

REGISTERED/IMMEDIATE

Heavy Industries Taxila
Marketing & Procurement
Directorate (CP Branch)
Taxila Cantt, Pakistan
Tel : 051- 9315029
Fax : 051-9315029
5171/IT-3042/18-19/Eqpts/Med/CP-II/Proc
19 Apr 2019

To: M/s _____

Subject: **Tender Inquiry - FOR**

1. You are requested to please forward your offer for the following:-

Ser	Part No and Nomenclature	A/U	Qty Demands	Details
a.	Pulse Oximeter	No	12	As per Annexure 'A'
b.	HB Electrophoresis apparatus cellululose acetate / chromatography bse, semi / fully automated	No	01	As per Annexure 'B'
c.	Centrifuge (Desktop) Flexible Rotors for Different Tube Size (Germany, USA, Japan, UK/ or Equivalent)	No	01	As per Annexure 'C'
d.	Anaesthesia Machine Boyless apparatus	No	01	As per Annexure 'D'
e.	OT Table	No	01	As per Annexure 'E'
f.	Portable X-Ray Machine	No	01	As per Annexure 'F'
g.	Digital imaging system	No	01	As per Annexure 'G'
h.	Endomotor with built in Apex Locate	No	01	As per Annexure 'H'
i.	Light Cure Machine Cordless	No	01	As per Annexure 'I'
j.	Empty Oxygen Cylinder 50 Litter with stand	No	20	As per Annexure 'J'
k.	Empty Oxygen Cylinder 11 Litter with stand	No	30	As per Annexure 'K'
l.	Ophthalmoscope + Retinoscope with Charges	No	02	As per Annexure 'L'
m.	Trial Lens Box (MSD)	No	02	As per Annexure 'M'
n.	90 D Wide angle Lens	No	02	As per Annexure 'N'
o.	Vision Chart smbrt system (Unicos Projector)	No	01	As per Annexure 'O'
p.	Mecicines Trolleys	No	05	As per Annexure 'P'
q.	Wheel Chairs	No	25	As per Annexure 'Q'

Instructions to Bidders

2. Rates will be quoted on FOR Taxila Cantt basis. Offer best competitive price while submitting your quotation.
3. Over writing and cutting of any nature in the quotation will not be accepted.
4. Part-I and Part-II quotations will be enclosed in separate sealed envelopes for each tender inquiry. For identification purpose, the words "TECHNICAL QUOTATION PART-I WITHOUT PRICE" and COMMERCIAL QUOTATION (PART-II) WITH PRICE" shall be written in BLOCK CAPITAL LETTERS on the respective sealed envelopes which will be placed in a large envelope bearing complete details of the tender inquiry as under :-

BID

REGISTERED

TENDER INQUIRY NO. 5171/IT-3042/18-19/Eqpts/Med/CP-II/Proc dated 19 April 2019 TO BE OPENED ON 1100 Hours on 09 May 2019

To: ASSISTANT DIRECTOR (PROCUREMENT) HEAVY INDUSTRIES TAXILA
GATE NO.1, HRF (T),
FROM: M/s _____

5. **Delivery of Tender.** The tender/bid will be enclosed in a sealed envelope which will be invariably marked with "Bid against Tender Inquiry No. **5171/IT-3042/18-19/Eqpts/Med/CP-II/Proc dated 19 April 2019** and complete address. The tender if brought by hand, will be handed over to security staff on duty at Heavy Rebuild Factory HRF (T) Gate No.1 for placing the same in the bid box (available at the gate). The bid will not be brought by hand by any firm while visiting the office of Assistant Director (Procurement). Moreover if required endorsements are found missing, the bid will be liable for rejection.
6. The bid must be dropped in the bid box, latest by 1030 hours on **09 May 2019**, at Heavy Rebuild Factory HRF (T) Gate No.1. The bid will be opened same day at **1100 hours** in the presence of the available representative of the firms in Heavy Industries Taxila. No bid will be entertained / considered after **1030 hours**, on the aforementioned date.
7. All papers must be signed and stamped and items not quoted / quoted must be mentioned clearly.
8. All clauses/terms mentioned in this inquiry will be considered accepted by the bidding firms, even if no reference to them is given in the respective offers.
9. **Postal Order for Rs. 200/-** (Rupees Two Hundred) in favour of **CO Hospital**, HIT Taxila Cantt, will invariably be enclosed with the technical offer, failing which the bid will be ignored.

10. Firms are instructed NOT to send Telex and Fax bids. Such bids/offers would not be accepted.
11. Please confirm receipt of the tender inquiry immediately and also intimate your participation or otherwise in this tender inquiry. In case any firm does not wish to bid, then it should return the tender inquiry documents at the earliest.
12. HIT reserves its right to cancel the bidding process with reason but without any obligation to justify such a reason.
13. The stores are required to be delivered at Hospital HIT, Taxila Cantt within **02** months from the date of signing of the contract.
14. The offered price quoted must be firm, final and inclusive of all taxes, packing, handling charges etc and delivery at HIT Taxila Cantt.
15. **Offers must remain valid for 180 days** from the date of opening of the tender.
16. The store will be packed in standard grade, worthy of transportation by the means adopted.
17. This inquiry may not be taken as an indication of subsequent supply order and does not in any way commit HIT to purchase the items offered.
18. Warranty period mentioned as per annexes, remaining items warranty will be remain **Two years** from the date of issuance of CRV of the stores.
19. In case of failure to supply the stores within the stipulated periods, liquidated damages at the rate of 2% but not less than 1% of amount involved per month and maximum value not more than 10% of contracted store value or a part there-of will be levied.
20. **Payment Terms**
 - a. Payments will be made by either by CMA (DP), Rawalpindi or CMA (HIT) Taxila Cantt, through cheques against pre-receipted bills (duly affixed with revenue stamps) along with professional tax certificates (attested photocopies) of the suppliers after delivery and acceptance of stores.
 - b. Partial payments are not allowed.
 - c. The payment to the registered person is linked with active taxpayer status of the supplier as per FBR data base. If any registered supplier is not on active Taxpayer list, his payment will be stopped till he / she files his / her mandatory returns and appears on ATL of FBR.
21. HIT reserves the right to increase / decrease the quantity of items, placed on the tender without any reference to the firm.

22. The supplier shall furnish a 10% performance bank guarantee within one month from the date of signing of the contract from scheduled bank in Pakistan against the total value of contract excluding taxes/duties. This bank guarantee must remain valid for 24 x months after the stores are put in operation. Bank guarantee will be released after completion of warranty period of store.

23. **All Firms participating in the tender will deposit 2% bid security of total quoted value in the shape of CDR / bank guarantee addressing to Director Marketing & Procurement, Heavy Industries Taxila. The bid security will be provided by the firms in commercial envelope and clear mentioning of the same in the technical quotation without price will be ensured by the firms, failing which the bid will stand rejected. The bid securities will be returned as under:-**

- a. **Unsuccessful Bidders. Within 15 days of completion/announcement of the bid evaluation result.**
- b. **Successful Bidders. Upon submission of 10 % PBG (para 22).**

24. Integrity pact will invariably be involved / invoked when the total value of the contract exceeds 10 Million as specified in PPRA Rule 2002-2004.

25. In case of any dispute regarding the terms and conditions and the quality of stores, the decision of the Chairman HIT will be considered as final and binding on the suppliers/firms.

26. In case, the contracted firm fails to execute the order within the stipulated time and does not materialize the supply of ordered stores, the supply order/contract would be cancelled at the firm's risk and expense. Expenditure incurred on the re-purchase of offered stores will be recovered from the defaulting firm, under existing procedures.

27. Inspection of the store will be carried out at HIT Taxila Cantt.

28. Technical & Commercial Quotations must be provided on **CDs in MS EXCEL, MS WORD or MS ACCESS** format along with hard-copies. **Quotations without CDs will not be entertained. Also ensure following while preparing bids:-**

- a. **Sequence of serial no as given in tender inquiry will not be changed.**
- b. **No serial no will be deleted or shortlisted in the bid/offer.**

Eligibility Criteria

29. Firms should not be blacklisted or defaulted anywhere within or outside Pakistan. In this regard firm should provide "No Blacklisting / Defaulting Certificate" (affidavit on judicial stamp as per **Annexure 'R'**, duly attested by Notary Public, to be provided).

30. Only registered suppliers / persons who are on Active Taxpayer List (ATL) of FBR are eligible to supply goods/services to government departments. Thus the bidders will submit a certificate to this regard along with the technical bid.
31. Country of Origin: **All countries except India, Israel and Taiwan.**
32. In case of indigenously / locally manufactured item, the firms should have relevant experience and capacity of manufacturing these Medical Equipments and should be duly qualified by Hospital of HIT. Capacity for manufacturing of Medical Equipments will be verified by a team ex HIT Hospital.
33. Confirmation of the numbers and nomenclatures of required items along with soft copy of same in MS Excel format. The confirmation to fulfill the technical specifications related to each item must be highlighted in the technical bid.
34. In the case of FOR imported items, the firms are responsible to provide evidence of the agency agreement/certificate of conformance, principal proforma invoice (in original and without price) and OEM certificates of all the items being quoted against this tender inquiry along with countries of origin. Separate OEM certificate for each item / Medical Equipments will be provided by the firms. The firms will clearly indicate that all the Medical Equipments used in the manufacturing are brand new from current production. Confirmation to fulfill technical specifications related to imported items on FOR basis must be highlighted in the technical bid.
35. Confirmation of the validity period of the quote, delivery period and warranty period.
36. Confirmation of the willingness of the firms to arrange the visit of a two member HIT team (ex HIT Hospital) on firms' expenses for ascertaining / validating the manufacturing, stocking and financial capabilities quoted.
37. Confirmation of all technical parameters specified in the IT. **Manufacture brand of each item must be highlighted in the bid.**
38. Firm may provide a certificate for training class to the technical staff of HIT Hospital regarding installation / repairing of machines at the firm expenses / permissions.
39. Confirmation/ certificate to the effect be provided from Drug Regulatory Authority of Pakistan and Pakistan Medical Association that firm / medical equipment being provided is not banned in Pakistan.

Qualification Criteria

40. Participating firms should meet the following criteria:-

- a. 50% score in every individual category/sub category (except Para 40 c (3) (c) whereby even zero score will not affect the qualification of the bidder).
- b. 70% aggregate score of all categories.
- c. The scoring would be done as under:-

(1)

Ser	Description	Maximum Points
(a)	Financial Soundness	50
(b)	Past Experience / Record	30
(c)	Past Performance	20
Total		100

- (2) **Financial soundness.** Credit Marks for financial soundness of the firm shall be on the basis of following qualifications:-

Ser	Description	Max Points	Explanation for Marks Obtained
(a)	Annual turnover of last 3 x Financial Years (Third Party generated verifiable audit reports for last three financial years to be provided).	20	Marks will be calculated as per the formula:- Formula Score = $\frac{(Y1+Y2+Y3)}{3X} \times 20$ *(Y1,Y2,Y3 respective annual turnovers of last three years) X= Last purchased rate / estimated value of the quoted items available with HIT. Note: All calculation will be done in Pak Rs, other currency (if any) will be converted into Pak Rs with applicable conversion rate.
(b)	Working Capital of last three years (Third Party generated verifiable audit report to be provided).	15	Marks will be calculated as per the formula:- Formula Score= $\frac{(Y1+Y2+Y3) \times 15}{3X}$ Y1, Y2 and Y3 being respective working capitals of last three years. X= Last purchased rate / estimated value of the quoted items available with HIT. Note: All calculation will be done in Pak Rs, other currency (if any) will be converted into Pak Rs with applicable conversion rate.

(c)	Litigation History where decision went against the firm (affidavit on judicial stamp paper as per Annexure 'S' to be provided).	15	Marks for firms with no litigation history. One mark will be deducted for each litigation where decision went against the firm.
Total		50	

- (3) **Past Experience**. Credit marks for experience shall be awarded on the basis of following criteria:-

Ser	Description	Max Points	Explanation for Marks Obtained
(a)	Projects of similar nature and complexity i.e. medical stores completed in last 10 years. (Attested and verifiable copies of related contracts be attached).	10	0.5 marks will be awarded on the number of contracts per year of having value 2 Million or more. Maximum 1 mark per year will be granted.
(b)	Projects of ongoing similar nature and complexity in hand i.e medical stores (Attested and verifiable copies contracts be attached).	15	Marks will be calculated as per the formula:- Formula Score= $\frac{C}{2 X} \times 15$ C= Total amount of contracts in hand. X= Last purchased rate / estimated value available with HIT. Note: All calculations will be done in Pak Rs, other currency (if any) will be converted into Pak Rs with applicable conversion rate.

(c)	Status of enlistment with Government Organizations (Attested copies of Registration certificates to be enclosed).	5	Full marks will be given on provision of at least 1x certificate.
Total		30	

- (4) **Past Performance.** Credit Marks for past performance shall be awarded on the basis of following criteria:-

Ser	Description	Max Points	Maximum Points
(a) Past performance to be evaluated on under mentioned parameters:-			
	i. Contracted store supplied beyond DP in last ten years (data will be attached duly verified from the concerned procurement agency).	5	Marks of bidders will be calculated as per given formula:- X1 = Total value of last ten years' contracts. X2 = Total value of last ten years' contracts completed within DP. Formula: Score= $\frac{X2}{X1} \times 5$
	ii. Quantum of rejections of items in the last ten years contracts (data will be attached duly verified from the concerned procurement agency).	5	X1 = Total value of last ten years contracts. X2 = Total value of the passed items in first go in the last ten years' contracts. Formula: Score= $\frac{X2}{X1} \times 5$

	iii. Timely provision of documents/ bank guaranties / bid security money (data will be attached duly verified from the concerned procurement agency).	5	X1 = Total no of contracts concluded in last ten years'. X2 = Total number of timely provided bank guaranties/ bid securities against the total no of contracts in last ten years. Formula: Score= $\frac{X2}{X1} \times 5$
	iii. No of contracts / items still pending beyond DP (data will be attached duly verified from the concerned procurement agency).	5	0.25 marks would be deducted for each contract in hand, which is pending beyond DP.
Total		20	

41. Only affidavits and third party (having no conflict of interest with either HIT or the bidder) generated / verified documents may be treated as credible evidences for scoring.

42. **A pre bid meeting will be held a week prior to opening of IT on 30 April 2019 at 1000 hours in Marketing & Procurement Directorate (Tender opening room). All desirous firms are requested to attend the subject meeting before submission of bid and clarification require if any by the firm be obtained by the firms in the said meeting.**

43. Contracts will be awarded to **best evaluated bidder** with highest overall score based on **weightage which will be worked out as under:-**

- | | | | |
|----|--------------------------|---|------------|
| a. | Qualification Criteria | - | 70% |
| b. | Commercial offer / Price | - | 30% |

Note: Technical / Commercial quotation must conform to IT parameters specified in this tender. The offer will be rejected there in if the said parameters are not complied with.

Lieutenant Colonel
Assistant Director Procurement
(Riaz Fida)

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	PULSE OXIMETER	No	12	FOR

TECHNICAL SPECIFICATIONS

1. Should have plethismographic wave form with numeric display for SPO2 and Heart rate on LCD/TFT display.
2. Should have a SPO2 range of 0 to 100%.
3. Should have SPO2 accuracy of $\pm 2\%$.
4. Should provide bar graph for pulse strength.
5. Audio and visual alarm for both upper and lower SPO2, Heart rate.
6. Should provide with adult reusable finger probe with technology from standard reputed companies..
7. Beep sound and alarm sound should have separate volume control
8. Should have a minimum of 2 hours back-up time.
9. Should be a portable, light weight and desktop model.
10. Should work with input 200 to 240Vac 50 Hz supply.
11. Should have safety certificate from a competent authority CE / FDA (US) /STQC CB certificate / STQC S or equivalent certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Hemoglobin Electrophoresis	No	01	FOR

Capillary Electrophoresis

V8 is an integrated diagnostic system optimized for an extensive assay range for the preparation, separation and analysis of human proteins for a wide range of disease states including multiple myeloma, chronic disease states and hereditary blood disorders.

V8 System features:

- The only clinical CE system to offer Hemoglobin IEF separation technique
- Variant analysis and quantitation in a single assay
- Continuous access sample processing with liquid level sensing of both buffers
- Only 30 uL dead volume required from a secondary tube
- Multi-assay onboard capacity with fully automated buffer switching technology
- Powerful Platinum 4V software with key user functions on a single intuitive display



Agarose Gel Electrophoresis Systems

ELECTROPHORESIS AUTO SAMPLE HANDLER

Features include:

- - User-friendly touch screen interface
- - Primary tube sampling with liquid level sensor
- - Barcode reader with LIS interface for positive ID
- - 100-sample capacity
- - Flexible dilutions, i.e. per sample
- - Smaller footprint
- - 50% faster sample tray preparation
- - Improved level and tube detection
- - Quieter operation



SPIFE TOUCH:

- **Touch Screen:** Easy to use interface for test selection and customization of parameters
- **30% Faster:** Faster processing and organized workflow means greater efficiency over previous generations of SPIFE and other brands of electrophoresis analyzers.
- **Positive ID:** Integrates with ESH Touch for positive ID of patient samples and electrophoresis gel.
- **Accurate Sampling:** Up to 100 samples per agarose gel are precisely applied. New applicator blades provide fast, clean and accurate sampling.
- **Temperature Controlled:** Peltier devices precisely regulate temperature to preserve sample integrity while providing crisp separations.
- **Efficient Staining and Reagent Application:** Reagent is automatically applied to gels for enzymatic assays while the online stainer provides auto staining and destaining of visible analytes.

QUICKSCAN TOUCH

- **High Def Touch Screen** -Sharper patterns and adjustable contrast and brightness enhance visualization of small bands. The touch screen makes for easy menu navigation, scanning and editing.
- **New Reverse Image** - Invert the background of IFE images onscreen to create a “negative” view to enhance visualization and aid in interpretation. View simultaneously with positive image system.
- **Easy M-Spikes** -Place cursor in the middle of the M-spike and the system auto delimits on either side. This provides greater consistency between users. Users can adjust marks.
- **User Access** - Set access for each user’s ability to edit patient info or scans, import or export, print, change setup or work list settings, or change calibration. User IDs are stored with the scan to identify who scanned, who reviewed, who edited, whether or not rescanned, and who rescanned.
- **Auto Pairing** - Auto pair previous results for a patient for a specified test and date range and overlay up to two previous scans on patient's current results.
- **Auto Editing** - Intelligent software gives the flexibility to quantitate split beta SPEs as one fraction or two and intuitiveness to automatically edit cholesterols.
- **Auto Pairing** - Auto pair previous results for a patient for a specified test and date range and overlay up to two previous scans on patient's current results.
- **Positive ID** -Barcoded gels allow positive ID from patient tube to final results. Using the Electrophoresis Sample Handler, Quick Scan Touch can download work lists created from barcoded samples. Patient data can also be imported from LIS.
- **Massive Data Storage** -Store all the demographics, tests, comments and customizable work lists you want. The only limitation is the size of the storage drive. The number of characters in labels or fields is essentially unlimited.
- **User-Defined Reports and Work lists** -Reports and work lists are completely customizable. Create a single-page report that includes one patient’s SPE and IFE with interpretation, or print up to 100-scan profile of the patient’s entire history - easily.
- **Customized Interpretive Analysis** -Build your own decision limits and interpretive comments library, making reporting results a snap. Comments can be automatically added or coded for quick retrieval. Text can be easily amended.
- **Network Capability** - Patterns can be reviewed and edited remotely over the LAN.
- **Quality Control** - Touch the QC icon to set the Quick Scan Touch in motion to scan a linearity step tablet and neutral density control. Levy-Jennings plots are also available for easy evaluation of QC data.

General Specification:

- Capillary / cellulose acetate electrophoresis acceptable.
- Automated /Semi automated equipment.
- Preferably reader incorporated in the machine.
- Reagents to be supplied by the same supplier, after quoting the cost of reagents.
- After sales service free of cost for 01 year.

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	CENTRIFUGE MACHINE	No	01	FOR

Feature Specification

DETAILED REQUIREMENT:

Bench top centrifuge machine with angle rotor
 Built in speedometer, variable speed control, lid locking and braking device
 Maintenance free motor
 Lid safety interlock
 Noiseless and vibration free
 220V 50 Hz, AC

USER ADJUSTABLE SETTINGS:

Speed 4500–5000 rpm.
 Maximum capacity 8/12 x 15ml
 Digital control of Timing up to 60min

DISPLAYED PARAMETERS:

Digital display of speed, timing
 Rotor Imbalance detection

ACCESSORIES:

Complete with standard and operation accessories

- Servo Controlled Voltage Stabilizer with surge protection facility.
- Operating Manual with a Soft Copy.
- Service Manual with a Soft Copy

WARRANTY:

Comprehensive warranty period should be five Years with parts including yearly replacement (or as per recommendation of manufacturer) of preventive maintenance kits (If applicable) and Parts & Accessories i.e., Probes, Cables, Transducers, Batteries etc. except disposables and consumable items.

➤ **Centrifuge should be European / Japan / USA made or equivalent.**

➤ **NOTE:**

- The system must be complete with all Cables, Leads, Probes & Batteries or any other accessory required for measuring all above selected parameters with disposables & consumable items for Adult & Pediatrics Patients

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Anaesthesia Boyles Apparatus	No	01	FOR

1. General Requirement
 - a. Compact and modular, 2gas Anaesthesia workstation with an integrated ventilator for adult to infants and integrated airway monitor for airway pressures and volume.
 - b. The machine should be suitable for low and minimal flow anesthesia application with compliance compensation of breathing ckt, fresh gas flow compensation / decoupling.
 - c. The machine should have 3 drawers.
 - d. The anaesthesia machine inbuilt ventilator, vaporizer and patient monitor should be manufacture by same company
 - e. The system should have up to 2 hrs. Battery backup
 - f. System should conform to US FDA / European CE and EN 60601-2-13 or equivalent (Requirement for safety and essential performance of anaesthesia system)

2. Gas delivery system

- a) Should have pin index yokes for Oxygen & Nitrous Oxide besides separate connection for Central gas supply for Oxygen, Nitrous Oxide.
- b) The machine should have pressure gauges for cylinders & central supply lines mounted on front of Anaesthesia machine for better visibility. The gas connections should be non-interchangeable.
- c) The system should be suitable to use at minimal flow upto 700ml fresh gas setting.
- d) Automatic cutoff of N₂O by Oxygen pressure failure.
- e) Hypoxic guard for linear regulation of minimum oxygen concentration at 23% volume
- f) Audible visual oxygen failure alarm.
- g) Emergency Oxygen flush at 30 – 70 L/min bypassing the vaporizer.

4. Flow meter

- Dual Cascade type flow meter tubes for Oxygen & N₂O. Range 20 ml / min to 10 Lit/min. Calibrated in multiple scales. Single tube for air 100 ml to 14 L/ min.

5. Vaporizer

- Machine should have possibility to mount two quick mount type vaporizer for easy interchangeability, and safety with interlock facility.
- Should be provided with a Temperature / pressure compensated and flow independent
- Should be capable of connecting Vaporiser for Isoflourane / Sevoflourane / Halothene / Desflourane
- Vaporizer should have extended delivery range from 0 to 6 Vol. %
- The vaporiser should be calibration free.

6. Breathing System

- Should have fresh gas de-coupled semi closed circle absorber system.
- Should have adjustable pressure relief valve from 5 to 75 mbar.
- The system should have leak and compliance test (including patient hoses upto the Y piece).
- Should have compact breathing system with approx 1.7 Ltr. Volume capacity.
- Should have an external fresh gas outlet for connecting Magill or Bain's circuit
- The system should have integrated breathing system warmer to prevent condensation in breathing system and patient comfort (to prevent delivery of dry fresh gases to lungs or mucocilliary transport of fresh gas)
- The device should have port for anaesthesia gas scavenging system.

7. Anaesthesia Ventilator

- The system should have inbuilt ventilator with electronically controlled and pneumatic or Piston driven technology.
- Should not require changing of bellows for adult & infants.

- Should have minimum screen size of 6".
- Modes: Manual/Spont, Volume Controlled
- The same ventilator should be capable to be upgrade to pressure support.
- Tidal Volume : 20 ~ 1400 ml
- PEEP : 0 ~ 20 mbar
- Breathing Frequency : 4 to 60 BPM
- I:E Ratio : 4:1 to 1:4
- Inspiratory pause : 0 – 50% of Ti
- Should have Desflurane compensation.
- Should be able to ventilate with atmospheric air, in case of total gas supply failure.

8. Airway monitoring

- Integrated monitor for electronic monitoring and display of following parameters :
 - Expiratory Tidal Volume
 - Expiratory Minute volume
 - PEEP, Peak & Mean and Pleatru airway pressure
 - Frequency
 - Waveform display for Airway pressure.

9. Alarm limits & alarms

- Adjustable high / low limits with audio and visual alarms for the following :
 - Minute volume,
 - Airway pressure (incl stenosis and disconnect),
 - Insp oxygen concentration,
 - Audio power supply fail alarm,
 - Fail to cycle warning.

10. Machine should have RS 232 connectivity port

Scope of supply

- 2 gas Anaesthesia machine with Patient Monitor
- Trolley with 3 drawers
- Writing surface
- Pin Index yokes for O₂ & N₂O
- Pipeline connections for all three gases
- Electrically operated piston based Anaesthesia ventilator
- Isoflourane Vaporiser
- Semiclosed breathing system
- Adult & Paediatric autoclavable patient tubings
- Anaesthetic mask size – Adult & child
- Vaporisers for Isoflourane
- Central gas supply hoses (Color coded)

Price to be quote for:-

1. System with 1 year warranty and CMC charges for next 10 years
2. System with 5 years warranty and CMC charges for next 5 years
3. Price list of all proprietary consumables required.

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	OT Table	No	01	FOR

Features :

- Electro Manual drives with noiseless, jerk less and smooth positioning.
- Table positions i.e. **Height adjustment, Trendelenburg, Reverse Trendelenburg, Lateral Tilt, Back Section/Chair Position, Flex-Reflex** are controlled by dual operations i.e. **Corded Handset & Manual Override with graphical icons.**
- Zero Position to make table neutral by simply pressing '0' positioning button.
- Remote has **LED backlit** with symbolic position figures to use even in darkness.
- **Safety key** to block motor system in critical operations.
- Manually gear operated Kidney Elevator.
- **Table top is divided into 5 sections** providing numerous articulation possibilities.
- Radiolucent table top is **C-ARM & X-RAY compatible** over the entire length of the table.
- No cross bar on the table top making it very suitable for fluoroscopy.
- The base of the table is scientifically designed "T" shaped SS covered heavy base proving optimum foot room for comfortable posture of the surgeons.
- Offset column provide unrestricted access of C-ARM.
- Detachable-Interchangeable head and leg sections provide further versatility.
- Integrated weight compensation by manual adjustment of the head and leg sections.
- **Non-corrosive stainless steel 304G construction including table top frames, accessories rail, base cover and column telescopic covers.**
- Four easy glide, antistatic castors, two of which are swiveling, ensure mobility.
- **50mm decompressed mattress** with greater comfort & easy to clean.
- **Pedal operated braking system** secures the table in its place while in use.

Optional:

- **Override Panel/Standby Controller:** Additional control panel on the table column cover for continue operation in case of remote failure.
- **Zero Position** to make table neutral by simply pressing '0' positioning button.

- **Memory Function** - The microprocessor based control system is fully programmable and can store upto **two user-programmable preset positions** in its memory that can be recalled anytime by simply pressing M1 or M2 button.
- Remote has **LED backlit** with symbolic position figures to use even in darkness.
- **Safety key** to block motor system in critical operations.
- Individual Locking Function.

- **Technical Constraints :**

Top dimension	L 1980 x W 533 mm
Height adjustment with pad	750 mm – 1050 mm
Trendelenburg / Reverse	30° / 25°
Lateral tilt left/right	20° / 20°
Kidney elevator	150 mm
Back Rest (upward / downward)	80° / 25°
Leg Rest (upward / downward)	15° / 90°
Head Rest (upward / downward)	20° / 90°
Power supply	24VDC
Patient Weight Capacity	200 kgs (440 lbs)



Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Cordless Portable Digital X-Ray	No	01	FOR

Features Specification

Cordless Portable Digital X-Ray

Convenience of cordless

Using rechargeable Li-Polymer Battery-Pack

Great reduction of X-Ray exposure

Up to 1/7 of existing X-Ray systems: 60kV, 2mA

Adopting high-frequency circuit of inverter type

X-Ray system the most suitable to diverse digital sensors

Simultaneous use of digital sensor and film.

More than 3010 exposure are possible with one time charging of battery.

Technical Data:

X-Ray Generator: Inverter

Tube Voltage: 60k V (fixed)

Tube Current: 1mA

Tube Type: Stationary

Tube Focal Spot: 0.8 mm

Target Angle: 20°

Exposure Time: 0.05-1.25sec – Digital Sensor

Increase 0.05 sec : 0.20-1.35 sec – Film

Power Requirement: DC 14.2 – 16.8V

Detector: Film / Digital Sensor

Power Supply: Rechargeable Battery

Display: Graphic LCD

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Digital Imaging System	No	01	FOR

Features Specification

Digital Imaging System

Exceptional work flow with USB Module

For modern top-level x-rays. With exceptional image quality

Simple Cable Change

if the cable is damaged, it can be easily and rapidly replaced on-site, guaranteeing optimal investment security.

Only two screws have to be loosened.

Very slim design, rounded edges, flat cable outlet

Innovative thin sensor hold facilities easy positioning

Technical Data:

Sensor size 1:

Active Surface: 20x30mm

External dimensions: 25.4 x 38.3 x 7.5 mm

Physical pixel size: 15 µm

Measured resolution: 16 Lp/mm

Theoretical resolution: 16.6 Lp/mm

Sensor cable length: upto max. 2.7m

USB Module:

USB port of USB module: Version 2.0

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Endo Motor with Builty-in Apex Locator	No	01	FOR

Features Specification

Endo Motor with Builty-in Apex Locator

Portable unit to perform root canal preparation in several treatment rooms.

Battery- Powered unit and can be use during charging.

The machine have file library.

User interface for easy operation with tiltable display for optimum view.

Integrated apex locator for optimal measuring accuracy without a file clamp when using the contra-angle hand.

Piece (Using ENDO 6:1)

Automatic motor stop.

Rotation clockwise and anti clackwise.

Wire Treatment.

The unit is equipped with a storage battery with the backup time of 2 hours.

Removable and disinfect able Motor holder.

Frequency: 47-63Hz

Power: 30W

Motor Speed: 1200-19200 rpm

Torque: 0.2 – 5 Ncm

Annexure "I"

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Curing Light (Wireless)	No	01	FOR

Features Specification

Curing Light (Wireless)

Wavelelength: 42-480mm

Power: 1250 mW /cm

Opalecent: Ø 7.5 mm light guide

Protective light shield

Battery Lithium-Ion 2300 mAh

Base Station

Annexure “J”

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Oxygen Gas Cylinder	No	20	FOR

Specification

1. Oxygen Gas Cylinder : 6.8 Cubic with tested BOC
With valve (2019) 50 ltr

Annexure "K"

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Oxygen Gas Cylinder	No	30	FOR

Specification

1. Oxygen Gas Cylinder : 2 Cubic with tested BOC
With valve (2019) 11 ltr

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	LED Ophthalmoscope / LED Retinoscope Set with Desk Charger	No	02	FOR

Specification

Ophthalmoscope featuring:

- Unique optical system reduces corneal and iris reflex
- Even small pupils allow full view of retina
- LED illumination CRI > 97, color temperature 3500K
- Multi-coated lenses reduce stray light
- Dust resistant housing for longer periods w/o servicing
- Ergonomic shape fits the orbita comfortably
- Optics mounted on metal chasis for durability
- Soft orbital support for protection of user's glasses
- Lens Range: (+) 38D to (-) 36D in 74 single step design
- 5 Apertures: Slit, Fixation Star, Large Spot, Small Spot, Half-Spot
- 2 Filters: Cobalt Blue, Red-Free (Green)
- Li-ion Rechargeable battery handle with charging module

Streak Retinoscope featuring:

- Parastop feature for selection of parallel beam
- Single Control knob for convergence/width and rotation
- Streak revolves 360 degrees
- Integrated polarization filter reduces internal dazzle
- LED illumination, detachable brow rest
- Multi-coated optics in metal control chasis for easy recognition of neutralization point
- Dust-resistant housing reduces service requirements for longer periods
- Ergonomic shape covers orbita completely to reduce stray light
- With detachable brow rest to prevent operator's spectacles getting scratched
- Li-ion Rechargeable battery handle with charging module

Dual Desk featuring:

- Rechargeable battery cannot be overcharged
- Two independent charging compartments
- Fast charge feature 2 hours to recharge
- Automatic charging, independent of the state of charge of the rechargeable battery
- Guarantees extended battery life
- Charge status display
- Light pulses from the charging compartment to confirm the charging mode

Annexure "M"

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Lens Box	No	02	FOR

European Quality Standard or equivalent Trial Lens set large composition, meniscus lenses with variable curve to correspond exactly to the prescription, refractive index 1.523, comprising of:

35 pairs each of plus and minus spheres (0.12D to 20.00D).

19 pairs each of plus and minus cylinders (0.12D to 6.00D).

10 pcs prisms (1D to 10D).

10 pcs accessory lenses (maddox, crossed lenses 2 pcs, pin hole, occluder, slit, red lens, green lens, plano lens, frosted glass).

Complete in lockable carrying case with handle.

Trial Frame Universal with spring joints, axis rotation knobs, variable side length, adjustable nose pads, asymmetrical p.d. adjustment 50mm-90mm, robust metal construction

Annexure “N”

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	90D Lens	No	02	FOR

90D Lens for general diagnosis and small pupil examinations, small diameter ring is ideal for dynamic funduscopy, outstanding general diagnostic lens, even through small pupils, field of view 74° / 89°, image magnification 0.76x, laser spot 1.32x, working distance 7mm, complete in carrying case.

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	AUTO CHART PROJECTOR	No	01	FOR

Auto Chart Projector with four different types of chart show clear and bright images for your right vision test. A remote controller and fast chart change make operator comfortable and stable.

Specifications:

Chart	:	31 pcs
Chart selection speed	:	Average 0.3 Sec.
Mask	:	1 Open 3 Vertical lines 3 Horizontal lines 21 Single letters
Filter	:	Red / Green
Projection distance	:	2.0m ~ 7.0m (3m is standard)
Projection magnification	:	30 x (5m)
Projection size	:	φ 252mm and 330W x 225H (at 5m)
Tilt angle	:	Ball joint (±10°)
Lamp	:	6V 20W halogen
Power source	:	AC100V ~240V 50/60Hz
Power consumption	:	80VA
Auto -OFF function	:	5 ~ 10minutes after
Dimensions	:	Main body: 265(H) x 230(W) x 360(D)mm Remote controller: 20(H) x 64(W) x 195(D)mm
Net Weight	:	Main body: 6.0Kg Remote controller: 180g
Interface	:	8-pin connector for simultaneous control of chart, mask and R/G filter by a motorized refractor's control unit.

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Medicines/ Emergency Crash Trolley	No	05	FOR

Specification:

- Mobility: Four non conductive 5th swivel diagonally locking castors
- Protection: Wrap around bumper provides protection for trolley accessories, wall and staff
- Easy access: Full extension drawers offers easy access to entire contents of the DRAWERS
- Effortless operation: Roller Bearing slides with quick release levers
- Adjustable: IV pole height adjustable
- Security: Drawers with central locking device
- Durability: Stainless steel top with pull handles
- Platform: Heavy duty over head shelf for monitor / equipment
- Versatile: Dual oxygen cylinder holder at rear side with cylinder securing mechanism
- High quality: Epoxy Powder coated in texture finish
- Size: 26"x26"x50" (LXWXH)

Annexure “P”

Cat/Part No	Nomenclature	A/U	QTY	FOB/FOR
	Medicines/ Emergency Crash Trolley	No	25	FOR

FFEATURE

- Easy-to-use folding system ideal for car travel or compact storage, including a flip down back rest.
- Flip-up armrests and adjustable and detachable leg rests.
- Large self-propelling, 24” pneumatic or solid tyres with quick release wheels and sturdy 8” solid aluminium casters.
- Comes standard with a calf strap and seat belt.
- Available in your choice of solid or pneumatic tyre models. Pneumatic tyre model comes standard with tyre pump.
- Available in ‘*silver liquid*’ colour

Specification:

Overall Width	78 cm (30.7”)
Overall Height	93 cm (36.6”)
Overall Length	103 cm (40.5”)
Folder Width	26.5 cm (10.5”)
Total Weight	21 kg (46.3 lbs)
Weight Capacity	110 kg (242 lbs)
Weight without Leg rest & Wheels	12.2 kg (27 lbs)
Seat Dimensions	45 cm x 40 cm (18” x 15.7”)
Seat-to-floor Height	50 cm (19.7”)
Seat Back height	46 cm (18.1”)

AFFIDAVIT**NO DEFAULTER CERTIFICATE**

It is certified that M/s _____ have never been defaulted or blacklisted with any Govt / Semi Govt / Defence Organization / PPRA / Khyber Pakhtunkhwa PPRA / Punjab PPRA / Sindh PPRA within or outside Pakistan.

(Designation, Signature & Stamp)

(Signature & Stamp of Notary Public)

AFFIDAVIT**NO LITIGATION CERTIFICATE**

It is certified that M/s _____ have no litigation history where decision went against the firm anywhere within or outside Pakistan.

OR

It is certified that M/s _____ have following litigation history:-

- a.
- b.
- c.

(Designation, Signature & Stamp)

(Signature & Stamp of Notary Public)