgical Instruments

Item D-11	Amputation Set	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Scalpel handle #3	1		
2	Suture scissor sh/bl 14 cm	1		
3	Mayo scissor CVD 7	1		
4	Metzenbaum scissor CVD 8	1		
5	Dissecting forceps tooth 6	1		
6	Dissecting forceps non tooth 6	1		
7	Adson fcp tooth 5	1		
8	Adson fcp non tooth 5	1		
9	Grille wood needle holder 5	1		
10	Grille wood needle holder 6	1		
11	Grille wood needle holder 7	1		
12	Grille fcp cvd 14 cm	4		
13	Halsted mosquito str 12 cm	2		
14	Halsted mosquito cvd 12 cm	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Ochsner fcp str 7	2		
16	Kocher langenbck pettractor 35 x 11 mm 21.5 cm	1		
17	Carspow senn miller pettractor d/e 16 cm	1		
18	Farabouf pettractor 15 cm	2		
19	Volkman pettractor 4 prongs sharp 22 cm	1		
20	Skin hook sharp 16 cm	1		
21	Sponge holder forceps 9	1		
22	Towel clamp 13 cm	4		
23	Gigli saw handle	2		
24	Gigli saw wire	6		
25	Amputation saw	1		
26	Percy Amputation retractor	1		
27	Bone holder clamp sele retaning 9	1		
28	Bone rongeur 24 cm	1		
29	Bone cutter 22 cm	1		
30	Bone mallets 500 g	1		
31	Bone chesiel 15 mm	1		
32	Bone chesiel 25 mm	1		
33	Bone file str 30 cm	1		
34	Hohmann bone levers 22 mm	1		
35	Hohmann bone levers 33 mm	1		
36	Gallipots s	1		
37	Kidney dish l	1		
38	Instrument rtray	1		
39	Original sterilization tray	2		



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Annex 7: Surgical Instruments

Item D-12	Major Thoracotomy Set	Qty. (1 Set)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Maier polypus forceps (sponge forceps): With ratchet cvd 265 mm	1		
2	Maier polypus sponge and dress forceps	1		
3	Atrauma polypus and ovum forceps: Non traumatic ovum forceps str 250 mm	1		
4	Backhaus towel holding forceps: 110 mm	1		
5	Backhaus towel holding forceps: 135 mm	1		
6	Towel clamp: 115 mm length	1		
7	Scalpel handle: No.4 for blades 18-37	1		
8	Scalpel handle: No.3 for blades 10-15	1		
9	Scalpel handle: No.3 for blades 10-15	1		
10	Metzenbaum, diss , sciss: Durotip cvd 200 mm curved	1		
11	Metzenbaum, diss , sciss: Durotip cvd 230 mm curved	1		
12	Nelson-metzenbaum,diss, sciss: Durotip 260 mm curved	1		
13	Nelson-metzenbaum,diss, scissors: Durotip 300 mm curved	1		
14	Dissecting scissors: Curved 230 mm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	Mayo scissors: Curved 170 mm	1		
16	Dissecting scissors: Curved 140 mm	1		
17	Diss, sciss,mayo lexer: Durotip cvd 165 mm	1		
18	Dissecting forceps: Slend patt 145 mm	1		
19	Tissue forceps: Std patt 1x2t .145 mm	1		
20	Tissue forceps: 1x2 t 200 mm medium size	1		
21	Forceps: Straight 2 mm jaw atrauma . 150 mm	1		
22	Forceps: Straight 2 mm jaw atrauma . 200 mm	1		
23	Forceps: Straight 2 mm jaw atrauma . 240 mm	1		
24	Forceps: Straight 2 mm jaw atrauma . 300 mm	1		
25	Halsted mosquito forceps: Curved 125 mm	1		
26	Halsted mosquito forceps: Straight 125 mm	1		
27	Baby mosquito: Curved 100 mm	1		
28	Kocher forceps: Str 1x2 teeth 140 mm	1		
29	Kocher forceps: Str 240 mm	1		
30	Rt angel forceps: 185 mm s-shape	1		
31	Rt angel forceps: 210 mm s-shape	1		
32	Rt angel forceps: 215 mm s-shape	1		
33	Rt angel forceps: 220 mm s-shape	1		
34	Rt angel forceps (Gemini): 200 mm	1		
35	Rt angel forceps (Gemini): 280 mm	1		
36	Rt angel forceps (kantrowitz): 190 mm	1		
37	Rt angel forceps (kantrowitz): 265 mm	1		
38	Rt angel forceps (rumel): 250 mm	1		
39	De , baky vessel clamp: Jaw 54 mm . 270 mm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
40	De , baky vessel clamp: Jaw 38 mm . 220 mm	1		
41	De , baky aneurism clamp: 315 mm	1		
42	Atraumata clamp de bakey: 255 mm , 70 mm 90 degree	1		
43	De bakey vessel forceps: Jaw 65 mm 280 mm 60 degree	1		
44	De bakey lig carrier: Acute curved 265 mm	1		
45	Durogrip crile wood needle holder: 145 mm	1		
46	Durogrip hegar mayo needle holder: 205mm	1		
47	Durogrip de bakey needle holder: 180 mm	1		
48	Durogrip de bakey needle holder: 250 mm	1		
49	Durogrip de bakey needle holder: 305 mm	1		
50	Masson durogrip needle holder: 265 mm	1		
51	Inerior box for bl 930	1		
52	Laboratory dish: 0.16 L	1		
53	Laboratory dish: 0.4 L	1		
54	Kidney tray: 250 mm	1		
55	Redon spike char 16 slig cvd triang tip	1		
56	Russian foreceps: 150 mm	1		
57	Russian foreceps: 250 mm	1		
58	Collin atraumatic lung forceps: 195 mm	1		
59	Collin atraumatic lung forceps: 230 mm	1		
60	Babcock forceps: 160 mm	1		
61	Babcock forceps: 230 mm	1		
62	Bronchial forceps (price Thomas): Pins nlt jaw 200 mm	1		
63	Bronchial forceps (price Thomas): Pins nlt jaw 200 mm	1		
64	Bone curette (volkman): Standard pattern oval 170 mm no 6	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
65	Bone curette (volkmann): Standard pattern oval 1270 mm no 6	1		
66	Kellt retractor (moris): 210 mm	1		
67	Kellt retractor (moris): 65 mm x 75 mm	1		
68	Deaver retractor: 75 x 90 mm	1		
69	Deaver retractor: 35 cm length 25 mm wide	1		
70	Harrington retractor: 30 cm length 50 mm wide	1		
71	Balfur abdominal retractor: 32 cm /62 mm wide x 172 mm deep	1		
72	Balfur abdominal retractor: Fenestrated blades 85 x 65 mm	1		
73	Ochsner ribbon retractor: Fenestrated blades 70 x 100 mm	1		
74	Abdominal suction tube: Malleable copper silver plated 30 x300 mm	1		
75	Yankauer suction: Malleable copper silver plated 75 x300 mm	1		
76	Nelson metzenbaum dissecting scissor: 22 cm , 10 mm	1		
77	Klenkenbergh artery and dissecting scissor: 28 cm chrome plated	1		
78	Dressing forceps: s-shape 23 cm	1		
79	Dressing forceps: Medium width str 25	1		
80	Debaek needle holder: Medium width str 30	1		
81	Debaek needle holder: Slender pattern hm tungsten carbide inserts gold plated ring handles 30 cm	1		
82	Original sterilization tray	4		



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Annex 7: Surgical Instruments

Item D-13	Adult Laparoscopic Surgical Set	Qty. (3 Sets)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	TROCAR, with insufflation tap, metal sleeve standard, diameter 5.5-6 mm, working length 100-150 mm	2		
2	TROCAR with pyramidal tip, diameter 5.5-6 mm, working length 100-150 mm	2		
3	TROCAR, 10-11 mm capacity, 100-150 mm working length	1		
4	TROCAR PYRAMIDAL TIP for trocar sleeves diameter 10-11 mm, working length 100-150 mm	1		
5	TROCAR PYRAMIDAL TIP for trocar sleeves diameter 13 mm, working length 100-150 mm	1		
6	Reduction sleeve (10.0 / 5.5 mm)	1		
7	Reducing adapter Ø 10 mm to Ø 5.5 mm	2		
8	Atraumatic fenestrated Grasping single jaw action, with horizontal serration, 20 mm jaw length, WL 330-360 mm	1		
9	"Babcock" Grasping forceps 5 mm, grasping surface with fine horizontal serration, double jaw action WL= (330-360 mm)	1		
10	Atraumatic grasping forceps 5mm, perforated with horizontal serrations, double jaw action WL= (330-360 mm)	1		



Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
	mm)			
11	Maryland dissector forceps 5mm," curved with fine horizontal serration, double jaw action WL= (310-360 mm)	1		
12	Retraction grasper with two teeth 5mm WL= 330-360 mm	1		
13	Teeth trumatic "Alligator Grasping forceps with 5mm,fine horizontal serrations, single jaw action WL= (330-360 mm)	1		
14	Tooth 2/3 claws grasping forceps 10 mm, single jaw action WL =335-360 mm	1		
15	Grasper 5mm Wl 330-360 mm	1		
16	Intestinal grasping atraumatic clamp "Debakey" 5mm, axial grooves with fine horizontal serrations, double jaw action, with spring jaws Wl=(330-360mm)	1		
17	Hook punch, 5 mm cutting, single jaw action	1		
18	Scissors, "Metzenbaum" 5mm, curved left, double jaw action	3		
19	Scissors 5mm, straight, tapered, double jaw action	1		
20	Hook scissors 5 mm , length 310-360 mm	1		
21	Hook electrode 5 mm, HF MONOP. WL = (340-430 mm)	2		
22	SPATULA ELECTRODE 5 mm, HF MONOP. WL = (340 - 430mm)	1		
23	SUCTION-IRRIGATION TUBE, 5 mm with central or side holes opening with 2 way stopcock	1		
24	TISSUE RETRACTOR, 5 mm WL = (320-360 mm)	1		
25	NEEDLE HOLDER Ø 5 mm straight, Wl = (310-360 mm)	1		
26	NEEDLE HOLDER Ø 5 mm curved left, Wl = (310-360 mm)	1		
27	KNOTPUSHER, Ø 5 mm, with distal notch and lateral opening for optimal knot pushing, extremely atraumatic tip for use as probe, WL 330-360 mm	1		
28	PUNCTURE CANNULA diameter 5 mm, with suction control,	1		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
	and 4 mm Luer connector, working length 315 mm			
29	VERES CANNULA 150 mm working length	2		
30	Clip Applicator 10 mm WL = (290-410)	1		
31	CLIPS	100		
32	Metal outer sheath insulated size 5 mm length 310-360 mm	4		
33	Metal outer sheath insulated size 10 mm length 310-360 mm	2		
34	Instrument plastic handle with ratchet	2		
35	Instrument plastic handle without ratchet	2		
36	Instrument tray with racks	1		



Annex 7: Surgical Instruments

E: Ophthalmic Instruments

Item E-1	Cataract set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Non tooth forceps	2		
2	Spring scissors	2		
3	Bipolar forceps	2		
4	Bonn forceps	2		
5	Handle Knife	1		
6	Capsule Forceps	2		
7	Corneal scissors	2		
8	Muscle hook	1		
9	Colibri forceps	1		
10	Lens forceps	1		
11	Needle holder	2		
12	Tying forceps	2		
13	Vannas scissors	2		
14	Tooth forceps	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
15	Needle holder(castroveigo)	1		
16	Mosquito (5inch)	2		
17	Towel clamp	2		
18	Sharp scissors	1		
19	Speculum	2		
20	Iris reposer	1		
21	Iol manipulator	1		



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Annex 7: Surgical Instruments

Item E-2	Chalazion Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Straight scissors	2		
2	Handel knife	1		
3	Non tooth forceps	1		
4	Chalazion currete	3		
5	Chalazion retractor	3		
6	Skin forceps	1		
7	Hook curved	1		



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Annex 7: Surgical Instruments

Item E-3	D.C.R Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	SPOON HOLDER	1		
2	TOWEL CLAMP	3		
3	5INCH (STRAIGHT)	2		
4	5INCH(CURVED)	2		
5	PROBE(0-00)	2		
6	PUNCTUM DILATER	1		
7	SHARP SCISSORS	1		
8	BLUNT SCISSORS	1		
9	RETRACTER	2		
10	TOOTH FORCEPS	3		
11	NON TOOTH FORCEPS	3		
12	SPRING SCISSORS	1		
13	BLADE HANDLE	1		
14	RETRACTER	3		
15	FRIER	1 medium 1 small		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
		1 large		
16	PERIOSTEUM OLEVETER	2		
17	BONE CUTTER	1 medium 1 small 1 large		
18	NEEDLE HOLDER	2		
19	CROCODILES FORCEPS	1		
20	MALPEL RETACTER	3		
21	BIPOLAR FORCEPS	1		



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Annex 7: Surgical Instruments

Item E-4	P.K Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Punch	2		
2	Punch handle	2		
3	Bone forceps	1		
4	Tooth forceps	1		
5	Non tooth forceps	2		
6	Corneal scissors	1		
7	Corneal scissors right	1		
8	Corneal scissors left	1		
9	Tying forceps	2		
10	Needle holder	2		
11	Vannas scissors	1		
12	Tissue forceps	1		
13	Simco	1		
14	Keratometer	1		
15	Sinch	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	Sharp scissors	1		
17	Towel clamp	3		
18	Calliper	1		
19	Trephine hand	3		
20	Trephine hand size 16mm	2		
21	Trephine hand Size 18mm	2		
22	Spring scissors	1		
23	Speculum	1		



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Annex 7: Surgical Instruments

Item E-5	Phaco Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Sponge holder	1		
2	speculum	2		
3	Sharp scissors	1		
4	Towel clamp	1		
5	Tooth forceps	1		
6	Needle holder	2		
7	5 Inch	1		
8	Non tooth forceps	1		
9	Spring scissors	2		
10	Bonn forceps	2		
11	I /A set	2		
12	Lens forceps	1		
13	Bipolar forceps	1		
14	Chopper/mushroom	2		
15	Sinsky hook	2		



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Annex 7: Surgical Instruments

Item E-6	Evisceration Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Speculum	2		
2	Tooth forceps	2		
3	Sharp scissors	2		
4	Spring scissors	2		
5	Spoon	2		
6	5 Inch	2		
7	Needle holder	2		
8	Blunt scissors (curved)	2		
9	Towel clamp	2		
10	Busin (metallic small size_)	2		
11	Blade handle	1		



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Annex 7: Surgical Instruments

Item E-7	Plastic set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Sharp scissors	2		
2	Towel clamp	2		
3	5 Inch	2		
4	Spring scissors	2		
5	Blunt scissors	2		
6	Tooth forceps	2		
7	Non tooth forceps	2		
8	Retractor	3		
9	Needle wright fascia suture	2		
10	Lied gured	1		
11	Handle knife	2		
12	Nasal elevator	2		
13	Speculum	2		
14	Curette eye hook	2		
15	Busin (metallic small size)	2		



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	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
16	Lacrimonal dilator	2		
17	Suction tip	2		
18	Bipolar forceps	1		
19	Mosquito straight	2		
20	Blunt curved	2		



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Annex 7: Surgical Instruments

Item E-8	Probing Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Ruedemann infant dilator (length 80 mm)	1		
2	Wilder lacrimal dilator size 2 medium taper	1		
3	Bowmann lacrimal probe stainless steel: Size:00 qty:1 Size:0 qty:1 Size:1 qty:1 Size:2 qty:1 Size:3 qty:1 Size:4 qty:1			



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Annex 7: Surgical Instruments

Item E-9	RD + P.P.V Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Sharp scissors	2		
2	speculum	2		
3	Non tooth forceps	2		
4	Spring scissors	2		
5	calliper	1		
6	Needle holder	2		
7	Tying forceps	2		
8	localizer	2		
9	Back flash	2		
10	Blunt scissor	2		
11	Muscle hook	2		
12	R D muscle hook (with hole)	2		
13	Intraocular forceps G 23	1		
14	Intraocular scissors G 23	1		
15	Mosquito	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
16	Cryo probe	1		
17	Foreign body forceps	1		
18	Membrane pelar	1		
19	Colibri	2		
20	Endo cautary (metallic)	2		
21	Vannas scissors	2		
22	Biom	2		



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Annex 7: Surgical Instruments

Item E-10	Squint Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Non tooth forceps	2		
2	Tooth forceps	2		
3	5 inches(mosquito)	2		
4	Muscle hook	2		
5	Muscle clamp	2		
6	Blunt scissors	2		
7	Sharp scissors	2		
8	Needle holder	2		
9	speculum	2		
10	Spring scissors	2		



Annex 7: Surgical Instruments

F: E.N.T Instruments

Item F-1	ENT Clinic Instruments Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Hartmann ear speculum, standard model, outer diameter 3 mm, length 3.6 cm	10		
2	Hartmann ear speculum, standard model, outer diameter 4 mm, length 3.6 cm	20		
3	Hartmann ear speculum, standard model, outer diameter 5 mm, length 3.6 cm	20		
4	Hartmann ear speculum, standard model, outer diameter 6 mm, length 3.6 cm	20		
5	Hartmann ear speculum, standard model, outer diameter 7.5 mm, length 3.6 cm	10		
6	Nasal tip, metal, size 18 mm	5		
7	Nasal tip, metal, size 22 mm	5		
8	Tuning fork A1-440, with stand	3		
9	Cotton applicator, standard model, triangular serrated, diameter 1.1 mm, working length 13 cm	10		
10	Cotton applicator, standard model, triangular serrated, diameter 1.3 mm, working length 15 cm	10		
11	Zaufal curved spatula, length 14.5 cm	5		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
12	Ear hook, without ball end, size1, length 15.5 cm	10		
13	Wegener ear hook, with ball end, size 2, length 15.5 cm	10		
14	Buck ear curette, blunt, size 0, length 14 cm	10		
15	Buck ear curette, blunt, size 1, length 14 cm	10		
16	Ear knife, screw handle, bayonet-shaped, working length 8 cm	5		
17	Lucae ear forceps, bayonet-shaped, length14.5 cm	20		
18	Jansen nasal dressing forceps, bayonet-shaped, length 16.5 cm	10		
19	Hartmann ear dressing forceps, slender, extra delicate, working length 6 cm	5		
20	Hartmann ear forceps, serrated, extra delicate, 1x4.5 mm, working length 8 cm	5		
21	Hartmann ear forceps, serrated, working length 8 cm	5		
22	Strumple ear forceps, working length 8 cm	5		
23	Fisch suction handle, with cut-off hole, luer cone, length 5.5 cm, for use with suction tubes 204005-204025, 204305-204330	10		
24	Suction tube, straight, luer-lock, malleable, outer diameter 2 mm, length 10 cm	30		
25	Suction tube, straight, luer-lock, malleable, outer diameter 2.5 mm, length 10 cm	15		
26	Suction tube, straight, luer-lock, malleable, outer diameter 1.5 mm, length 10 cm	15		
27	Luer-lock tube connector, male, tube diameter 6 mm	5		
28	Joseph scissors, curved, length 14 cm	5		
29	Bowman probe, size 00-0, diameter 0.7 and 0.8 mm, length 13 cm	5		
30	Bowman probe, size 1-2, diameter 0.9 and 1.1 mm, length 13 cm	5		
31	Surgical handle, length12.5 cm, for blades 208010-15, 208210-15	5		
32	Bruenings tongue depressor, metallic, size 19 cm	10		
33	Forceps, serrated, width 4 mm, length 20 cm	5		
34	Jar, stainless steel, diameter 5 cm, length 17,5 cm	5		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
35	Kidney-shaped dressing tray, stainless steel, length 25 cm	5		
36	Dressing forceps, standard width, length 14.5 cm	5		
37	Tissue forceps, 1x2 teeth, standard width, length 14.5 cm	5		
38	Scissors, straight, sharp/blunt, length 14.5 cm	5		
39	Killian-Stuycken nasal speculum, standard model, blade length 75 mm, length 13.5 cm	5		
40	Hartmann nasal speculum, for adults, length 13 cm	50		
41	Hartmann nasal speculum, for children, length 13 cm	20		
42	Hartmann nasal dressing forceps, light model, working length 11 cm	5		
43	Suction tube, conical, luer, outer diameter 3 mm, working length 11 cm	10		
44	Suction tube, conical, luer, outer diameter 3.5 mm, working length 11 cm	10		
45	Suction tube, conical, luer, outer diameter 4.5 mm, working length 13 cm	5		
46	Needle holder tungsten carbide inserts, length 15 cm	5		
47	Barbara needle, straight, sharp size 15 cm	4		
48	Micro ear forceps, cupped 1x0.9 mm . 8 cm	4		
49	Trousseau tracheal dilator forceps, 13.3 cm, standard size, jaws 3 cm long x 5 mm wide at tip	2		
50	Trousseau tracheal dilator forceps, 11.4 cm, neonatal size, jaws 2 cm long x 3 mm wide at tip	2		
51	LaBorde tracheal dilator forceps, 14 cm, three bladed	2		



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Annex 7: Surgical Instruments

Item F-2	Direct Laryngoscopy Set For Adults	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	op laryngoscope 182mm fig 3 w light carrier	1		
2	op laryngoscope 172mm fig 4 w light carrier	1		
3	op laryngoscope 172mm fig 5 w light carrier	1		
4	Fiber-optic light carrier f 74.00.03-06 + 33-36	1		
5	laryngoscope holder f 74.01.01/02	1		
6	laryng cup fcps Ø 2mm 23cm str	1		
7	laryng cup fcps Ø 2mm 23cm ang upw	1		
8	laryng cup fcps Ø 2mm 23cm rt cvd	1		
9	laryng cup fcps Ø 2mm 23cm lf cvd	1		
10	laryng cup fcps oval 23cm str 3x5mm	1		
11	laryng grasp fcps serr 23cm str	1		
12	laryng scrs 23cm lf cvd	1		
13	laryng scrs 23cm str	1		
14	laryng scrs 23cm 45° cvd up	1		
15	laryng scrs 23cm rt cvd	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	laryng nh w catch conical 23cm	1		
17	Endolaryngeal sickle knife · 24 cm	1		
18	Endolaryngeal knife · golf club design · 24 cm	1		
19	Endolaryngeal round edge knife · 24 cm	1		
20	Endolaryngeal hook · 24 cm	1		
21	Endolaryngeal needle · curved right · 24 cm	1		
22	Endolaryngeal needle · curved left · 24 cm	1		
23	Endolaryngeal hook · 24 cm	1		
24	Endolaryngeal suction raspatory · 24 cm	1		
25	Endolaryngeal knot guide · 24 cm	1		
26	Handle	1		
27	Bipolar connecting cable · Ø 12,5 mm · 3 m	1		
28	Bracket · for high frequency cables · 22,5 cm	1		
29	BINNER Larynx coagulation electrode · curved · 35 cm	1		
30	Teeth Protector, silicone autoclavable, can also be used as inlay in metal teeth protector	1		
31	Laryngeal Suction Tube, outer diameter 2.5 mm, working length 23 cm	2		



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Annex 7: Surgical Instruments

Item F-3	Functional Endoscopic Sinus Surgery Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Troeltsch Forceps, angular, serrated, 13 cm	1		
2	Troeltsch (Wilde) Forceps, angular, 1 x 2 teeth, 13 cm	1		
3	Septum Tube, angular, Ø 0,8 mm, Luer-Lock	1		
4	Frazier (Fergusson) Suction Tube, 10 French, 12,5 cm	1		
5	Frazier (Fergusson) Suction Tube, 12 French, 12,5 cm	1		
6	Freer Elevator, double ended, sharp/blunt, 5 mm, 19 cm	1		
7	Novotex-Plastic-Mallet, 240 g, Ø 45 mm, 26 cm	1		
8	West Osteotome, straight, 4 mm, 16 cm	1		
9	West Chisel, curved, 4 mm, 16 cm	1		
10	Halle Curette, malleable, oval, 21 cm, Fig. 1 - 4 mm	1		
11	Hartmann-Halle Nasal Specula, 15 cm, Fig. 3	1		
12	Antrum Grasping Forceps, shaft curved, 10 cm	1		
13	Takahashi Nasal Forceps, Ø 4,0 mm, straight, 2,5 mm, 10 cm	1		
14	Takahashi Nasal Forceps, Ø 4,0 mm, straight, 3,5 mm, 10 cm	1		
15	Takahashi Nasal Forceps, Ø 4,0 mm, angled upwards 45°, 2,5 mm, 10 cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	Takahashi Nasal Forceps, Ø 4,0 mm, angled upwards 45°, 3,5 mm, 10 cm	1		
17	Weil-Blakesley Ethmoid Bone Forceps, straight, 3,5 mm, 12 cm	1		
18	Weil-Blakesley Ethmoid Bone Forceps, straight, 4,5 mm, 12 cm	1		
19	Weil-Blakesley Nasal Forceps, throughcutting, straight, 3,0 mm, 11,5 cm	1		
20	Weil-Blakesley Ethmoid Bone Forceps, angled upwards 45°, 3,5 mm, 12 cm	1		
21	Weil-Blakesley Ethmoid Bone Forceps, angled upwards 45°, 4,5 mm, 12 cm	1		
22	Weil-Blakesley Nasal Forceps, throughcutting, angled upwards 45°, 2,0 mm, 11,5 cm	1		
23	Weil-Blakesley Nasal Forceps, throughcutting, angled upwards 45°, 3,0 mm, 11,5 cm	1		
24	Weil-Blakesley Nasal Forceps, throughcutting, 30° right curved, 2,5 mm, 11,5 cm	1		
25	Weil-Blakesley Nasal Forceps, throughcutting, 30° left curved, 2,5 mm, 11,5 cm	1		
26	Weil-Blakesley Ethmoid Bone Forceps, angled upwards 90°, 3,5 mm, 12 cm	1		
27	Weil-Blakesley Ethmoid Bone Forceps, angled upwards 90°, 4,5 mm, 12 cm	1		
28	Cupped Forceps, Ø 2,7 mm, 90° upcurved, vertical opening, 2 mm, 13 cm	1		
29	Cupped Forceps, Ø 2,7 mm, 90° upcurved, horizontal opening, 2 mm, 13 cm	1		
30	Cupped Forceps, Ø 2,7 mm, 70° upcurved, horizontal opening, 3 mm, 13 cm	1		
31	Cupped Forceps, Ø 2,7 mm, 70° upcurved, vertical opening, 3 mm, 13 cm	1		
32	Ostrom Rongeur, straight, upwards cutting backwards, 2,5 mm, 10 cm	1		
33	Ostrom Rongeur, straight, right cutting backwards, 2,5 mm, 10 cm	1		
34	Ostrom Rongeur, straight, left cutting backwards, 2,5 mm, 10 cm	1		
35	Ostrom Rongeur, shaft curved, backwards cutting, 360°	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
	rotatable, 1,5 mm, 10 cm			
36	Ostrom Rongeur with suction, upwards cutting backwards, 2,0 mm, 10 cm	1		
37	Ostrom Rongeur with suction, right cutting backwards, 2,0 mm, 10 cm	1		
38	Ostrom Rongeur with suction, left cutting backwards, 2,0 mm, 10 cm	1		
39	Ostrom Rongeur, shaft curved, upwards cutting backwards, Ø 4,0 mm, 2,0 mm, 10 cm	1		
40	Antrum Punch, large jaw, throughcutting right, 10 cm	1		
41	Antrum Punch, large jaw, throughcutting left, 10 cm	1		
42	Punch circular cutting, straight, Ø 3,5 mm, 16 cm	1		
43	Hajek-Kofler Sphenoid Bone Punch, 3 x 5 mm, 360° rotatable, 16 cm	1		
44	Antrum Rongeur with hook jaw, throughcutting, 2 mm, 18 cm	1		
45	Antrum Rongeur with hook jaw, throughcutting, 3 mm, 15 cm	1		
46	Nasal Scissors, lower cutting edge toothed, straight, 13,5 cm	1		
47	Nasal Scissors, lower cutting edge toothed, right curved, 13,5 cm	1		
48	Nasal Scissors, lower cutting edge toothed, left curved, 13,5 cm	1		
49	Sickle Knife, pointed 19 cm	1		
50	Sickle Knife, blunt, 19 cm	1		
51	Ostium Instrument, double ended, 1,2 mm + 2,0 mm, 19 cm	1		
52	Faulkner Antrum Curette, double ended, 21,5 cm	1		
53	Antrum Curette, angled downwards, 19 cm	1		
54	Antrum Curette, round, 4 mm, 20 cm	1		
55	Antrum Curette, oval, 1,5 x 6,0 mm, 20 cm	1		
56	Eicken Irrigating Tube, Ø 3,0 mm, Luer, 15 cm	1		
57	Killian Irrigating Tube, Luer, 3.5 mm, 15 cm	1		
58	Sinuscope, Ø 2,7 mm, 175 mm, 70°	1		
59	Sinuscope, Ø 4,0 mm, 175 mm, 0°	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
60	Sinuscope, Ø 4,0 mm, 175 mm, 30°	1		
61	Cottle Septum-Elevator, double ended, 23 cm	1		
62	Kluba Orbital Hook, medium, 19 cm	1		
63	Bipolar Cable, 3 m	1		
64	Bipolar Coagulation Forceps, angular, blunt, 20 cm	1		
65	Heymann Supercut Nasal Scissors, 18 cm	1		
66	Fomon Supercut plus Nasal Scissors, 13 cm	1		
67	Holding Arm variable with universal Clamp Base	1		
68	Universal Holder for Instruments and Optics	1		
69	Hartmann nasal dress fcps 15cm	1		



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Annex 7: Surgical Instruments

Item F-4	Head And Neck Surgery Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	DUPLAY Dressing and Sponge Holding Forceps, curved, with ratchet, length 21cm	2		
2	NEGUS Forceps, large curve, length 20 cm	2		
3	KOCHER Probe length 16.5 cm	1		
4	BRUENINGS Tongue Depressor, length 19 cm	1		
5	FREER Elevator, double-ended, semi-sharp and blunt, length 20cm	1		
6	HENKE Elevator, width 11.5 mm, length 23.5 cm, (standard size)	1		
7	JANSEN Raspatory, width 9 mm, length 19.5 cm	1		
8	Bulbous Probe, diameter 1.5 mm, length 14.5 cm	1		
9	WULLSTEIN Retractor, 3 x 3 prongs, length 13 cm	1		
10	FISCH Retractor, articulated, 3 x 3 prongs, semi-sharp, length 17 cm	1		
11	KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 75 mm, length 13.5 cm	1		
12	KILLIAN Laryngectomy Scissors, double action, length 21.5 cm	1		
13	FERGUSON Suction Tube, with cut-off hole and stylet, LUER,	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
	9 Fr., working length 11 cm			
14	FERGUSON Suction Tube, with cut-off hole and stylet, LUER, 12 Fr., working length 11 cm	1		
15	FERGUSON Suction Tube, with cut-off hole and stylet, LUER, 15 Fr., working length 11 cm	1		
16	BLOHMKE Forceps, length 20 cm	1		
17	HARTMANN Nasal Cutting Forceps round, size 2, working length 11 cm	1		
18	Cup Medicine, 60 cm ³ , diameter 70 mm, height 33 mm	1		
19	Cup Medicine, 100 cm ³ , diameter 80 mm, height 30 mm	1		
20	YANKAUER Suction Tube, standard model, with large holes, length 29cm	1		
21	Retractor, sharp, 1 prong, length 17 cm	2		
22	Retractor, sharp, 2 prongs, length 17 cm	2		
23	VOLKMANN Retractor, sharp, 2 prongs, length 21 cm	2		
24	VOLKMANN Retractor, blunt, 2 prongs, length 21 cm	2		
25	VOLKMANN Retractor, blunt, 4 prongs, length 21 cm	2		
26	GLANZ Retractor, blunt, 4 prongs, curved backwards, size 30 x 12 mm, length 21 cm, for retraction of the jugular vein during throat surgery	1		
27	SCHÖNBORN Thymus Retractor, width 5 mm, length 20.5 cm	2		
28	LANGENBECK Retractor, size 33 x 14 mm, length 22 cm	2		
29	Dressing Forceps, medium, length 14.5 cm	1		
30	Dressing Forceps, narrow, length 14.5 cm	1		
31	Tissue Forceps, 1 x 2 teeth, standard width, length 14.5 cm	1		
32	Tissue Forceps, 1 x 2 teeth, medium, length 14.5 cm	1		
33	Tissue Forceps, 1 x 2 teeth, narrow, length 14.5 cm	1		
34	"ATRAUMA" Atraumatic Tissue Forceps, width of jaws 2 mm, length 16 cm	1		
35	Bipolar Forceps, insulated, tips curved, blunt, tips 1 mm, length	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
	16 cm			
36	Bipolar Forceps, insulated, tips curved, blunt, tips 2 mm, length 19 cm	1		
37	Bipolar High Frequency Cord, length 300 cm, for AUTOCON® II 400 SCB systems (111,113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® systems (50,200,350), Erbe-Coagulator, T and ICC series and KARL STORZ bipolar coagulation forceps	1		
38	Ball Electrode, 4 mm	1		
39	KIRSCHNER Spatula Electrode, straight, for use with Electrode Handle 26520043	1		
40	Electrode Handle, without buttons, with integrated connecting cable, length 300 cm, activation via two-pedal footswitch, for use with AUTOCON® II 400 (111, 112,122, 125), AUTOCON® II 200, AUTOCON® II 80, AUTOCON® 200/50 and Erbe-ICC/ACC/VIO	1		
41	SCHNIDT Forceps, slightly curved, serrated, length 19 cm	6		
42	Surgical Handle, length 12.5 cm, for Blades 208010-15, 208210-15	1		
43	Blade, sterile, package of 100	1		
44	Redon Guide Needle, angled, with lancet tip, 10 Fr.	1		
45	DESCHAMPS Ligature Needle, curved to right, length 20 cm	1		
46	DESCHAMPS Ligature Needle, curved to left, length 20 cm	1		
47	Needle Holder, tungsten carbide inserts, length 13 cm	1		
48	Needle Holder tungsten carbide inserts, length 15 cm	1		
49	HEGAR Needle Holder, tungsten carbide inserts, slender, length 18Cm	1		
50	LUCAE Ear Forceps, bayonet-shaped, length 14.5 cm	1		
51	ADSON Tissue Forceps, 1 x 2 teeth, length 12 cm	1		
52	ADSON-BROWN Tissue Forceps, atraumatic, fine side grasping teeth, length 12 cm	2		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
53	HALSTEAD "Mosquito" Artery Forceps, curved, length 12.5 cm	10		
54	HALSTEAD "Mosquito" Artery Forceps, curved, 1 x 2 teeth, length 12.5 cm	10		
55	BACKHAUS Towel Forceps length 11cm	6		
56	Dissecting Forceps, straight, without ratchet, length 14 cm	1		
57	OCHSNER-KOCHER Artery Forceps, straight, 1 x 2 teeth, length 14cm	4		
58	ROCHESTER-PEAN Artery Forceps, straight, length 14 cm	2		
59	ALLIS Forceps, 4 x 5 teeth, length 15 cm	2		
60	BRAUN Hook Forceps, 4 x 4 teeth, length 15.5 cm	1		
61	REYNOLDS Scissors, curved, delicate tips, length 15 cm	1		
62	METZENBAUM Scissors, curved, length 18 cm	1		
63	METZENBAUM-LAHEY Scissors, curved, extra slender, length 15 cm	1		
64	METZENBAUM Scissors, curved, length 14 cm	1		
65	JOSEPH Scissors, curved, length 14 cm	2		
66	Scissors, extra delicate, curved, length 10 cm	1		
67	Scissors, curved, sharp/blunt, length 14.5 cm	1		



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Annex 7: Surgical Instruments

Item F-5	Maryngotomy Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	LATHBURY (FARRELL) Cotton carrier · Ø 1,2 mm · cross threads · 15 cm	1		
2	HARTMANN Ear speculum · child · figure 3 - Ø 5,5 mm	1		
3	HARTMANN Ear speculum · adult · figure 2 - Ø 6,5 mm	1		
4	HARTMANN Ear speculum · adult · figure 3 - Ø 7,5 mm	1		
5	BUCK Ear curette · blunt · figure 1 · 15 cm	1		
6	LUCAE Tympanum perforator	1		
7	ROSEN Suction needle · 0,7 mm · straight · Luer-Lock	1		
8	ROSEN Suction needle · 0,9 mm · straight · Luer-Lock	1		
9	ROSEN Suction needle · 1,2 mm · straight · Luer-Lock	1		
10	Tube connector · Luer	1		
11	Micro ear forceps · serrated · straight · 4 × 0,5 mm · 8 cm	1		
12	Needle · curved · blunt · 15 cm	1		
13	Hook · 90° · 0,6 mm · 15 cm	1		
14	HOUSE Sickle knife · 6,0 × 1,5 mm · 15 cm	1		
15	kidney basin 250x140x35mm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	round bowl 80x40mm 0.16l	1		
17	round bowl 40x20mm 0.02l	1		
18	round bowl 60x30mm 0.06l	1		



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Annex 7: Surgical Instruments

Item F-6	Mastoid Surgery Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Foerster sponge fcps 21cm str	2		
2	Backhaus towel clamp 10.5cm	4		
3	scalpel hdl no 7 long 16.5cm	2		
4	Gillies tissue fcps 15cm 1x2t	2		
5	McIndoe dress fcps 15cm serr	2		
6	SC Mayo scrs cvd 14.5cm	1		
7	Iris scrs str 11.5cm	1		
8	SC Iris scrs str 10.5cm	1		
9	Providence Hospital hemost fcps 14cm cvd	6		
10	Halsey nh 13.5cm serr	2		
11	Sheehan osteotome 10mm 16cm	1		
12	Sheehan osteotome 12mm 16cm	1		
13	Troeltsch (Wilde) ear fcps 13cm serr	1		
14	Hartmann ear fcps 8cm 1x2t	1		
15	Gillies hook small 19cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	Jansen sh curette d/e 17cm Ø 3/5mm	1		
17	Bellucci retr lf 2t 11cm	1		
18	Bellucci retr rt 2t 10cm	1		
19	Howarth septum elevator d/e 21.5cm	1		
20	Volkman retr 4t sh 18mm 22cm	2		
21	Allis grasp fcps 15cm 5x6t	2		
22	tissue fcps 14.5cm 1x2t stand	1		
23	SC oper scrs str 14.5cm sh/bl	1		
24	oper scrs str 13.0cm sh/bl	1		
25	Williger sh curette d/e 14cm fig 00-0	1		
26	Weitlaner Wullstein retr sh 13cm	1		
27	Freer elevator sh/bl 19cm 5mm	1		
28	Frazier (Fergusson) suct cann 10 Fr ang 12.5cm	1		
29	Redon guide needle slight cvd 8 Fr knife tip threaded end	1		
30	Mayo Hegar nh 16cm	1		
31	kidney basin 250x140x35mm	1		
32	round bowl 80x40mm 0.16l	1		
33	round bowl 40x20mm 0.02l	1		
34	round bowl 60x30mm 0.06l	1		



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Annex 7: Surgical Instruments

Item F-7	Micro-Ear Tympanoplasty & Stapedectomy Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Scalpel handle · no. 3 · standard · 12,5 cm	2		
2	BACKHAUS Towel clamp · 8,5 cm	6		
3	Tissue forceps · 1 × 2 teeth · standard · 11,5 cm	1		
4	SEMKEN Dressing forceps · straight · serrated · 15 cm	1		
5	HALSEY HM Needle holder · 13,5 cm	1		
6	HALSTED-MOSQUITO Hemostatic forceps · curved · 12,5 cm	2		
7	PEAN Hemostatic forceps · straight · 14 cm	1		
8	SCHUKNECHT Wire cutting scissors · 10 cm	1		
9	WAGNER Scissors · delicate · curved · sharp/blunt · 12 cm	1		
10	Operating scissors · curved · sharp/blunt · 11,5 cm	1		
11	Hartmann ear specula fig 1 Ø 5.0mm steel	1		
12	Hartmann ear specula fig 2 Ø 6.0mm steel	1		
13	Hartmann ear specula fig 3 Ø 7.5mm steel	1		
14	Raspatory · 8 mm · 17 cm	1		
15	LEMPERT Raspatory · 3,0 mm · 17 cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	HARTMANN Ear forceps · 8 cm	1		
17	HARTMANN- HERZFELD Ear forceps · straight · Ø 2,0 mm · 8 cm	1		
18	Micro ear forceps · serrated · straight · 4 × 0,5 mm · 8 cm	1		
19	Micro ear forceps · serrated · straight · 4 × 0,4 mm · 8 cm	1		
20	Micro ear forceps · straight · 1 × 0,9 mm · 8 cm	1		
21	Micro ear scissors · sharp · straight · 8 cm	1		
22	Probe · double-ended · Ø 1,5 mm · 25 cm	1		
23	PLESTER Retractor · 2 × 2 teeth · blunt · 11 cm	1		
24	Bellucci retr lf 2t 11cm	1		
25	Bellucci retr rt 2t 10cm	1		
26	VOLKMANN Retractor · 4 teeth · sharp · 13 mm · 12 cm	1		
27	PLESTER Suction tube · 5 French · angled · 13,5 cm	1		
28	PLESTER Suction tube · 6 French · angled · 13,5 cm	1		
29	PLESTER Suction tube · 9 French · angled · 13,5 cm	1		
30	WULLSTEIN Suction handle · Luer	1		
31	Rosen suct cannula ang Ø 0.7x65mm LL	1		
32	Rosen suct cannula ang Ø 0.9x65mm LL	1		
33	Rosen suct cannula ang Ø 1.2x65mm LL	1		
34	Rosen suct cannula ang Ø 1.5x65mm LL	1		
35	BUCK Ear curette · sharp · figure 00 · 15 cm	1		
36	BUCK Ear curette · sharp · figure 0 · 15 cm	1		
37	WAGENER Ear lever · blunt · 14cm	1		
38	DAY Ear hook · large · 16 cm	1		
39	HOUSE Curette · double-ended · 1,0 / 1,2 mm · 15 cm	2		
40	HOUSE Curette · double-ended · 1,5 / 1,8 mm · 15 cm	2		
41	FISCH Perforator · 0,3 mm · 15 cm	1		
42	ROSEN Fenestrator · 15 cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
43	ANTOLI-CANDELA Round knife · Ø 2 mm · 45° · 15 cm	2		
44	PLESTER Flap knife · 15 cm	2		
45	Discision knife · straight · 15 cm	1		
46	HOUSE Sickle knife · 6,0 × 1,5 mm · 16 cm	2		
47	BARBARA Needle · straight · sharp · 15 cm	1		
48	BARBARA Needle · curved · sharp · 15 cm	2		
49	Hook · 45° · 0,6 mm · 15 cm	1		
50	SHAMBAUGH Hook · 45° · 1,0 mm · 15 cm	1		
51	Hook · 90° · 0,3 mm · 15 cm	1		
52	Hook · 90° · 0,6 mm · 15 cm	1		
53	Hook · 90° · 0,8 mm · 15 cm	1		
54	SHAMBAUGH Hook · 90° · 1,0 mm · 15 cm	1		
55	FISCH Footplate hook · 0,2 mm · 15 cm	1		
56	PLESTER Footplate hook · 0,6 mm · 15 cm	1		
57	Coagulation forceps · bipolar · angled · blunt · 16,5 cm	1		
58	kidney basin 250x140x35mm	1		
59	round bowl 80x40mm 0.16l	1		
60	round bowl 40x20mm 0.02l	1		
61	round bowl 60x30mm 0.06l	1		
62	Medicin cup · graduated · 50 ml	1		



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Item F-8	Paediatric Laryngoscopy Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Operating laryngoscope · figure 1 · 135 mm	1		
2	Operating laryngoscope · figure 2 · 152 mm	1		
3	Chest support · only	1		
4	Fibre optic light carrier	1		
5	Laryngoscope holder · only	1		
6	Laryngeal suction tube · curved up · Ø 2 mm · 25 cm	1		
7	Laryngeal suction tube · curved up · Ø 3 mm · 25 cm	1		
8	Laryngeal cup forceps · Ø 2 mm · straight · 18 cm	1		
9	Laryngeal cup forceps · Ø 2 mm · curved up · 18 cm	1		
10	Laryngeal grasping forceps · serrated · straight · 18 cm	1		
11	Laryngeal scissors · straight · 18 cm	1		
12	Laryngeal scissors · curved right · 18 cm	1		
13	Laryngeal scissors · curved left · 18 cm	1		
14	Laryngeal cup forceps · Ø 4 mm · horizontal opening · 18 cm	1		
15	Suction Tube, ball end, O.D. 2 mm working length 18cm.	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	KLEINSASSER Suction Tube, ball end, outer diameter 3 mm, working length 18 cm	1		



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Annex 7: Surgical Instruments

Item F-9	Rhinoplasty Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Scalpel blade · figure 10 · sterile · packing unit 100 pieces	1		
2	Scalpel blade · figure 15 · sterile · packing unit 100 pieces	1		
3	Scalpel handle · no. 7 · long · 16,5 cm	1		
4	Mini Scalpel handle · round · 13 cm	1		
5	Mini Scalpel blade · figure 64 · sterile · packing unit 12 pieces	1		
6	Scissor · curved · sharp · 10,5 cm	1		
7	GRAEFE Iris scissors · angled · 10 cm	1		
8	JOSEPH Scissors · curved · 15 cm	1		
9	ADSON-BROWN Tissue forceps · straight · 7 × 7 teeth · 12 cm	1		
10	Cotton carrier · Ø 1,2 mm · triangular serrated · 14 cm	3		
11	FRAZIER Suction cannula · 8 French · angled · 12,5 cm	1		
12	FRAZIER Suction cannula · 10 French · angled · 12,5 cm	1		
13	YASARGIL Suction cannula · Ø 4,5 mm · 18 cm	1		
14	NEIVERT Needle holder · smooth · 12,5 cm	1		
15	SENNING Needle holder · 17 cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	MCKENTY Raspatory · 5 mm · 15 cm	1		
17	COTTLE-KAZANJIAN Bone cutting forceps · straight · 18 cm	1		
18	HARTMANN Ear hook · sharp · figure 2 · 16 cm	1		
19	KILLIAN Nasal speculum · figure 3 - 75 mm · 14 cm	1		
20	KILLIAN Nasal speculum · figure 4 - 90 mm · 14 cm	1		
21	BLAKESLEY Nasal septum forceps · 12 cm	1		
22	JANSEN-MIDDLETON Nasal septum rongeur · 19 cm	1		
23	WEIL-BLAKESLEY Nasal forceps · straight · figure 3 - 4,2 mm	1		
24	WEIL-BLAKESLEY Nasal forceps · straight · figure 5 - 5,6 mm	1		
25	COTTLE Nasal septum speculum · 14 cm	1		
26	COTTLE Septum knife · straight · 14 cm	1		
27	JOSEPH-MASING Septum raspatory · 22 cm	1		
28	Suction raspatory · with guide · Ø 4 mm · 20 cm	1		
29	MASING Elevator · double-ended · 5 mm · 22 cm	1		
30	COTTLE Elevator · double-ended · 4 mm · 22 cm	1		
31	COTTLE Cartilage crusher	1		
32	COTTLE Retractor · 2 teeth · ball tip/sharp · 10 mm · 14 cm	1		
33	COTTLE Retractor · 2 teeth · sharp/ball tip · 10 mm · 14 cm	1		
34	MASING Retractor · with guide · 17 mm · 20 cm	1		
35	NEIVERT Retractor · with guide · 11 mm · 19 cm	1		
36	COTTLE Alar retractor · 12 mm · 14 cm	1		
37	AUFRICT Nasal retractor · 45 × 9/7 mm · 18 cm	1		
38	COTTLE Osteotome · graduated · 4 mm · 18 cm	1		
39	COTTLE Osteotome · graduated · 7 mm · 18 cm	1		
40	COTTLE Osteotome · graduated · 9 mm · 18 cm	1		
41	COTTLE Cross bar chisel · 7 mm · 18 cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
42	COTTLE Chisel · curved · 6 mm · 18 cm	1		
43	SILVER Nasal osteotome · straight · 18 cm	1		
44	SILVER Nasal osteotome · curved right · 18 cm	1		
45	SILVER Nasal osteotome · curved left · 18 cm	1		
46	COTTLE Mallet · Ø 30 mm · 300 g · 19 cm	1		
47	COTTLE-MASING Nasal scissors · curved · blunt · 10 cm	1		
48	HOUGH Scissors · angled · 13 cm	1		
49	COTTLE Nasal forceps · 15 cm	1		
50	COTTLE Columella forceps · 11 cm	1		
51	MASING Nasal file · fine · 21 cm	1		
52	MASING Nasal file · coarse · 21 cm	1		
53	JOSEPH Nasal saw · left · 18,5 cm	1		
54	JOSEPH Nasal saw · right · 18,5 cm	1		
55	WALSHAM UNIVERSAL Septum forceps · 23 cm	1		
56	COTTLE-MASING Needle holder · 6 cm shaft	1		
57	WALTER Nasal scissors · supercut · angled · 14 cm	1		
58	Hartmann nasal dress fcps 15cm	1		



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Annex 7: Surgical Instruments

Item F-10	Septoplasty Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Gruenwald bay fcps 16.0cm serr	1		
2	Cottle nasal speculum 13cm 50mm	1		
3	Cottle nasal septum speculum 13.5cm	1		
4	Freer elevator sh/bl 19cm 5mm	1		
5	Ballenger Swivel Knife Straight 3mm	1		
6	Ballenger Swivel Knife Straight 4mm	1		
7	Tilley ear fcps 14cm	1		
8	Killian Claus septum gouge bay 17.5cm 5mm	2		
9	Luc nasal septum fcps 19cm fig 1	1		
10	Luc nasal septum fcps 19cm fig 3	1		
11	Heymann nasal scrs 17cm	1		
12	Frazier suct cann grad 6 Fr 10cm	1		
13	Freer chisel 4mm 17cm slight cvd	2		
14	Joseph rhinoplasty scrs 16.5cm	2		
15	Halsey nh 13.5cm serr	2		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	mallet w nylon facings Ø 25mm 200g 18.5cm	2		
17	Cottle nasal speculum 13.5cm fig 3 75mm	1		
18	Cottle nasal speculum 13.5cm fig 4 90mm	1		
19	Frazier (Fergusson) suct cann 15 Fr ang 12.5cm	1		
20	oper scrs del cvd 13.0cm sh/sh	2		
21	Adson tissue fcps 12cm 1x2t smooth	1		
22	Adson dress fcps 12cm serr	1		
23	Adson Brown tissue fcps str 12.5cm 7x7t	1		
24	Backhaus towel clamp 8.5cm	2		
25	Leriche hemost fcps 15cm cvd	2		
26	SC Mayo scrs cvd 14.5cm	1		
27	septum needle ang 0.8mm LL	1		
28	Davis dissector d/e 4/5mm 24.5cm	1		
29	Alderdice tonsil dissector d/e 22cm	1		
30	Bunt (Mayo) instr holder 14cm	2		
31	Weil Blakesley nasal fcps 12cm str fig 3 shaft slim	1		
32	Walsham universal septum fcps 23cm	1		
33	Killian septum elevator d/e 23cm	1		
34	Hartmann nasal dress fcps 15cm	1		



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Annex 7: Surgical Instruments

Item F-11	Tonsillectomy And Adenoidectomy Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
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Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Dressing forceps · standard · 20 cm	1		
2	Tissue forceps · 2 × 3 teeth · 20 cm	1		
3	YANKAUER Suction tube · 28 cm	1		
4	MAYO-HEGAR HM Needle holder · 18 cm	1		
5	SCHNIDT (BOETTCHER) Dissecting forceps · slightly curved · 19 cm	1		
6	BACKHAUS Towel clamp · 10,5 cm	6		
7	KILNER-DOUGHTY Mouth gag · complete	1		
8	Round bowl · Ø 60 mm · height 30 mm · 0,06 l	1		
9	BECKMANN Adenoid curette 21,5 cm · figure 1 - 10 mm	1		
10	BECKMANN Adenoid curette 21,5 cm · figure 2 - 11 mm	1		
11	BECKMANN Adenoid curette 21,5 cm · figure 3 - 12 mm	1		
12	BECKMANN Adenoid curette 21,5 cm · figure 4 - 13 mm	1		
13	BECKMANN Adenoid curette 21,5 cm · figure 5 - 15 mm	1		
14	JURASZ Adenoid forceps · 19 cm	1		
15	NAGER Soft palate retractor · 22 cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
16	BRÜNINGS Tongue depressor · 14/18 mm · 19 cm	1		
17	HARTMANN Tongue depressor · 75 mm · 23 mm	1		
18	HENKE Tonsil dissector · double-ended · 24 cm	1		
19	MIKULICZ Tonsil forceps · 18 cm	1		
20	COLVER Tonsil seizing forceps · 19 cm	1		
21	BLOHMKE Tonsil seizing forceps · 21 cm	1		
22	GOOD Tonsil scissors · 19 cm	1		
23	Laryngeal mirror · figure 2 - Ø 14 mm · 22 cm	1		
24	Laryngeal mirror · figure 6 - Ø 22 mm · 22 cm	1		
25	Bipolar connecting cable · Ø 12,5 mm · 3 m	1		
26	Bracket · for high frequency cables · 22,5 cm	1		
27	Coagulation forceps · bipolar · angled · blunt · 20 cm	1		
28	Freer elevator sharp/blunt 19cm 5mm	1		
29	Set of three Draffin bipod stands with plate chest support	1		



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Annex 7: Surgical Instruments

Item F-12	Tracheostomy Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
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Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Scalpel blade · figure 10 · sterile · packing unit 100 pieces	1		
2	Scalpel blade · figure 11 · sterile · packing unit 100 pieces	1		
3	Scalpel handle · no. 3 · standard · 12,5 cm	1		
4	Operating scissors · curved · sharp/blunt · 14,5 cm	1		
5	JOSEPH Scissors · curved · 15 cm	1		
6	REYNOLDS (JAMESON) Scissors · curved · 16 cm	1		
7	Tissue forceps · 1 × 2 teeth · standard · 14,5 cm	2		
8	Tissue forceps · 1 × 2 teeth · medium · 14,5 cm	1		
9	Tissue forceps · 1 × 2 teeth · slim · 14,5 cm	1		
10	ADSON-BROWN Tissue forceps · straight · 7 × 7 teeth · 12 cm	1		
11	DEBAKEY AT Vascular forceps · 1,5 mm · 15 cm	1		
12	Cotton carrier · Ø 1,2 mm · triangular serrated · 12 cm	2		
13	FRAZIER (FERGUSON) Suction cannula · 8 French · angled · 12,5 cm	1		
14	FRAZIER (FERGUSON) Suction cannula · 12 French · angled · 12,5 cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
15	COOLEY Suction tube · Ø 9 mm · 30 cm	1		
16	CRILE-WOOD HM (DEBAKEY HM) Needle holder · 15 cm	1		
17	CRILE-WOOD HM (DEBAKEY HM) Needle holder · 18 cm	1		
18	HALSTED-MOSQUITO Hemostatic forceps · curved · 12,5 cm	8		
19	PEAN Hemostatic forceps · straight · 14 cm	2		
20	ROCHESTER-PEAN Hemostatic forceps · straight · 16 cm	1		
21	KOCHER Hemostatic forceps · straight · 1× 2 teeth · 14 cm	2		
22	BIRKETT Hemostatic forceps · straight · 19 cm	1		
23	SCHNIDT (BOETTCHE) Dissecting forceps · slightly curved · 19 cm	2		
24	BACKHAUS Towel clamp · 10,5 cm	6		
25	GROSS Dressing forceps · curved · 20 cm	1		
26	SCHOENBORN Retractor · 6 × 13 mm · 21 cm	1		
27	Tracheal retractor · 1 tooth · sharp · 16 cm	1		
28	Tracheal retractor · 2 teeth · sharp · 8 mm · 16 cm	1		
29	VOLKMANN Retractor · 4 teeth · sharp · 18 mm · 22 cm	2		
30	LANGENBECK Retractor · 14 × 28 mm · 21 cm	2		
31	LANGENBECK Retractor · 20 × 63 mm · 21 cm	2		
32	WEITLANER-WULLSTEIN Retractor · sharp · 13 cm	1		
33	WEITLANER-BECKMANN Retractor · blunt · 17 cm	1		
34	FREER Elevator · sharp/blunt · 5 mm · 19 cm	1		
35	Round bowl · 80 × 35 mm · 0,1 l	1		
36	WULLSTEIN Suction tube · Ø 2,0 mm · sterling silver · 16 cm	1		
37	WULLSTEIN Raspatory · 17 cm	1		
38	KILLIAN Nasal speculum · figure 2 - 50 mm · 14 cm	1		
39	KILLIAN Nasal speculum · figure 3 - 75 mm · 14 cm	1		



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	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
40	KILLIAN Nasal speculum · figure 4 - 90 mm · 14 cm	1		
41	COTTLE-MASING Nasal scissors · curved · blunt · 10 cm	1		
42	KILLIAN Laryngeal scissors · 20 cm	1		
43	KILLIAN Cotton carrier · 25 cm	1		
44	Bipolar connecting cable · Ø 12,5 mm · 3 m	1		
45	Bracket · for high frequency cables · 22,5 cm	1		
46	Coagulation forceps · bipolar · angled · sharp · 16,5 cm	1		
47	Coagulation forceps · bipolar · angled · blunt · 20 cm	1		
48	METZENBAUM SLIM Scissors · supercut · curved · 14 cm	1		



G: Orthopedic Instruments

Item G-1	Titanium Elastic Nail Instrument and Implant Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
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	Minimum Requirements	QTY	Compliance (Y/N), Notes	Brochure Page No.
1	Insertor with Universal Chuck	1		
2	Locking Pliers	2		
3	Standard Tamp	1		
4	Beveled Tamp	1		
5	Bar, for Small F-Tool	1		
6	Threaded Rod, for Small F-Tool, (3)	1		
7	4.5 mm/ 3.2 mm Double Drill Sleeve	1		
8	Detachable Slide Hammer , 580 grams	1		
9	Hammer, 500 grams	1		
10	Titanium Elastic Nail System Graphic Case	1		
11	Tray Case for Titanium Elastic Nails	1		
12	Straight AWL (medium)	1		
13	Curved AWL (medium)	1		



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	Minimum Requirements	QTY	Compliance (Y/N), Notes	Brochure Page No.
14	Elastic nail cutter	1		



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Annex 7: Surgical Instruments

Item G-2	Small Fragment Implant and Instrument (3.5mm set) Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	2.0 mm Drill Bit, quick coupling, 125 mm, 2 ea.	1		
2	2.5 mm Drill Bit, quick coupling, 110 mm, 2 ea.	1		
3	2.7 mm Drill Bit, quick coupling, 100 mm, 2 ea.	3		
4	3.5 mm Drill Bit, quick coupling, 110 mm, 2 ea.	3		
5	Countersink, for 3.5 mm Cortex and 4.0 mm Cancellous Bone Screws	2		
6	Tap for 2.7 mm Cortex Screws	1		
7	Tap for 3.5 mm Cortex Screws	1		
8	Tap for 4.0 mm Cancellous Bone Screws	1		
9	Handle, with quick coupling	1		
10	T-Handle, with quick coupling	1		
11	2.0 mm Parallel Drill Guide and Drill Sleeve	1		
12	3.2 mm/ 2.5 mm Insert Drill Sleeve: a. AO (Universal) qty:1 b. standard qty:1			
13	Small Hexagonal Screwdriver with Holding Sleeve	2		



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	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
14	Small Hexagonal Screwdriver Shaft	1		
15	Depth Gauge, for 2.7 mm and 3.5 mm	2		
16	Screw Forceps	1		
17	2.7 mm Universal Drill Guide	1		
18	3.5 mm Universal Drill Guide	1		
19	Bending Iron, for 2.7 mm and 3.5 mm plates, used with 329.05	1		
20	Bending Iron, for 2.7 mm and 3.5 mm lates, used with 329.04	1		
21	Pointed reduction clamps (small)	2		
22	Serrated reduction clamps (small)	2		
23	Serrated reduction clamps (medium)	2		
24	Periosteal elevator (small)	1		
25	Periosteal elevator (large)	1		
26	Bone levers small (thin)	2		
27	Bone levers small (wide)	2		
28	Small retractors	2		
29	Bone plate holder	2		
30	Pointed reduction forceps (large)	1		
31	Curette (Small)	1		
32	Curette (Medium)	1		
33	Freer periosteal elevator (small)	2		
34	Bone nibbler (small)	1		
35	Bone cutter (small)	1		



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Annex 7: Surgical Instruments

Item G-3	Large Fragment Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
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	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	3.2 mm Drill Bit, quick coupling, 195 mm	2		
2	4.0 mm Drill Bit, quick coupling, 197 mm	1		
3	4.5 mm Drill Bit, quick coupling, 145 mm	2		
4	5.5 mm Drill Bit, quick coupling, 197 mm	2		
5	Countersink, for 4.5 mm Cortex Screws	2		
6	T-Handle, with quick coupling	2		
7	Tap for 4.5 mm Cortex and 4.5 Shaft Screws, 180 mm/ 110 mm tap depth	1		
8	Tap for 5.5 mm Cortex Screws, 197 mm/ 100 mm tap depth	1		
9	Tap for 6.5 mm Cancellous Screws, 197 mm/ 150 mm calibration	1		
10	4.5 mm/ 3.2 mm Double Drill Sleeve (standard)	1		
11	5.5 mm/ 4.0 mm Double Drill Sleeve (standard)	1		
12	Holding Sleeve	1		
13	Large Hexagonal Screwdriver Shaft	1		
14	Large Hexagonal Screwdriver	2		



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Annex 7: Surgical Instruments

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
15	Depth Gauge, for large screws	2		
16	Ratchet Wrench, 11 mm width across flats	1		
17	5.5 mm Universal Drill Guide	1		
18	4.5 mm Universal Drill Guide	1		
19	Bone plate holder (large)	2		
20	Periosteal elevator (large)	2		
21	Bone levers (large)	2		
22	Large retractor	2		
23	Pointed reduction forceps	1		
24	Curette (large)	2		
25	Curette (medium)	1		
26	Serrated reduction forceps (large)	2		
27	Serrated reduction forceps (medium)	2		



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Annex 7: Surgical Instruments

Item G-4	Kirschner Wire Instrument And Implant Set	Qty. (3)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	45 mm Wire Passer, standard	1		
2	Holding Forceps, 170 mm Length (2)	1		
3	Wire-Bending Pliers: a. small qty:2 b.large qty:2			
4	Wire Cutter, 3 mm Length	2		
5	Wire Instrument and Implant Set Graphic Case with graphic outlines, autoclavable, perforated, complete with cover	1		
6	T –handle with chock	1		
7	Standard tamp	1		



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Annex 7: Surgical Instruments

Item G-5	Dynamic Hip Screw DHS \ DCS Plate Instrument Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	2.0 mm Kirschner Wire, 150 mm, trocar point (10/pkg), 1 pkg	1		
2	3.2 mm Drill Bit, quick coupling, 145 mm, 2 ea.	1		
3	4.5 mm Drill Bit, quick coupling, 145 mm, 2 ea.	1		
4	T-Handle with quick coupling	1		
5	Tap for 4.5 mm Cortex and 4.5 mm Shaft Screws, 130 mm, 57 mm tap depth, 2 ea.	1		
6	4.5 mm/ 3.2 mm Double Drill Sleeve	1		
7	Holding Sleeve	1		
8	Large Hexagonal Screwdriver Shaft (4.5 mm)	1		
9	Large Hexagonal Screwdriver (4.5 mm)	1		
10	Depth Gauge for large screws	1		
11	Screw Forceps	1		
12	4.5 mm DCP Hip Drill Guide, neutral and load, 60 mm	1		
13	Angle Guide for DHS (135 Angle)	1		
14	DHS/ DCS Direct Measuring Device, 200 mm Length	1		
15	DHS/ DCS T-Handle, with quick coupling	1		



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	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
16	DHS Triple Reamer, complete	1		
17	Tap for DHS/DCS, 12.5 mm diameter, 220 mm	1		
18	DHS/ DCS Centering Sleeve, short	1		
19	Small Impactor Tip	1		
20	DHS/ DCS Impactor	1		
21	DHS/ DCS One-Step Insertion Wrench	1		
22	DHS/ DCS Impactor	1		
23	DHS/ DCS Coupling Screw (for One-Step Insertion Wrench)	1		
24	DHS/ DCS Centering Sleeve (for One-Step Insertion Wrench)	1		
25	DHS Reaming Head, for DHS Triple Reamer (for short barrel plates)	1		
26	4.5 mm/ 3.2 mm Insert Drill Sleeve	1		
27	6.0 mm/ 4.5 mm Drill Sleeve	1		
28	DHS Parallel Drill Guide	1		
29	2.5 mm Threaded Guide Wire, 230 mm, 10 ea.	1		



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Annex 7: Surgical Instruments

Item G-6	External Fixator Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
A	Item:			
	• 5.0 mm Steinmann Pin, with central thread	1		
	• Large Combination Clamp (pin-rod)	10		
	• Large Open adjustable Clamp (rod-rod)	10		
	• Large Pin Clamp, 6 position	10		
	• 30° Outrigger Post, 11 mm	20		
	• 11.0 mm Carbon Fiber Rod: -50 cm qty:10 -30 cm qty:10 - 15 cm qty:10			
B	Instruments:			
	• Split Tissue Protection Sleeve: - 5.0 mm qty:1 - 6.0 mm qty:1 - 6.5 mm qty:1			
	• Open Compressor, 2 ea.	1		
	• 3.5 mm Trocar, short	1		
	• 3.5 mm Trocar, long	1		



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	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
	• Drill Sleeve Handle	1		
	• 5.0 mm/ 3.5 mm Drill Sleeve, short	1		
	• 5.0 mm/ 3.5 mm Drill Sleeve, long	1		
	• 6.0 mm/ 5.0 mm Threaded Drill Sleeve, short	1		
	• 6.0 mm/ 5.0 mm Threaded Drill Sleeve, long	1		



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Annex 7: Surgical Instruments

Item G-7	Minor Basic Surgical Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	PHOTOMACROGRAPHIC SCALE, 105 mm, L-Shaped, Plastic	1		
2	SCALPEL, HANDLE, No 3 (for blades 10/ 11/ 15)	1		
3	SCISSORS, MAYO, 17 cm, curved	1		
4	SCISSORS, METZENBAUM, 14 cm , curved	1		
5	FORCEPS, ADSON, 12 cm, serrated jaws	1		
6	FORCEPS, ADSON, 12 cm, 1x2 teeth	1		
7	FORCEPS, McINDOE, 15 cm, serrated	1		
8	FORCEPS, GILLIES, 15 cm, 1x2 teeth	1		
9	PROBE, 16 cm/diam. 1.5 mm, round double-ended	1		
10	SUCTION TUBE, FRAZIER, CH 12, 12.5 cm, angular	1		
11	NEEDLE HOLDER, BABY-CRILE-WOOD, 15 cm	1		
12	FORCEPS, HEMOSTATIC, H-MOSQUITO, 12.5 cm, curved	1		
13	FORCEPS, HEMOSTATIC, CRILE, 14 cm, curved	1		



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	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
14	FORCEPS, HEMOSTATIC, KOCHER, 14 cm/1x2 teeth, straight	1		
15	FORCEPS, TOWEL CLAMP, BACKAUS, 13 cm	1		
16	FORCEPS, SPONGE, FOERSTER, 24 cm, serrated, jaws, straight	1		
17	RETRACTOR, SENN-MILLER, 16 cm, double-ended, blunt prong	1		
18	RETRACTOR, VOLKMANN, 22 cm, 3 sharp prongs, 10 mm curve	1		
19	RETRACTOR, SELF-RET., WEITLANER, 13 cm, 3 x 4 blunt prongs	1		
20	BOWL, ROUND, 100 ml, 80 x 35 mm, stainless steel	1		
21	FORCEPS, TISSUE, ALLIS-BABY, 14 cm/ 3x4 teeth	1		
22	FORCEPS, TISSUE, BABCOCK, 16 cm, 9 mm jaws, standard	1		
23	BASKET, STERILIZING, 240 x 255 x 100 mm, + lid	1		



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Annex 7: Surgical Instruments

Item G-8	Cannulated Screw (6.5 mm) Instrument Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	2.8 mm Threaded Guide Wire, 300 mm, 10 ea.	1		
2	7.3 mm Cannulated Drill Bit, large quick coupling, 300 mm, 2.9 mm cannulation	1		
3	5.0 mm Cannulated Drill Bit, large quick coupling, 300 mm, 2.9 mm cannulation	1		
4	Cannulated Countersink, for 6.5 mm and 7.3 mm Cannulated Screws	1		
5	Cannulated Tap for 6.5 mm and 7.3 mm	1		
6	Cannulated Screws, 275 mm/ 200 mm tap depth	1		
7	2.8 mm Adjustable Parallel Wire Guide	1		
8	2.8 mm Trocar, for use with 5.0 mm/ 2.8 mm Wire Sleeve (312.03)	1		
9	12.0 mm/ 8.5 mm Protection Sleeve	1		
10	Variable Angle Wire Guide	1		
11	8.5 mm/ 2.8 mm Wire Sleeve	1		
12	15.5 mm/ 13.0 mm Washer Sleeve	1		



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	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
13	Multiple Wire Guide, for use with 2.8 mm Threaded Guide Wire	1		
14	2.8 mm Trocar, for use with Multiple Wire Guide	1		
15	Solid Hexagonal Screwdriver, 4.0 mm width across flats, for removal of 7.3 mm Cannulated Screws	1		
16	Solid Hexagonal Screwdriver Shaft, 4.0 mm width across flats, 270 mm, for removal of 7.3 mm Cannulated Screws	1		
17	Cannulated Hexagonal Screwdriver, 2.9 mm cannulation, 4.0 mm width across flats	1		
18	Holding Sleeve, for use with Hexagonal Screwdriver	1		
19	Cannulated Hexagonal Screwdriver Shaft, 2.9 mm cannulation, 4.0 mm width across flats, 270 mm	1		
20	2.9 mm Cleaning Brush	1		
21	2.8 mm Cleaning Stylet	1		
22	Cannulated Screw Measuring Device	1		
23	Screw Forceps	1		
24	Large Quick Coupling	1		



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Annex 7: Surgical Instruments

Item G-9	Osteotome Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	LAMBOTTE OSTEOROME 125 MM OVERALL LENGTH WIDTH: 6-15 MM: a. STRAIGHT qty:1 b. CURVED qty:1			



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Annex 7: Surgical Instruments

Item G-10	Hohmann Retractors	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	6 mm (width) x 15.9cm (length)	2		
2	8 mm (width) x 15.9cm (length)	3		
3	10 mm (width) x 23.5cm (length)	3		
4	18 mm (width) x 23.5cm (length)	3		
5	24 mm (width) x 23.5cm (length)	2		
6	43 mm (width) x 23.5cm (length)	2		
7	70 mm (width) x 24.1cm (length)	2		



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Annex 7: Surgical Instruments

Item G-11	Schanz Screws and Steinman Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
A	Steinman pins width (3, 4, 5,6)mm qty:20 from each size			
B	Schanz screws self drill :			
	1. size (3 mm) ,threads size (16mm), length (5cm-20cm)	20		
	2.size (3 mm) ,threads size (20 mm), length (5cm-20cm)	20		
	3.size (4 mm) ,threads size (16mm), length (5cm-20cm)	20		
	4.size (4 mm) ,threads size (20mm), length (5cm-20cm)	20		
	5.size (4 mm) ,threads size (24mm), length (5cm-20cm)	20		
	6.size (5 mm) ,threads size (20mm), length (10cm-20cm)	30		
	7.size (5 mm) ,threads size (30mm), length (10cm-20cm)	30		
	8.size (5 mm) ,threads size (40mm), length (10cm-20cm)	30		
	9.size (6 mm) ,threads size (20mm), length (10cm-20cm)	30		
	10.size (6 mm) ,threads size (30mm), length (10cm-20cm)	30		
	11.size (6 mm) ,threads size (40mm), length (10cm-20cm)	30		



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Annex 7: Surgical Instruments

Item G-12	Orthopedic Hammer set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Small size	1		
2	Medium size	2		
3	Large size	1		



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Annex 7: Surgical Instruments

Item G-13	Fine Bone Orthopedic Set	Qty. (2)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
1	Bone cutter: -small qty:1 -Medium qty:1 -Large qty:1			
2	Bone nibbler : -small (qty:1 straight) & (qty:1 curved) -medium (qty:1 straight) & (qty:1 curved) -large (qty:1 straight) & (qty:1 curved)			
3	Osteotomes -straight (2, 3,5,6,8,10)mm qty:1 (from each size) -curved (4,7,10,5)mm qty:1 (from each size)			
4	Periosteum elevator: -medium qty:1 -Large qty:1			
5	Curette : -small qty:1 -medium qty:1 - large qty:1			
6	Freer retractor: -small qty:1			



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	Minimum Requirements	Qty	Compliance (Y/N), Notes	Brochure Page No.
	-large qty:1			
7	Bone hook	1		
8	Hammer	1		
9	Bone lever (large)	2		



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Annex 7: Surgical Instruments

Item G-14	Plaster Room Set	Qty. (1)

IMPORTANT NOTE:

Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below

TECHNICAL SPECIFICATIONS:

The unit must meet or exceed the requirements listed in the table below.

Product Details	
Name of Manufacturer	
Model/ catalogue number	
Country of Origin for the offered model	
Country where the manufacturer is based	
Delivery time	
Full warranty period	

	Minimum Requirements	Qty.	Compliance (Y/N), Notes	Brochure Page No.
1	Bandage Scissor - 18cm	2		
2	Plaster Cast Shears 220mm	2		
3	Plaster Cast Scissors 220mm	2		
4	Plaster Cast Spreaders, 25, 26, 27 cm	2		
5	Plier for removal wire	1		



Annex 7: Surgical Instruments

Special Terms for Surgical Instruments

- Offers not complying with any of the special terms or the technical specifications shall be considered non-conforming with tender requirements.
- Any vendor providing FORGED documents shall be disqualified from the current tender and banned from participating in any future RMS tenders
- Offers submitted by vendors with previously complaints or unsolved issues will be excluded from the current tender

1. The vendor is responsible to ensure through official documents that classified medical instrument are manufactured in conformity with applicable quality system standards (ISO) and must provide the latest copy of the certificates of the following standards formally endorsed by the chamber of commerce of the manufacturing origin with the technical offer:

A- ISO 13485:2016

Medical devices — Quality management systems — Requirements for regulatory purposes

ISO 13485:2016 specifies requirements for a quality management system where an organization needs to demonstrate its ability to provide medical devices and related services that consistently meet customer and applicable regulatory requirements.

B- ISO 9001:2015

Quality management systems — Requirements

Specifies requirements for a quality management system, aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

C- ISO 7153-1:2016

Surgical instruments — Materials — Part 1: Metals

Specifies metals commonly used to manufacture various types of standard surgical instruments, including but not limited to those used in general surgery, orthopaedics and dentistry.

D- ISO 7151:1988

Surgical instruments — Non-cutting, articulated instruments — General requirements and test methods

Specification of basic requirements for as well physical characteristics as workmanship, of the steel grades used and heat treatment of component parts, excluding rivets, screws and parts manufactured of material grade M.



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E- ISO 7740:1985

Instruments for surgery — Scalpels with detachable blades — Fitting dimensions

Lays down the dimensions of two sizes of fitting features for detachable scalpel blades and the handles with which they are used. It secures a good fitting and interchangeability of detachable blades for scalpels manufactured in different countries or by different manufacturers

F- ISO 7741:1986

Instruments for surgery — Scissors and shears — General requirements and test methods

This standard deals with materials, heat treatment and hardness of component parts, corrosion resistance, workmanship and cutting ability of scissors and shears used in the surgery and defines the test methods.

G- ISO 13402:1995

Surgical and dental hand instruments — Determination of resistance against autoclaving, corrosion and thermal exposure

Describes test methods to determine the resistance of stainless steel surgical and dental hand instruments against autoclaving, corrosion and thermal exposure.

2. Offered items should be from reputable well known manufacturers and excellent experience in the field previously evaluated and accepted in Main Hospitals at Royal Medical Service. Bidder must submit samples with the technical offer from each brand that was submitted in the offer to be assessed and /or evaluated by RMS
 - A. Evaluation duration and quantities will be determined by the purchasing committee.
 - B. Offers which do not include such samples will be considered non-conforming.
 - C. Offers which fail the evaluation/assessment process will be excluded from the tender.
 - D. Samples will be returned to the Bidder at the end of the evaluation/assessment process except for samples from Bidders winning the final award where they will be the property of RMS and will be kept as a reference for the receiving committee.
 - E. The purchasing committee has the right to require a sample for any instrument previously installed in RMS Hospitals.
3.
 - A. Bidder is not allowed to submit more than one offer for the same item whether that's solely or in coalition or partnership with other bidders.
 - B. Bidder is allowed to include within their offer optional alternatives for the same offered item from the same manufacturer.



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4. Required certificates:

- a. For instruments of USA origin, a copy of a certificate of FDA approval must be submitted with the technical offer.
 - b. For instruments of other origins, a copy of either a CE certificate (MDD)/TUV OR a certificate of FDA approval must be submitted with the technical offer.
 - c. With each offer, bidders must provide a formally endorsed document issued by the manufacturer stating that the bidder is the authorized agent/ distributor for the offered item.
 - d. In all of the above cases (except C) certificates must be formally endorsed by JFDA.
 - e. Any vendor not submitting all required certificates will be eliminated.
5. All Offered items should be supplied with free sale certificate said confirmation should be stating clearly that the item is freely sold in the country of origin.
6. All items should be engraved or etched with manufacturing origin, company logo and code number.
7. Each instrument set will be awarded as a listed set which including its specific sterilization baskets and trays.
8. Bidders must submit their reservations/queries regarding tender specifications and/or special terms within the first third of the tender closing period starting from the tender announcement date. Reservations/queries submitted after the end of this period will be rejected.
9. The supplier must furnish DRMS with a guarantee letter stamped and legalized by the Notary Public equals to (115%) of the total value of the awarded equipment valid for (24) months from the date of final acceptance of the instruments by DRMS which shall cover rusting, manufacturing defects, wear and tear and corrosion.
10. Offers must include clear original catalogues for all offered items. Images and part numbers of offered items must be provided, highlighted and outlined clearly.
11. Offers must include fully detailed information as a soft copy (either Microsoft office or Microsoft excel format) in addition to a hard copy , mentioning the exact model/catalogue number and country of origin of the offered item(s), full description/specifications. And any accessories or options included in the offer.
12. Official website of the manufacturer must be provided. The website must clearly demonstrate the history profile and manufacturing features of the company. In case of inconsistency between the information on the website with the provided information of the local agent regarding any offered product, the purchasing committee has the right to eliminate that product from the awarding process.



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13. *Any complementary parts, accessories and consumable items necessary for the proper operation of surgical instruments must be included in the offer, priced separately and to be approved by the manufacturer.*
14. *A. complementary parts availability must be guaranteed and can be purchased without the need replace the entire system of surgical instruments*
B. Bidder will bear any responsibility resulting from the awarding of insufficient items or sub-items.
15. *Pricing must include services of sale, shipment, transportation, delivery from port to site or to Main Medical Stores.*
16. *A. custom clearance of goods shall be the responsibility of the Jordanian Armed Forces (JAF), however, suppliers shall bear all costs incurred by handling charges and any demurrage charges or extra expenses incurred by the port's corporation (including expenses caused by delay in presenting the necessary shipment documents for either clearing or transporting the goods to the required location mentioned in the final order, delivery note issuing charges, unloading charges, local shipping charges etc.).*
B. The supplier is also responsible for providing of all relevant shipping documents, together with the delivery order(s).
17. *Delivery period should be mentioned clearly; the purchasing committee has the right to reject any offer with delivery time exceeding 4 months.*
18. *Goods are to be brand new; manufacturing date of the delivered products should not exceed 18 months from the date of the final award.*
19. *A. DRMS has the right to increase the awarded quantities by a percentage not exceeding 35% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.*
B. DRMS has the right to decrease the awarded quantities by a percentage not exceeding 50% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.
20. *For offers submitted in Jordanian dinars, payment will be either by wire transfer or by cheque after final acceptance of good, any other way of payment will be rejected.*