

BID SOLICITATION DOCUMENTS For the Procurement of Equipments (Dental Units, Dental Equipment and Laboratory Equipment) Khyber College of Dentistry (MTI) Peshawar

Note: The prospective bidder is expected to examine the Bidding Documents carefully, including all Instructions, Terms & Conditions, and Specifications etc. Failure to furnish all information required by the Bidding documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect would result in the rejection of the Bid.

TABLE OF CONTENTS

5S #	Contents	Page #
1.	Introduction	
2.	Instruction to Bidders	
3.	General Conditions	
4.	Invitation for Bids	
5.	Bid Security	
6.	Bid Validity	
7.	Blacklisting of Defaulted Bidder/Contractor	
8.	Disputes Controversies/Dispute Resolution	
9.	Statement of Requirement with Specification	
10.	Evaluation Criteria	
11.	Redressing of Grievances	
12.	Award of Contract	
13.	Payment	
14.	Sub-Letting Contract	

1. INTRODUCTION:

KCD-Medical Teaching Institution (KCD-MTI) Peshawar invites item wise sealed bids from the Manufacturer/Authorized Dealers for procurement of "Equipments (Dental Units, Dental Equipment and Laboratory Equipment)" under Competitive Bidding under rule 6(2) (b) "Single Stage Two Envelope" bidding procedures of Khyber Pakhtunkhwa Public Procurement Regulatory Authority (KPPRA) Rules 2014.

2. INSTRUCTIONS TO BIDDERS:

- 1. This Bidding procedure will be conducted in light of Khyber Pakhtunkhwa Public Procurement Regulatory Authority (KPPRA) Laws, Rules made there under along with Standard Bidding Documents.
- 2. Both Technical Bids and Financial Bids must be submitted in two separate sealed inner envelops marked "1-Technical Bids" and "2-Financial Bids" which should be packed in one outer envelope.
- 3. Separate bids shall be submitted against each package i.e. for Dental Units, Dental Equipment and Laboratory as mentioned in the tender advertisement and bidding documents.
- 4. Pre-bid meeting with the interested bidders will be held on **07/09/2022** at **11:00 AM** hrs in the Conference room of this Institution.
- 5. The technical bids will be opened on **21/09/2022** at **11:00 AM** in presence of the bidders/representatives who choose to attend while the financial bids will be opened later on after theevaluation of technical bids. Financial bids of only technically qualified responsive bidders will be opened while the financial bids of technically unqualified bidders will be returned unopened.
- 6. An affidavit is mandatory, without indicating the figure in the Technical Bid that bid security is placed in the financial bid. Duly attested by notary public.
- 7. Any bid received after the deadline for submission of bids shall not be entertained and shall be returned unopened to the Bidder.
- 8. All the bidders are required to provide annexure wise complete requisite documents with page marking for their Technical Evaluation / Qualification as prescribed under the rules.
- 9. The bid should be complete in all respect and must be signed by the bidder.
- 10. Prices should be quoted in Pak rupees PKR for Serial No. 1 and PKR & CNF for all other items and should include all taxes applicable by Govt. (at any stage of tender process/till the validity of rates). If not specifically mentioned in the Quotation, it will be presumed that the prices include all the taxes.
- 11. Bidders are essentially required to provide correct and latest postal/email/web addresses, phone/mobile/fax numbers for actively and timely communication.
- 12. For any query, clarification regarding Services / Bid Solicitation Documents, the applicants may send a written request at least one day prior to the opening date.
- 13. The Bidder may after its submission withdraw its bid prior to the expiry of the deadline prescribed

for submission of bids. Withdrawn bids will be returned unopened to the Bidders.

- 14. Any bid not received as per terms and conditions laid down in this document are liable to be ignored. No offer shall be considered if:
 - a. Received without earnest money;
 - b. It is received after the date and time fixed for its receipt;
 - c. The tender document and the bid is unsigned;
 - d. The offer is ambiguous;
 - e. The offer is conditional i.e. advance payment, or currency fluctuations etc.
 - f. The offer is from blacklisted firm in any Federal / Provincial Govt. Dept.:
 - g. Only typed tender on original prescribing letter pad, sealed & signed (Every Page) should be submitted, the quoted Price must be preprinted and hand written quoted price will not be acceptable. The tenders must be according to specification; alternate rates will not be acceptable.
- 15. Usage of correction fluid & corrections are strictly prohibited unless duly initiated.
- 16. Any erasing / cutting etc. appearing on the offer, must be properly signed by the person signing the tender.
- 17. Bids will be rejected if the Bid is in some way connected with bids submitted under names different from his own.
- 18. In case of Bid Tie, the decision will be taken by making toss/draw/Recall sealed quotation in front of the bidders.
- 19. Any direct or indirect effort by a bidding firm to influence this institution during the process of selection of a bidder or award of contract may besides rejection of its bid result into its disqualification from participation in the KCD-MTI Peshawar's future bids.
- 20. The bidder shall provide an undertaking that the bidder has not been declared black listed by any Governmental/ Semi-Governmental institutions.
- 21. Bidders shall not be eligible to bid if they are under a declaration of Ineligibility for corrupt and fraudulent practices issued by any government organization in accordance with the Section 44(1) KPP Rules 2014.

3. GENERAL CONDITIONS: -

- 1. KCD-MTI Peshawar shall evaluate the proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements.
- 2. Alternative bid shall not be considered and shall be rejected by the Competent Authority.
- 3. KCD-MTI Peshawar may increase or decrease the quantity of the items required, as per KPPRA rules.
- 4. At any time prior to the deadline for submission of bids, KCD-MTI Peshawar may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the bidding documents by amendment.
- 5. If a bid is not substantially responsive, it will be rejected by the Procuring Entity and may not subsequently be made responsive by the Bidder by correction of the nonconformity.
- 6. KCD-MTI Peshawar may accept or reject any or all of the bids under Rule 47 of KPPRA Rules, 2014.
- 7. Additional documents will not be acceptable after Bid Submission.
- 8. Bid Validity 180 Days.

INVITATION FOR BIDS KCD Medical Teaching Institute Peshawar

INVITATION FOR BIDS

Dean, Medical Teaching Institute, **KCD Peshawar** invites sealed bids from Manufacturer/Importers/Authorized Distributors under National Competitive Bidding for the procurement of "Equipments (Dental Units, Dental Equipment and Laboratory Equipment)", under rule 6(2) (b) "Single stage Two Envelop procedure" of KPPRA Rules 2014, from Manufacturer/Authorized Dealers registered with theIncome / Sales tax, reflected on Active Taxpayer List of FBR.

The bidders are required to submit bid security @ 2% of Total Bid Value - in the name of Dean KCD Peshawar. Pre-bid meeting with the interested bidders will be held on 07/ 09/2022 at 11:00 AM at the Conference Room of the institution.

The tenders complete in all respect must reach the undersigned by **10:30 AM** on **21/09/2022**, which will be opened at **11:00 AM** on the same day in conference room / Dean KCD office of the in the presence of the procurement committee and the bidders / representatives who may choose to attend.

Competent Authority reserves the right to reject any or all the bids as per provisions contained inRule 47 of KPPRA Rules 2014.

4. BID Security

- i. Bid security @ 2% of Total Bid Value (refundable) drawn in favor of " Dean KCD-MTI Peshawar"
- ii. Pay Order (PO) is not acceptable.

The bid security may be forfeited:

- i) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or
- ii) In the case of a successful Bidder, if the Bidder fails to sign the contract or to furnish performance Guarantee.

5. **BID VALIDITY:**

i) The bids should be valid for 180 days.

ii) In exceptional circumstances, KCD-MTI may solicit the Bidder's consent to an extension of the period of validity reasons shall be recorded in writing. The request and the responses there to shall be made in writing. The bid security provided shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid, except as provided in the bidding document.

6. BLACKLISTING OF DEFAULTED BIDDER/CONTRACTOR

Conditions for Blacklisting of Defaulted Bidder/Contractor under rule 44 of KPPRA Rules 2014

The following are the events which would lead to initiate (Rule 44 of KPPRA Rules 2014) blacklisting/debarment process;

- Consistent failure to provide satisfactory performances.
- Found involved in corrupt/fraudulent practices.
- Abandoned the place of work permanently

Conditions for debarment of Defaulted Bidder/Contractor

Failure or refusal to;

- Accept Purchases Order / Services order terms;
- Make supplies as per specifications agreed:
- Fulfill contractual obligations as per contract
- O Non execution of work as per terms & condition of contract.
- Any unethical or unlawful professional or business behavior detrimental to good conduct and and another and the public procurement process.
- o Persistent and intentional violation of important conditions of contract.
- o Non-adherence to quality specifications despite being importunately pointed out.
- Security consideration of the State i.e., any action that jeopardizes the security of the State orgood repute of the KCD- MTI Peshawar.

Procedure for blacklisting and debarment

- **1.** Competent authority of KCD -MTI Peshawar may on information, or on its own motion, issue show cause notice to the bidder.
- 2. The Show Cause notice shall contain the statement of allegation against the Bidder.
- **3.** The bidder will be given maximum of seven days to submit the written reply of the show cause notice.
- **4.** In case the bidder fails to submit written reply within the requisite time, the competent authority may proceed forth with ex-pa rte. against the bidder.
- 5. Direct to issue notice of personal hearing to the bidder/ authorized representative of the bidder and the competent authority shall decide the matter on the basis of available record and personal hearing, if availed.
- **6.** The competent authority shall decide the matter within thirty days from the initiation of proceedings.
- 7. The order of competent authority shall be communicated to the bidder by indicating reasons.
- **8.** The order past as above shall be duly conveyed to the KPPRA and defaulting bidder within three days of passing order.
- 9. The duration of debarment may vary up to five years depending upon the nature of violation.

7. DISPUTES AND CONTROVERSIES/DISPUTE RESOLUTION

- 1. The purchaser shall constitute a committee comprising of disagreed & notified by the competent authority proper powers and authorizations to address the complaints of bidders that may occur prior to the entry into force of the procurement contract.
- 2. Any bidder feeling aggrieved by any act of the purchaser after the submission of his bid may lodge a written complaint concerning his grievances not later than 03 days after the announcement of the bid evaluation report.
- 3. The grievance redress Officer shall investigate and decide upon the complaint within 06 days of the receipt of the complaint. The report along with decision shall be forwarded to the purchaser officerwithin the prescribed period.
- 4. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.

 Note: Grievance notified & designated who can invite appropriate official as co-opted member for grievance.
- 5. Any dispute or difference arising out of the Agreement which cannot be amicably settled between the Parties, shall be finally settled by KPPRA whose decision will final and bidding on both the parties.

STATEMENT OF REQUIREMENT WITH SPECIFICATTION: Package 1

Dental Unit (Local Manufactured)

- **Headrest**: multiple position articulated head rest.
- Chair: should be strong and comfortable, hydraulic operated by electric motor. Chair movement should be synchronized, allows back rest to adopt with the body's natural movement for the patient as well as for the dentist.
- Multiple/two preset programmable chair position, last memory position, the chair should return to the previous treatment position.
- After using, the preset rinsing/zero position are achieved. Chair movement should be controllable by dentist touch panels and on chair base joystick/foot control (hands free operation).
- Foot Control for chair movements should be independent of computerized circuit (relay system). One main switch to control air, water and power.
- External/Internal junction box.
- Chair-instrument lock enables safe operation; the chair is locked while an instrument is working. With safety system, backrest and seat movement can be stopped once it meets obstacle.
- Spacious instrument tray chair mounted (pneumatic control for up and down movement of tray).
- LED Dental light (shadow less) flexible and multiple axis position with different light intensity control, Sensor and manual control.
- Ceramic cuspidor & glass filler with easy cleaning facility and direct water control and needle valve control. Fixed cuspidor.

Dentist Element:

- Hoses hanging should be adjustable according to dentist position.
- X-ray film viewer (for OPG Optional).
- Left/Right armrest (foldable for patient convenience).
- Instrument holder with arc edge design, more space for operation.
- Control panel can be used for operating functions, such as chair movement, preset and programmable positions, cup filler and bowl rinsing option.
- Operating light on/off and intensity adjustment.
- Equipped with: one three way syringe.
- High Speed Air Turbine Push Button Type (Optional).
- Slow speed Air Motor with Contra and Straight Angle Attachment with integrated water spray (optional), 1air pressure gauge.
- In built Ultrasonic Scalar (optional)
- Intra oral camera and screen (optional)
- Small size Pediatric Dental Unit (optional)
- 1silicon mat Autoclavable.
- Connector type (hand piece coupling): 2 connectors with 4 holes and 2 connectors with 2 holes.
- One doctor stool with full back.

Assistant Element

- 1 assistant stool.
- High power suction and saliva ejector system with filter for easy cleaning.
- 1 three way syringe.

Water Unit

- Mounted to the chair. Fresh Water bottle (1.5L).
- A switch to choose city water or fresh water bottle.
- Controlled with air regulator.
- Programmable cup filler and bowl rinsing systems.
- Water supply with filter.
- Air filter regulator.
- Air & water pressure pipe best quality.

2. Dental Unit (Imported)

- **Headrest**: multiple position articulated head rest.
- Chair: should be strong and comfortable, hydraulic operated by electric motor. Chair movement should be synchronized, allows back rest to adopt with the body's natural movement for the patient as well as for the dentist.
- Multiple/two preset programmable chair position, last memory position, the chair should return to the previous treatment position.
- After using, the preset rinsing/zero position are achieved. Chair movement should be controllable by dentist touch panels and on chair base joystick/foot control (hands free operation).
- Foot Control for chair movements should be independent of computerized circuit (relay system). One main switch to control air, water and power.
- External/Internal junction box.
- Chair-instrument lock enables safe operation; the chair is locked while an instrument is working. With safety system, backrest and seat movement can be stopped once it meets obstacle.
- Spacious instrument tray chair mounted (pneumatic control for up and down movement of tray).
- LED Dental light (shadow less) flexible and multiple axis position with different light intensity control, Sensor and manual control.
- Ceramic cuspidor & glass filler with easy cleaning facility and direct water control and needle valve control. Fixed cuspidor.

Dentist Element:

- Hoses hanging should be adjustable according to dentist position.
- X-ray film viewer (for OPG Optional).
- Left/Right armrest (foldable for patient convenience).
- Instrument holder with arc edge design, more space for operation.
- Control panel can be used for operating functions, such as chair movement, preset and programmable positions, cup filler and bowl rinsing option.
- Operating light on/off and intensity adjustment.
- Equipped with: one three way syringe.
- High Speed Air Turbine Push Button Type (Optional).
- Slow speed Air Motor with Contra and Straight Angle Attachment with integrated water spray (optional), 1air pressure gauge.
- In built Ultrasonic Scalar (optional)
- Intra oral camera and screen (optional)
- Small size Pediatric Dental Unit (optional)
- 1silicon mat Autoclavable.
- Connector type (hand piece coupling): 2 connectors with 4 holes and 2 connectors with 2 holes.
- One doctor stool with full back.

Assistant Element

- 1 assistant stool.
- High power suction and saliva ejector system with filter for easy cleaning.
- 1 three way syringe.

Water Unit

- Mounted to the chair. Fresh Water bottle (1.5L).
- A switch to choose city water or fresh water bottle.
- Controlled with air regulator.
- Programmable cup filler and bowl rinsing systems.
- Water supply with filter.
- Air filter regulator.
- Air & water pressure pipe best quality.

3. Dental Unit USA, UK, EU, JAPAN

- **Headrest**: multiple position articulated head rest.
- Chair: should be strong and comfortable, hydraulic operated by electric motor. Chair movement should be synchronized, allows back rest to adopt with the body's natural movement for the patient as well as for the dentist.
- Multiple/two preset programmable chair position, last memory position, the chair should return to the previous treatment position.
- After using, the preset rinsing/zero position are achieved. Chair movement should be controllable by dentist touch panels and on chair base joystick/foot control (hands free operation).
- Foot Control for chair movements should be independent of computerized circuit (relay system). One main switch to control air, water and power.
- External/Internal junction box.
- Chair-instrument lock enables safe operation; the chair is locked while an instrument is working. With safety system, backrest and seat movement can be stopped once it meets obstacle.
- Spacious instrument tray chair mounted (pneumatic control for up and down movement of tray).
- LED Dental light (shadow less) flexible and multiple axis position with different light intensity control, Sensor and manual control.
- Ceramic cuspidor & glass filler with easy cleaning facility and direct water control and needle valve control. Fixed cuspidor.

Dentist Element:

- Hoses hanging should be adjustable according to dentist position.
- X-ray film viewer (for OPG Optional).
- Left/Right armrest (foldable for patient convenience).
- Instrument holder with arc edge design, more space for operation.
- Control panel can be used for operating functions, such as chair movement, preset and programmable positions, cup filler and bowl rinsing option.
- Operating light on/off and intensity adjustment.
- Equipped with: one three way syringe.
- High Speed Air Turbine Push Button Type (Optional).
- Slow speed Air Motor with Contra and Straight Angle Attachment with integrated water spray (optional), 1air pressure gauge.
- In built Ultrasonic Scalar (optional)
- Intra oral camera and screen (optional)
- Small size Pediatric Dental Unit (optional)
- 1silicon mat Autoclavable.
- Connector type (hand piece coupling): 2 connectors with 4 holes and 2 connectors with 2 holes.
- One doctor stool with full back.

Assistant Element

- 1 assistant stool.
- High power suction and saliva ejector system with filter for easy cleaning.
- 1 three way syringe.

Water Unit

- Mounted to the chair. Fresh Water bottle (1.5L).
- A switch to choose city water or fresh water bottle.
- Controlled with air regulator.
- Programmable cup filler and bowl rinsing systems.
- Water supply with filter.
- Air filter regulator.
- Air & water pressure pipe best quality.

i. CENTRALIZED COMPRESSOR WITH DRIVER FOR AT LEAST 25 TO 30 UNITS

Set of motors independent working with each isolation system, individual on-off as well central auto on-off control with dessicant drier (Medical grade) for each motor 99.9% moisture free, oil free, odour free, dust free , rust free air hour meter, over load protector, thermal protector, thermal protector, circuit breaker for each motor. Minimum 300 litre vertical tripod stand tank with filter regulator assembly, safety valve, Auto drain, pressure gauges, connected through flexible pipe

5-8 bar working pressure, 440voluts/50hz

Bypass system

Local tank

ii. **Air Compressor Motor** (USA,UK,JAPAN,EU) Oil Free, 5 to 8 bar air pressure, 440 volt compatible with the selected Air Compressor.

DENTAL EQUIPMENT PACKAGE #02 ORAL & MAXILLOFACIAL SURGERY

4.	Digital Portable Dental X-Ray	X-Ray generator	: Inverter	
	Imported	Tube voltage	:60 to 70KV	
	-	Tube curent	: 2 mA to 3mA	
		Tube focal spot	: 0.8 to 0.9mm	
		Target angle	: 20°	
		Exposure time	: 0.05-1.25sec Digital Sensor	
		(Increase 0.05sec)	: 0.20-1.35sec Film	
		Power requirement	: DC 14.2-16.8V	
		Detector	: Film / Digital Sensor/Phosphorus plate	
		Power supply	: Rechargeable battery,	
		Display	: Graphic LCD	
5.	RVG SYSTEM/INTRA ORAL	Detector: CMOS		
	SENSOR	Pixel Matrix: Size 1 10	C	
	USA/UK/JAPAN/EUROPE	Active surface dimensi	ions: Size 1 20 x 28mm	
		Size 2 26 x 35mm		
		Dynamic range: 12 bit		
		True resolution: 20 lp/mm or lower		
		Scintillator : CSI/Optical fiber		
		Input voltage: 5 VDC (USB Interface)		
		Data Interface: USB 2	.0 high speed	
	DICITAL INCLUSION AND	Protection: IP 68	2 4011 4 G 70 (6011	
6.	DIGITAL IMAGING PLATE	Operating voltage: 100		
	SYSTEM/ SCANNER	Pixel size: selectable 3		
	USA/UK/JAPAN/EUROPE	Resolution: 19lp/mm or lower		
		Read out time: 5-10 seconds		
		PC connection: Ethernet AJ 45		
		Dimensions: Standard	1.2	
		Plate sizes: 0, 1, 2, and Optimization: Auto	1.3	
		*	trolled network sharing	
		Multi Connect. for Con	Holled Hetwork Sharing	

7.	Oscillating Surgical saw Japan/USA/EU	Touch screen color control unit with integrated irrigation pump, single pedal foot control unit, control adjust rotational speed: min 30% >default max> 100%)> default >max100%), reverse flush continuous 100% irrigation when depressed; disable function to the selected foot control button. Motor Cable autoclavable. Reverse/forward 80-200W high speed motor for different types of hand piece with 70,000-80,000rpm, reciprocating hand piece speed 18,000-20,000 min, stroke length: 2.5mm, sagittal saw attachment, speed 18,000-20,000min, Angle of Oscillation 8°. Angled hand piece 80,000 rpm, medium size with irrigation nozzle. Adaptor for oscillating intra oral blades, sagittal and oscillating saw blade for intra oral, reciprocating saw blade, and diamond burs for angled hand piece, sterilization case, lubricant oil for cleaning.
8.	Surgical Drill Machine Japan/USA/EU	Adjustable light intensity. 6 present implant system with individual 8 programs. Slim high performance pump. Powerful torque (5 to 80 Ncm). Widespread range (> 80,000/min required). High torque accuracy. Lightest and smallest Micro motor. LED illumination (over 32,000 lux). Excellent durability. Autoclavable, thermodisinfectable and maintenance free brushless design. Contents: Control unit with data storage facility. LED Micro motor. Foot Control. Optic Hand piece (20:1 Reduction)Irrigation tube (5pc Micro surgery hand pieces: Straight hand piece 1:2 increasing, for surgical burns (2.35),Twist chuck, Max: 80,000/min. 20 degree Angle Hand Piece 1:2 increasing, for surgical burns (2.35),Twist chuck, Max: 80,000/min Surgical Hand Piece oscillating with surgical blades 17 degree oscillating action, 3:1 Reduction With external spray nozzle Max: 12,800 strokes/min Surgical Hand piece Sagittal with surgical blades 3 degree Sagittal action, 3:1 reduction With external spray nozzle, Max: 12,600 strokes/min Surgical Hand piece Reciprocating with surgical blades 1.8 mm reciprocating action, 3:1 Reduction With external spray nozzle, Max: 12,600 strokes/min.
OPEF	RATIVE DENTISTRY	
9.	Endo motor (Rotary plus reciprocating) USA/EU/UK/JAPAN	Torque range 0.6 - 4.0 Ncm in continuous rotation Speed range 250 - 1200 rpm in continuous rotation Multiples angle available for clockwise and counterclockwise reciprocation. Rated input DC 18 V 0.5 A. Charging time 5 hours approx. Consists of; Endo motor Hand piece, endo motor Control unit, Contra- Angle Attachment, endo motor AC adapter.

10	Obtains System dual (back flag)	Dual Console
10.	Obturating System dual (back flow	
	and heat & touch combined)	1 Pack and 1 Flow Handpieces
	USA/EU/UK/JAPAN	Singles gutta-percha cartridges (20 gauge)
		Singles gutta-percha cartridges (23 gauge)
		Electric Heat Pluggers
		Cartridge Nut
		Cleaning Brush
		Bending Tool and 1 Heat Shield
		Pluggers of various sizes
		Easy click on pluggers
		Pluggers can be used for down packing and searing of gutta-percha.
		Thermal response tip for pulp vitality testing
1.1	Amoralogoton	Temperature and flow rate can be seen individually
11.	Apex locator	Apex Locator for Canal Length Measurement Should have Documented / Published Accuracy of above 95%
	USA/EU/UK/JAPAN	Measurement thorough Ratio Technique
		Accuracy of Measurement should not be affected by Presence or Absence
		of Blood / Other Discharge, Electrolytes, Saline, Tap Water, Hydrogen
		Peroxide
		No Zero-Adjustment should be required Before Measuring Individual
		Canals
		Apex Locator should Calibrate itself Automatically
		There should be no affect of Temperature & Moisture on Auto Calibration
		There should be Large Color Liquid Crystal Display for Easy Reading
		There should be Live Indicator Bar showing File Position in the canal
		There should be Live Indicator Bar showing Canal Length
		Possibility of Adjusting Apical Line between 0.1 mm to 1 mm
		There should be at least two memories for Setting Apical Line
		Green Indicator Bars should Illuminate when the File Approaches Apical
		Constriction
		Battery Status should be shown on the Screen
		Apex Locator Should Beep as the File Approaches the Apex
		Beep Should Convert into Continuous Sound as File Touches the Apical
		Line. Sound of the Beep can be adjusted
		Consists of Probe cord, files electrodes, contrary electrodes and function
		tester. It should operate on AA Batteries
12.	Electric Pulp Tester	Must consist of main tester body with a hand piece (in which tips are
	USA/EU/UK/JAPAN	inserted), 2 short tips, 2 long tips, mini crown tester body (optional),
		grounding lead with lip clips. Senses sensitivity or vitality of a tooth
		Digital type showing readings from 00 to 80. Must turn on automatically
		as it contacts tooth surface. Powered by 1.5V size AA batteries
13.	Mini/Standard/Big Head Hand piece	Stainless steel body
	USA/Japan/EU/UK	Clean head system
		ISB turbine
		Water spray
		Push button
		Power= 16 Watts
		Speed= 380,000-450,000 rpm
		Mini head size: W= 10.6mm*H=12.4mm
		Easy replacement of cartridge
		LED light (Optional)

14.	Diode Laser	Max. output power is <7w, 810nm or 10w, 940nm/980nm, there is a big color
	Japan/USA/EU/UK	screen, wireless foot switch and customizable pre-setting protocols
15.	Fractional RF with Micro needle	0.5 - 3.5mm of penetration, touch screen with multi functions, insulated/non
	electrodes system	insulated needle delivery system.
	USA/EU/UK/JAPAN	
16.	Model trimmer dual wheel	Voltage 230V/50/60 Hz REF 031-100-00, Motor power 2 x 450 W motor spee
	USA/EU/UK/JAPAN	1400 min-1 dimensions width 53cm, Height 40 cm, depth 38.5cm, weight 39 k
		color front grey rear black discs Corundum, fine REF 091-102-00 Diamond discourse REF, 001-105-00
17	Orthodontic Typodont wax models	coarse REF -091-105-00 This kit contains Mounting system articulator, wax forms with teeth
1/.	Imported	Anatomically rooted metal teeth over layed with white resin crown.
	Importou	Each buccal surface has concave indentations for better bonding strength of
		brackets.
		Each type of wax form including ideal arch, CII, CIII is available.
18.	Slidematic Face bow and adaptable	Precision speed-glide gear mechanisms permits the face bow to open and close
	Articular	on the axis
	Imported	Convenient detachable transfer jig mounts to the articulator, freeing the face
		bow for the next patient
19.	Intra Oral Scanner	The scanner should process more than 1,000,000 3D points/3000 imag
	Imported	per second to produce photorealistic and highly accurate data. Scanr
		should be capable of perfect sharpness and outstanding precision, even
		a measuring depth up to 20 mm Scanner should have following feature
		Extremely fast Very precise and accurate Comprehensive hygie
		concept Intuitive handling even for frequent full-jaw scans Late
		forward-looking technology, Highest accuracy 32 microns or bet
		Global Accuracy (Full Arch scans) 14 microns local Accuracy (Quadra
		scans) Widest options for exporting scans to the Dental Laboratory Op
		STL format Web portal to transfer the images. Scan Time: Full Arch
		upper and lower and bite registration: 2-3 minutes Changeable scann
		sleeves Dynamic Depth Scan up to 20 mm Constant and immediate se
		Heating to prevent fogging (instant heating with no waiting time) Power
		free scanner capable of scanning all types of material (Restoration
		shiny metal) Photo realistic Intra-Oral scanning (Color) Color (Sha
		analysis) possibility. Real time artifact removal automatically cuts of
		extraneous data such as cheek, tongue, or fingers, to keep the mode
		clean. Approximately 50,000 3D Data points per image/3000 image p
		second Resolution 1920×1080 or better moveable Touch screen w
		Anti-reflection Scanner should have motion sensors for Automat
		Activation Smooth Surface of the Scanner cart for better disinfection
		Automatic Margin detection.

PAEDIARTIC DENTISTRY

20. Nitrous Oxide Inhalation Sedation Unit USA, Japan, UK, EU

Nitrous oxide Inlet, pressure requirements: 50 to 55 psi, flow requirements: 10 LPM minimum. Fittings: Fresh gas outlet: 15mm IDx22mm OD, Nitrous Oxide Inlet: male DISS CGA 1040, Oxygen Inlet: Male DISS CGA 1240, **Environmental:** Storage Temperature: 40°F to 120°F (47°C to 48°C) allow stabilizing to room temperature before operating) Operating Temperature 72°F nominal (22°C), Humidity: ambient, no condensing. Gas Supply: Oxygen Inlet; Pressure Requirements: 50 to 55 psi, Flow requirements: 30LPM minimum flow. Gas Delivery: Oxygen Flush: 10 to 30LPM (20 LPM) nominal A 50psi input) Minimum Nitrous Oxide Concentration 00%, Maximum Nitrous Oxide Concentration 70%, Minimum Oxygen Concentration 30%, Maximum Oxygen Concentration 100%, Flow Range @ 100% Oxygen 1.0 to 9.9 LPM, Flow Range @ any % mixture up to 9.9LPM (low end limited by 1.0 LPM oxygen limit). Electrical (Domestic 115-120V) Input Voltage supply 115 VAC nominal, Input line Frequency 60Hz, Circuit Protection 2.5 amp time delay fuses.

O2-N2 Mixing Unit

Digital and Touch Screen/ Keypad

Auto Adjustable out flow

O2 flush for immediate oxygen (separate button)

Audio visual display

Auto stop of N2 if O2 is low

Non Breathing Valve

Breathing Bag

Connection Coding

Usb-Port

Voltage 220 Volt

Warranty

Auto claveable

Adaptor for saline eject

Pressure Reader O2

4.5 bar

Connection type DISS

Duct Inlet Safety System

All in one Cart Movable Wheels

PERFORMANCE AND ACCURACY: Controlled Variable @ N_2O flow > 1.0LPM, 50 to 55psi sources. Percent: $O_2\pm 5$ Percentage points, +20,-10 Percentage points, Oxygen Flow Rate: From 1.0 to 9.9 LPM, ± 0.5 LPM. Nitrous Oxide Flow Rate: From 1.0 to 7.0LPM, ± 0.5 LPM, From 0.0 to 1.0 LPM, +0.5 , -0.9LPM. Pure Oxygen Flush 20 LPM nominal @ 50psi input. 20 LPM nominal @ 50 psi input. The measurable threshold of nitrous oxide flow for the digital MDM* mixer is 1 LPM. Below this point, the nitrous oxide flow delivered is a calculated flow.

Scavenging system and breathing systems (disposable) for children.

	DONTICS	
	Ultrasonic Scalar Unit Detachable External USA/EU/UK/JAPAN	Classification: Class II with transformer, applied part type B, IP 40 unit, II 20 Transformer, IP x 1 foot pedal. Mode: Continuous Operation. Power Supply: external Voltage: 100 – 120V AC, 220-240V AC. Unit: 20-25AC Main frequency: 50/60Hz. Power consumption: 20 – 30 VA. Water supply: 1.0 to 5.0 bar (100 to 500 kPa). Maximum output: 8 watts. Frequency range: 25 – 32kHz. Weight: approx: 0.550 to 1 kg. Operating conditions: +10° C to +40° C. 30% to 75 75 % relative humidity.
22.	Scalar hand piece (separate) for the s	elected ultrasonic scalar USA, UK, Japan, EU
23.	Scalar Tips Compatible with selected	scalar hand piece
24.	Centrifuge for separation of platelet rich fibrin. USA, UK, Japan, EU	1 new centrifuge DUO, 1 PRF box, 1 polysteribox, All PRF instruments, 100 A-PRF tubes 10ml, 24 I-PRF Tubes 10ml, blood collectors (24), 1 Tourniquet, 2 Angulations 70 Degree, RPM 1300-2500, 210-230 V. year warranty on centrifuge
25.	Piezo Surgery Unit USA, UK, EU,JAPAN	Touch keyboard Sterile protection foils Feedback system. Working efficiency Unique hand piece system. APC (Automatic Protection Control). Power supply Voltage: 100-240 Vac 50/60 Hz Operating frequency: Automatic scan. From 20 KHz to 38 KHz
26.	Resonance Frequency	Electronic technology RFA
	Analysis (RFA) Machine	Magnetic technology RFA
	USA/EU/UK/JAPAN	Wagnetic technology KI'A
	THODONTICS	T
27.	Duplicating and hardening Machine USA/EU/Japan	Four zone heating system. Three temperature sensors control and monitor the temperature in the duplicating, material container, chamber dimension: Height 365mm, width = 310mm, 355mm, capacity 3-6kg. Three micro compresse temperature control levels with tow tubs of 6kg capacity each. Two duplicating flasks.
28.	Casting Machine USA/Japan/EU	Casting system using vaccum and argon gas pressure. Capacity of casting widerange of alloys (silver alloy, chrome cobalt alloy, etc.). Ability to perform wide variety of casting like crown and bridges and dentures. Fast and safe. Dimension width: 400 mm, depth= 550mm, Height =490mm clear view of all fusion process, touch button control panel. Time end cycle shutdown of the cooling pump, vibration free, auto standby function when idle. With a accessories like different sizes of crucibles for different purposes.
29.	Face bows USA/Japan/EU	Light and resistant to corrosion. Opening and closing system permits adaptation each patient. Removable and autoclavable ear pieces bite fork and orbital points Graduated condylar rods, anatomic nose support.
30.	Electro polishing bath USA/Japan/EU	A complete 3-station electro polishing system. Corrosion resistant parts with mid volume output. Push-button operation and a built in digital timer. Tot maximum polishing output of 24 volt DC at 10-25 amps. Stainless steel cabine which should b corrosion resistant. Three years warranty on all parts with fre labor. A cooling fan built into the unit. Digital temperature control for great precision. A digital timer. Cabinet dimensions: 12-15Wx17-25Lx18-30H.Tai volume 1-3 gallons. Current capacity: 25-100amps. Construction all stainlesteel. RFI/EMI filtered. UL listed. Electrical 120volt. Auxiliary tank- (optional)
31.	Vacuum mixer Imported	For mixing investment material plaster and duplicating material. Optimal vacuu capacity of approx 100 mbar. Maintenance free diaphragm pump. Coupling for mixing bowl 250-300ml, 550-600ml, 835-600ml with pre and post evacuation options.
32.	Sand blasting machine Imported	Three interchangeable nozzles for different size of blasting materials. Illumate chamber with dust protected tubular lamp with long service life. Quadruple filt system for high extraction. High collection capacity of pre filters 1.5-5kg. Optic for connection to the central suction extraction system, filters, gasket, rubber plu paper filters (10), fuses, spare extra nozzles, spare windows, 250 corundu blasting material 20kg, 110 size corundum blasting material 20 kg.

22	Electric wax knife	E
33.	Imported	Easy to use
	importeu	Excellent heat conductivity
		Long service life
		Easy to use and visible control buttons.
		Accurate temperature maintenance with reset function.
		Built in digital CPU circuit accurately maintains desired temperature
		Digitally displays temperature in either Celsius or Fahrenheit
		Previous working temperature is kept in memory, even if the unit has been
		turned off
		Usable with AC 100-240 V without additional adjustment
		Light handle
		Translucent compartment in rear of unit for easy storage of carving tips
		2 waxing tips
		Exchangeable tips
34.	Porcelain furnace	Multiple free program, Pre Heat temperature 0-600 C, Preheat 0-30
	Imported	minutes in 6 steps
		Fast internal pre heat time, Start vaccum 0-1000 C, Vaccum levels 0-99%.
		Release vaccum 0-1200 C. Final temperature 0-1200 C.
		Timed final temperature 0-30mins. Internal cooling time 0-10min.
		External cooling time 0-60 min in 6 steps.
		Automatic standby 0-60 min.
		Dimensions: H*W*D=520-600*300-350*420-550mm
		Vaccum pump for ceramic. Type of pump: Oil tank hermetically sealed
		Outflow 35 litres.
35.	· ·	1 swivel arm, two articulated joints, Model holder, 1 wax chisel, Scanning
	USA, Japan, EU, UK	needle probe, 3 undercut gauges, 1 carbon marker, holder.
36.	Steamers	Boiler in stainless steel 4-5 litres
	Imported	Heat protection with high insulating materials
		Pipe fitting in stainless steel and copper
		Electric power cut out in case of water failure
		Minimum level sensor switch
		Work pressure 4 bar
		Safety valve
		Emission of dry steam. Refilling 3-5 litres water. Fast reaching working
		temperature (10 min)
		Gun with hot water dropping protection
		Hose design for hot temperature and pressure
37.	Preheating furnace for crown and	Microprocessor controlled temperature regulation with digital display
	bridge and partial denture (C.C	Preheating temperature at least up to 1100 C
	Plates)	Maximum capacity of the mould chamber 100 MP
	Imported	Option of multiple individual program to be set
		Multiple temperature holding levels can be entered
		Programmable heating rate, linear heating rate of 1-9 C/min
		Clock time for desired casting readiness can be specified, optical and
		acoustic signal for end program.
		Corrosion resistant casting of stainless steel
		Connection piece and timer for regular suction extraction, switch off
		temperature can be set in every stored program
38.	Dental dewaxing bath	Double walled, outside and inside body made of stainless steel
	Imported	Temperature controlled with digital display and controller cum digital
		timer. Alarm at end of operation time. Drain valve for dewaxing
		Work on 220-230 volts AC. Inner side 300-350*250-300*350-400 mm
		Temperature controlled with hydraulic thermostat from 5 C above ambient
		to 100 C with a sensitivity of 5 C.Timer can be set from half hour to 2 hrs

39.	Composite curing light	Wavelength: 430-480 nm, light intensity: 1470 mW/cm2 (-10%/+20%).
	Imported	Power supply: lithium-ion battery. Approx. 120min. battery runtime (-720
		10 sec. cures) with constant light output regardless of battery charge.
		Operation intuitive two-button and single – mode operation. Pre-set sure times: 5,10,15 and 20 sec, continuous mode (120 sec) and tack cure mode
		power input: 100V-240 V 50/60 Hz chargeable cordless
40	Thermostatically controlled water	Capacity 3-5 Litres
10.	bath	Temp range: 0-180 C. Bench Top. Temp control: heating
	Imported	Bath shape in accordance to flask geometry
		1350 Watts
41.	Ultrasonic debridement bath	Low noise
	Imported	Typical generator peak output: 240 Watts
		Power consumption: 120 watts
		Operating frequency: 50 Khz
		Timer: 0-15 mins
10		Volume: 2-2.75 L
42.	Dental loupes with head bands	Magnification power: 2.5x upto 4x
	Imported	Working length: 340mm-420mm
		Option for attached head bands Adjustable to operator
		Focal length suitable for endodontic work
		magnification DL-DM-HB
43	Vaccum former	Easy-to-use system
15.	Imported	Uses 5"x5" resin sheets
		Available in 110 Volt and 220 Volt
		Machine weight: 20-30 lbs.
		Machine size: 14 -15" x 8 -10" x 10-12"
		Symmetrical heating system
		Lightweight, rust-free aluminum frame
	BIOLOGY	
44.	Microscope with Digital Camera and led screen with PC	Microscope frame with Trinocular tube, a pair of eye piece. Quadruple revolving nose piece, able condenser plan achromatic objective 4x, 10x, 40x100x(oil), as
	Japan/USA/EU/UK	blue filter, 30 W illuminator, Adjustable LED light integrated in the base,
		Universal 100 to 240V. Microscope digital camera: digital camera with 5 mega
		pixel CCD with adaptor, connection cable between desktop and digital camera.
		Cellsens standard-V1.7 DVD, dongle, instruction manual, software for image
15	Binocular Electric microscope	capturing. 36 to 41 inches LED screen Microscope frame with Binocular tube, a pair of eye piece PL 10X18mm.
43.	Japan/USA/EU/UK	Quadruple revolving nose piece, able condenser plan achromatic objective 4X,
	Supul Coll 20, CIX	10X, 40X, 100X (oil), as blue filter, 30 W illuminator, Adjustable LED Light
		integrated in the base, Universal 100 to 240V, enlargement/magnification 40X to
		100X
1 /	ENTIVE AND COMMUNITY DENTIS	
46.	DMFT MODEL	Clear Model Depicting Caries and other Basic Oral Lesions Study Model
46.		Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model
46.	DMFT MODEL	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth.
46.	DMFT MODEL	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition.
46.	DMFT MODEL	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth.
46.	DMFT MODEL	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration.
46.	DMFT MODEL	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration. Demonstrates prosthesis case on the upper jaw and filling on the lower jaw. Purpose:- For explaining various treatment methods depending on different caries condition. For demonstration of cleaning missing teeth,
	DMFT MODEL Imported	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration. Demonstrates prosthesis case on the upper jaw and filling on the lower jaw. Purpose:- For explaining various treatment methods depending on different caries condition. For demonstration of cleaning missing teeth, brushing and flossing.
	DMFT MODEL Imported Perio Model	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration. Demonstrates prosthesis case on the upper jaw and filling on the lower jaw. Purpose:- For explaining various treatment methods depending on different caries condition. For demonstration of cleaning missing teeth, brushing and flossing. Study Model "PERIO" Material Of Acrylic / Plastic And Mask Is Soft
	DMFT MODEL Imported	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration. Demonstrates prosthesis case on the upper jaw and filling on the lower jaw. Purpose:- For explaining various treatment methods depending on different caries condition. For demonstration of cleaning missing teeth, brushing and flossing. Study Model "PERIO" Material Of Acrylic / Plastic And Mask Is Soft Silicon Material
	DMFT MODEL Imported Perio Model	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration. Demonstrates prosthesis case on the upper jaw and filling on the lower jaw. Purpose:- For explaining various treatment methods depending on different caries condition. For demonstration of cleaning missing teeth, brushing and flossing. Study Model "PERIO" Material Of Acrylic / Plastic And Mask Is Soft Silicon Material Designed For Comprehensive Periodontal Surgery Training, But Also
	DMFT MODEL Imported Perio Model	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration. Demonstrates prosthesis case on the upper jaw and filling on the lower jaw. Purpose:- For explaining various treatment methods depending on different caries condition. For demonstration of cleaning missing teeth, brushing and flossing. Study Model "PERIO" Material Of Acrylic / Plastic And Mask Is Soft Silicon Material Designed For Comprehensive Periodontal Surgery Training, But Also Allows SRP And Other Periodontal Treatment Practice
	DMFT MODEL Imported Perio Model	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration. Demonstrates prosthesis case on the upper jaw and filling on the lower jaw. Purpose:- For explaining various treatment methods depending on different caries condition. For demonstration of cleaning missing teeth, brushing and flossing. Study Model "PERIO" Material Of Acrylic / Plastic And Mask Is Soft Silicon Material Designed For Comprehensive Periodontal Surgery Training, But Also Allows SRP And Other Periodontal Treatment Practice Model Represents Severe Periodontal Disease Condition Fitted With
	DMFT MODEL Imported Perio Model	Clear Model Depicting Caries and other Basic Oral Lesions Study Model "DMFT" Silicon Soft Material Model Decay, Missing, Filling, Teeth. Features:- The left quadrant shows pre-treatment condition. The right quadrant show post-treatment condition with restoration. Demonstrates prosthesis case on the upper jaw and filling on the lower jaw. Purpose:- For explaining various treatment methods depending on different caries condition. For demonstration of cleaning missing teeth, brushing and flossing. Study Model "PERIO" Material Of Acrylic / Plastic And Mask Is Soft Silicon Material Designed For Comprehensive Periodontal Surgery Training, But Also Allows SRP And Other Periodontal Treatment Practice

48. COMPUTED RADIOGRAPHY (CR) USA/UK/JAPAN/EU

CR system should broadly comprise of following modules/components:

- Image recording system (cassette & reading plates)
- Image reading system (reader/digitizer)
- Identification & CR processing workstation.
- Dry imager.

1. Image recording system (cassette & imaging plates).

The following sizes of radiography cassettes along with image plates should be supported by the unit.

• 14"x17", 10"X 14"/11"X14", 8" X 10"

2. Image reader(CR reader/digitizer)

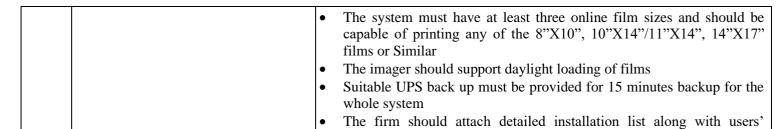
- The CR reader/digitizer should be able to process 65 image plates/hr or more of the largest size cassette
- CR reader/digitizer must be able to handle phosphor image plates.
- Cr reader capable of handling latest Dual side /needle/structured/columnar image plates will be preferred.
- It should have a resolution of 6 pixels/mm (minimum) for high resolution cassette reading.
- Gray scale resolution: Cr reader/digitizer should have a minimum resolution of 12bits/pixel for images sent to CR processing station.

3. Identification Station & processing server

- The processing station must have 2GB RAM, at least 500 GB HDD and 19-inch clinical grade monitor.
- The PC hardware and monitors must be from reputed brands like DELL, HP, and BARCO etc.
- The monitor should have a wide viewing angle and it should be clinical grade monitor with at least 1.3 MP resolution.
- Processing server capable of identification of patient demographics to the acquired image will be preferred, else a separate identification station must be provided
- The server and /or ID station must be DMWL(DICOM modality work list) compliant to access patient and study data from HIS or RIS
- The server must provide full amount of post processing features i.e., Geometric corrections, window level algorithms, annotation like markers, predefined test, drawing lines and geometrical shapes, multi scale image processing, measuring distance and angles, shuttering, histograms, zoom, grey scale reversal, edge enhancement, noise reduction, indication of gray scale saturation level, latitude reduction
- It should facilitate full-fledged DICOM printing and should be able to print multiple formats of patient study.
- Should be able to send DICOM images to DICOM workstation or PACS without loss of information
- Should be equipped with DICOM CD writer for transferring image
- Should be able to store image on external device viz. CD or pen drive

4. Dry imager

- The system must have a dry imager without need of any wet chemistry
- It must be DICOM 3.0 compatible allowing multiple modalities to be connected at a time
- The system must be able to print at least 60 films/hr of the largest size
- The system must deliver its first film within 80 seconds from the request sent.
- The imager must have spatial resolution of 500 ppi minimum
- The system must have contrast resolution of 14 bits/pixel or more. films or Similar



complete address and telephone number. The successful bidder will have to ensure onsite training of end users for a period not less than 3 weeks after installation of the unit.

49.	OLOGY LAB Package#3	• Standard interference filters 6.7 at least with autre parties for
49.	Semi Automatic Chemistry Analyzer	 Standard interference filters 6-7 at least with extra portions for optional filters- prefebly 340, 405, 505, 546, 578, 620 and 660nm. Measurement mode: i. Kinetic ii. Two Point Kinetic iii. End point with sample blank and with or without reagent blank. iv. With blanking automatic zero setting.
		With in-built printer.
		• Fixed temperature at 37c and with thermoregulatory peltier system.
		With a proper calibration and quality control system.
		• Languages: English is compulsory.
50	Evily Automotic Homotology	Compatible with local power supply 10.22 power start differential of WDC
30.	Fully Automatic Hematology	 19-23 parameters -3 parts differential of WBC. Throughout: approx 60 samples/hour.
		 Sample volume: Pre dilution mode: 10-20ul, whole blood: 20-50ul
		 Quality control and calibration system.
		Built in thermal system.
		Compatible with local power supply.
51.	Hb A1C Analyzer	Fully automatic smooth and easy operation
	Biosensor for HBA1C	Sample: whole blood.
		Embedded thermal printer.
		• Reasonably accurate results/reports with less test time.
50	D. H. M. Dl. 1C l.	Compatible with our strips an local power supply.
52.	Roller Mixer Blood Sample	Rocking and rolling action for complete mixing at variable speeds. A divide black and a graph from 10, 70 mm. The speed speeds are speed from 10, 70 mm.
		 Adjustable speed range from 10-70rpm. 4-10 rollers designed for gentle and efficient rolling, easy to clean.
		 Continuous and smooth quite operation.
		 Ambulant temperature range +4c to 60c (adjustable)
		Compatible with local power supply.
53.	Laboratory Water Bath	Volume: 20-40 Litres.
		• Temperature range: upto \pm 95c/100c with a quality thermoregulatory
		peltier system.
		Water circulation for uniform temperature.
		Minimum temperature fluctuation.
		Built in thermometer. High quality comparing registant steinless steel hady, both interior and
		• High quality corrosive resistant stainless steel body – both interior and exterior.
		Compatible with local power supply.
54.	General Purpose Laboratory	Operating at an RCF suitable for centrifuging blood and other body
	Centrifuge	fluids.
	_	• Fixed angle rotor with 6-12 places.
		 Can accommodate caped conical tubes as commonly used in a pathology Lab.
		 Brushing drive induction motor.
		• Fitted with timer.
		Easy smooth operation with proper balance.
		Compatible with local power supply.
		• RPM up to 6000.

Additional Mandatory Note Applicable to all the equipments & Instruments in the Tender

Please note:

A- Some variations in Dimensions e.g., Length, Breadth, Width, Strength, Power, Torque, Speed, Revolutions etc may be acceptable **provided** the Equipments, Instruments / sets have been specifically designed & specialized for use as per International Standards.

B- Demonstration of the use of the equipment / instruments set or both will be mandatory required or otherwise if the Enduser/ Procuring entity feels necessary. (Visit in Pakistan installation Based.)

Acceptance or Rejection of the equipment or instruments set will be based on the performance & outcome of the demonstration of the equipment / instrument or both as evaluated, determined & finally decided by the end user/ Procuring entity.

EVALUATION CRITERIA

The bids / proposals will be evaluated on the basis of advertisement, bid solicitation documents and the pointsystem as specified below.

A proposal shall be rejected during the technical evaluation if the bid does not fulfill the minimum specified requirements OR if it fails to achieve the minimum score as indicated in the below mentioned table. Relevant certificates / documents must be attached.

Evaluation Criteria for Procurement of Instruments:

Total Marks (Technical Criteria + Financial Criteria): TM: 70 + 30 = 100 Marks No chance will be provided for re-submission of secondary documentation. The bidders must carefully read the instructions; Non-compliance to the stated instruction may lead to their technical disqualification.

Technical Evaluation Criteria for Dental Unit Serial#1

S #	Parameters	Sub-parameters	Marks
1	P	roduct Specification	20
	Product that 100% comply with the advertised specifications	Fully compliance with the required specifications (Up to a maximum of four Minor deviations may be accommodated subject to the condition that main function and performance in any aspect would not affect. 1 mark will be deducted on each deviation. However, up to four marks will be deducted.	20
2		Legal Requirement	
	Manufacturer Authorizati	on Certificate from Principal Letter Head Pad	Mandatory
	NTN	Registration Certificate	Mandatory
	Sales T	ax Registration Certificate	Mandatory
		(FBR/Income tax Registration should be attached)	Mandatory
3	Р	roduct Certifications	06
	CE	European Community	03
	Valid ISO 13485	Quality Management Certificates	03
	One of the above certificate is mandatory		
4	Product Local Performance		
	Satisfactory performance certificate of each quoted equipment from well reputed medical institutions within Pakistan on Institutional Letter Head (Supply Order/Purchase Order will not be considered as per performance certificates) Each Certificate carry 2 marks. (Max up to 7 Performance Certificates)		
5	Qualified Technical Staff		
	Graduate Engineers Bio-Medical,	/Electronics (appointment letter & Pay slip required)	03
	DAE Engineer based in Pesl	hawar(appointment letter & Pay slip required)	03
6	F	inancial Capabilities	05
	Turnover in Millions	Turn over verified from IT-1 or IT-2 form of FBR 10 - 30 Million.	02
	Audit Report / Bank Statement Should be attached	Turnover will be verified from IT-1 or IT-2 form of FBR 31 - 50 Million	03
7	Nationa	al Office / Peshawar Office	03
	Availal	oility of office in Peshawar	Mandatory
	Availabili	ty of office at National Level	03
	• •	Rent Agreement with Owner / Rent Agreement with Name. /Physical verification	
8		Warranty	06
	Warranty: 03 Years	with Parts and Services, 2 Years Services	Mandatory

	Marks	
9	Post warranty Maintenance Services	10
	Post warranty maintenance contract, including service and parts, rates (companies to offer Percentage (%) of the contract value in the technical bid. The lowest will get the full marks.	10
	Total Marks	70

Technical Evaluation Criteria for Equipment (S#2 to Serial#54)

S#	Parameters	Sub-parameters	Marks
1	Product Specification		20
	Product that 100% comply with the advertised specifications	Fully compliance with the required specifications (Up to a maximum of four Minor deviations may be accommodated subject to the condition that main function and performance in any aspect would not affect. 1 mark will be deducted on each deviation. However, up to four marks will be deducted.	20
2		Legal Requirement	
	Manufacturer Authorization Co	ertificate from Principal Letter Head Pad	Mandatory
	NTN Registration Certificate		
	Sales Tax Registration Certificate		
	Firm Experience above 05Years (FBR/Income tax Registrations should be attached)		
3	P	roduct Certifications	09
	USFDA	US Food and Drug Administration(FDA)	03
	CE	European Community	03
	JIS/MHLW	Japanese Industrial Standards/Ministry of Health Labor and Welfare	03
	Any two certificates of the abo		
4	Pro	14	
	Satisfactory performance certificate of each quoted equipment from well reputed medical institutions within Pakistan on Institutional Letter Head (Supply Order/Purchase Order will not be considered as per performance certificates) Each Certificate carry 2 mark.(Max up to 7 Performance Certificates)		14

5	Qualified Technical Staff		
	Graduate Engineers Bio-Medical/	03	
	DAE Engineer based in Pesha	03	
6	Financial Capabilities		
	Turnover in Millions	Turn over verified from IT-1orIT-2 form of FBR10 -30 Million.	02
	Audit Report / Bank Statement Should be attached	Turnover will be verified from IT-1 or IT-2 form of FBR 31 -50 Million	03
7	National Office/ Peshawar Office		
	Availab	Mandatory	
	Availability of office at National Level		
	To be verified with Ownership/ Rent Agreement with Owner/ Rent Agreement with Company Name./Physical verification		
8	Warranty		
	Warranty: 03 Years with Parts and Services, 2 Years Services		
	The Firm offering extra warranty with parts will get 03 marks per year Maximum 6 Marks		
9	Post war	07	
	Post warranty maintenance contract, including service and parts, rates(companies to offer Percentage (%) of the contract value in the technical bid. The lowest will get the full marks.		07
	Total Marks		

Total Marks in Technical Criteria: 70

Qualifying Percentage in Technical Criteria: 70%

Qualifying Marks: 49

FinancialCriteria(30 Marks):

S#	Parameters	Sub-Parameters	TotalMarks:
	Price		30
		Lowest Price will get full marks.	
		The formula to calculate the marks for the price submitted is: [Lowest Price (Fm)/Price of Bid under consideration(F)]x100 x0.30	30

Bids having items not fulfilling/in compliance with the required specifications shall be treated as non-responsive bids.

9. REDRESSING OF GRIEVANCES

- 1. The purchaser shall constitute a committee comprising of disagreed & notified by the competent authority proper powers and authorizations to address the complaints of bidders that may occur prior to the entry into force of the procurement contract.
- 2. Any bidder feeling aggrieved by any act of the purchaser after the submission of his bid may lodge a written complaint concerning his grievances not later than 05 days after the announcement of the bid evaluation report.

- 3. The grievance redressed Officer shall investigate and decide upon the complaint within 06 days of the receipt of the complaint. The report along with decision shall be forwarded to the purchaser officer within the prescribed period.
- 4. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.
- 5. Note: Grievance notified & designated who can invite appropriate official as co-opted memberfor grievance.

10. AWARD OF CONTRACT:

Contracts shall be confirmed through a written agreement signed by the successful bidder and KCD Peshawar.

11. PAYMENT:

- a. No advance payment will be permissible.
- b. The payment will be made after successful supply, installation/inspection and test run of allrequisite items.

12. Sub-Letting Contract:

The supplier shall not sub-let or assign this Contract or any part thereof without the written permission of the procuring entity. In the event of the Services provider subletting or assigning this Contract or any part thereof without such permission, the procuring entity shall be entitled cancel the Contract and to purchase the goods elsewhere on the supplier account and risk and the supplier shall be liable for any loss or damage which the procuring entity may sustain in consequence of arising out of such purchase.

AGREEMENT DEED

Address:			Through:			
S/O:	NI	C No:		Des	ignation:	referred
as 1st Party, which	ch expressi	on shall unl	ess repugna	nt to the con	text mean and in	nclude his heirs,
executors, admin	istrators, su	iccessors an	d assigns).			
			And			
The Khyber Co	ollege of D	entistry, P	eshawar, th	rough the I	Dean (hereinafter	r referred as 2 nd
The Khyber Co Party which exp executors, admin	pression sh	all unless		_	,	

- a) "The Contract" means the agreement entered into between the Procuring agency and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
- c) "The Goods" means all of the equipment, machinery, and/or other materials which the Supplier is required to supply to the Procuring agency under the Contract.
- d) "The Services" means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
- e) "The Supplier" means the individual agent of firm or firm supplying the Goods and Ancillary Services under this Contract.
- f) "The Project Site," where applicable, means the place or places named in this contract.
- g) "Day" means calendar day.

Terms and conditions:

- 1. 1st party shall deliver and install the stock at the premises and precincts of KCD, Peshawar. On the CNF basis.
- 2. The specification, quality, quantity of goods shall be in conformity to purchase order, which shall be made part of this agreement. The first party shall include the ancillary services attached with goods.
- 3. The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin. Such standards shall be the latest issued by the concerned institution.
- 4. The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in contract:

- i. Performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- ii. Furnishing of tools required for assembly and / or maintenance of the supplied Goods;
- iii. Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- iv. Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time indicated in purchase order, provided that this service shall not relieve the first party of any warranty obligations under this Contract; and
- v. Training of the second party's personnel, at the first party's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- 5. The firm will liable to complete the supply within stipulated time limit by confirming quality, quantity and timeline up to the entire satisfaction of second party.
- 6. The first party warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The first party further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the second party specifications) or from any act or omission of the first party, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of second party.
- 7. The second party shall promptly notify the first party in writing of any claims arising under this warranty.
- 8. The second party, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the first party, may terminate this Contract in whole or in part:
 - a. if the first party fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the second party; or
 - b. if the first party fails to perform any other obligation(s) under the Contract.
 - c. if the first party, in the judgment of the second party has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

- 9. "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at Artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.
- 10. In case the firm failed to complete the supply till due date a penalty as per detail below will be charged from the firm.
 - a. Penalty @ 2% for late supply up to 15 days.
 - b. Penalty @ 5% for late supply beyond 15 days. Once the maximum is reached, the second party may consider termination of the contract.

- 11. The 1st party shall be responsible for the transportation and transportation charges. The 1st party shall complete the supply and installation of goods within the stipulated period as mentioned in the supply order (imported items) from the date of execution of this agreement or as extended or reduce by the 2nd party. In case of failure of 1st party to supply the goods within the stipulated period, the 2nd party will be at liberty to make an alternate arrangement at the risk and cost of 1st party and the 1st party shall be liable to pay the entire cost/amount to the alternate supplier according to the demand of the 2nd party. In the event of commuting a default the 2nd party will be at liberty to take any Civil/Criminal action against the 1st party in accordance with law. A fine up to 10% of the purchase price shall also be inflicted against the first party.
- 12. The 1st party shall be responsible for any defect in goods or supply of goods. The entire goods will be free of any charges and encumbrance of what so nature and the 2nd party or its agent will be authorized at all reasonable time to view, check and examine the conditions of the supplied goods.
- 13. Upon demand made by the 2nd party at any time or from time to time, to execute all such instruments, deeds or documents which the 2nd party may in its sole discretion require, the 1st party will do the needful.
- 14. The 1st party will be furnishing all such information as the 2nd party may at any time or from time to time required relating to the position of goods and pecuniary liability of the 1st party or otherwise whatever.
- 15. The first party shall not, without the prior written consent of second party, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the second party in connection therewith, to any person other than a person employed by the first party in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.
- 16. The first party shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
- 17. The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, and in any subsequent instructions ordered by the second party.
- 18. The 2nd party will be at liberty, at all time and shall have the right to return the goods, provided/delivered by the 1st party with regard to quality quantity, value or otherwise fitness for use. Notwithstanding any contained hereinabove, it is hereby agreed by both parties that the 2nd party at all times be at liberty and shall have the right to cancel or reduce the quantity, without assigning any reason.
- 19. The 1st party shall be bound under this agreement to provide the warranty and services of equipment which must be three years with spare parts from the date of installation and 2 years without spare parts. The 1st party shall be bound to keep available the spare parts for 10 year.

- 20. The 1st party shall deposit an amount of **Rs. 10%** of the purchase price as service security, which will be refundable after expiry of the period of warranty/ guaranty and services after necessary adjustments.
- 21. The first party shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
 - For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Procuring agency in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes. If a Force Majeure situation arises, the first party shall promptly notify the second party in writing of such condition and the cause thereof. Unless otherwise directed by the second party in writing, the first party shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 22. Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or by cable, telex, or facsimile and confirmed in writing to the other party's address specified in contract.
- 23. A notice shall be effective when dispatched on the given address of the supplier in contract via above means.
- 24. The price shall be as per approved rates during procurement prices which shall be considered as part of this agreement.
- 25. The goods supplied shall be conformity to specification provided in bid solicitation document which shall be made part of this agreement.
- 26. The quantity of good shall not exceed the quantity provided in bidding documents, which shall include the tender notices, TORs, BSDs, technical evaluation reports financial evaluation report and minutes of purchase committee.
- 27. In case the goods not confirmed to quality, quantity and specification as provided in bidding documents the goods shall be return to the suppliers. The supplier shall be liable to fine as mentioned in clause-10 as well as penalty which may extended to 10% of the purchase price.
- 28. The firm/ supplier carries out all verbal / written orders of KCD regarding all matters, concerning goods in letter & spirit, Willful default shall lead to cancellation of contract a fine which may extended to Rs. 50,000/-.
- 29. Payment to the supplier shall be on presenting a bill in the shape of summary duly verified by finance department. The bill shall be counter verified from the end using department before clearance. Demand in violation of this clause of agreement may lead to imposition of reasonable amount of fine.
- 30. The goods shall be open to inspection at all times during the contractual period. The inspection of good shall be carried out by a representative from purchase, legal, quality control, finance or end using department.
- 31. Besides the above conditions the 1st party shall be bound to fulfill the defacing if found at any time and for the purpose shall be ready to sign and execute fresh agreement if needed.

32. Any difference or dispute which may arise between the parties of their representative agents regarding right and liabilities of the parties or any other matter relating to this deed may be referred to the **Board Of Governors** and their decision will be final in all respect and the 1st party will not be authorized to sue the 2nd party before any forum, court or tribunal anywhere.

IN WITNESS WHEREOF the parties above named have executed this agreement and have carefully pursued the terms and condition embodied.

Name	Dean		
CNIC No,	Medical Teaching institute Khyber College of Dentistry, Peshawar		
Address			
Witness of the first party	Witness of the Second party		
Name	Name		
CNIC No	CNIC No		
Address	Address		