

OFFICE OF THE **JOINT DIRECTOR OF HEALTH SERVICES, DIBRUGARH** DIBRUGARH-786001

E-Mail: jt.dhs.dibrugarh@gmail.com

PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS

TABLE OF CONTENTS	
SECTION – I	INVITATION FOR BIDS (IFB)
SECTION – II	ELIGIBILITY CRITERIA & PRICE BID EVELUATION METHODOLOGY
SECTION – III	FORMS & FORMATS
SECTION – IV	SPECIAL CONDITIONS OF CONTRACT (SCC)
SECTION – V	TECHNICAL SPECIFICATIONS (TS)
SECTION – VI	SCHEDULE OF RATES (SOR)

INVITATION FOR BID [IFB]

To,

DATED: 08.02.2024

PROSPECTIVE BIDDERS**SUB: "PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS".****TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354****Dear Sir / Madam,**

1.0 TENDER INVITING AUTHORITY invites bids from eligible bidders for the subject procurement, in complete accordance with the following details and enclosed Tender Documents.

The brief details of the tender are as under:

I	PERIOD OF CONTRACT / DELIVERY SCHEDULE / PERIOD	:	Delivery of material shall be within 60 (Sixty) days from the date of issuance of LOI / PO.
II	Earnest Money Deposit (EMD)	:	Rs. 1,500/- (One thousand five hundred) only
III	BID DUE DATE & TIME	:	22.02.2024 up to 14:30 Hrs
IV	OPENING OF UNPRICED BID	:	23.02.2024 at 15:00 Hrs.
V	VALIDITY OF OFFER UPTO	:	90 days from the date of opening of unpriced bid.
VI	VENUE FOR OPENING OF UNPRICED BIDS	:	C&P Department , Brahmaputra Cracker and Polymer Limited, Administrative Building, PO_Lepetkata, Dist_DIBRUGARH, Assam, Pin Code_786006
VII	MODE OF TENDERING	:	Open Domestic Competitive Bidding through e-Mode (Under Two Bid SystemBasis). Govt. CPP Portal (e-Portal)- https://etenders.gov.in
VIII	DATE AND TIME OF PRE- BID CONFERENCE VENUE	:	16.02.2024 at 15:00 Hrs. OFFICE OF THE DISTRICT DEVELOPMENT COMMISSIONER, DIBRUGARH-786001.

In case of the days specified above happens to be a holiday, the next working day shall be implied.

For & on behalf of

TENDER INVITING AUTHORITY

Dr. Saurav Kumar Gogoi

Mobile No.:9435056289

E-mail:

jt.dhs.dibrugarh@gmail.com

TENDER NO. DHS/DBR/23-24/CSR/BCPL/354 FOR "PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS"

INSTRUCTIONS FOR PARTICIPATION IN E-TENDER:

(Ready Reckoner to Participate in e-TENDER through CPP Portal of NIC)

The Ready reckoner for submission of bid is available in CPPP website.

<https://etenders.gov.in/eprocure/app?page=BiddersManualKit&service=page>

Please visit the above links

HELP DESK (BCPL) (only for e-TENDER queries)

Mobile: 8811017320

Email: etender@bcplindia.co.in

HELP DESK (NIC) (only for e-TENDER queries)

Phone: 1800-233-7315, 0120-4200462, 0120-4001002 (only for e-TENDER queries)

Email: cppp-nic@nic.in

NOTE TO BIDDER REGARDING EMD SUBMISSION:

1. Bidders are required to submit their offer along with an EMD amount of Rs. 1,500.00 (One thousand five hundred only) in the following forms only:

a. Bank Guarantee in the prescribed format (as per format F-6).

or

b. DD in favour of "Initiative Towards Development of Infrastructure of Primary Health Centre, Barbaruah (civil work)"

or

c. Through net banking (details are given below):

1.	Name of the Beneficiary	INITIATIVE TOWARDS DEV OF INFRASTRUCTURE OF BARBARUAH PHC
2.	Name of the bank	UNION BANK OF INDIA
3.	Branch Code	538612
4.	Branch Address	Khemka market, RKB path, Dibrugarh
5.	Branch Telephone	9101009832
6.	Fax No	NIL
7.	NEFT IFSC Code	UBIN0538612
8.	Account type	SAVINGS
9.	Account No.	386102010058349
10.	MICR Code	786026002

2. Bidder need to submit scan copy of any of the bank instrument or online payment details in the portal along with the unprice bid during bid submission and the original document (BG/DD) to be reached at OFFICE OF THE DISTRICT DEVELOPMENT COMMISSIONER, DIBRUGARH-786001 within 7 days from the bid opening date.

SECTION – II

1. BIDDERS ELIGIBILITY CRITERIA

The bidder shall either be a manufacturer or an authorized dealer having experience of supplying the offered item(s) to Govt. Organizations or Semi-Govt/Private hospitals having minimum 500 beds. The following documents shall be submitted by the bidder/bidders for technical qualification:

- a) Authorization letters from all the manufacturers concerned in the format at FORM F-1 must be submitted. Bids without authorization letters will be disqualified.
- b) Duly filled and self-certified technical compliance sheet of the quoted equipment as per Form-9.
- c) Installation certificate of the quoted equipment having same make and model no. certified by the client/hospital authority.

2. TECHNICAL/PRICE BID EVALUATION METHODOLOGY

Methodology for evaluation of Bid:

*EVALUATION: - Bid of techno-commercially acceptable bidder will be evaluated on **an item-wise L1 basis** (excluding GST) and will be considered for award. Technical/ Commercial bid shall be evaluated w.r.t Clause 1 i.e., Bidders Eligibility Criteria above (which includes Form F-1 and Form-9).*

.....

SECTION – III

FORMS & FORMATS

LIST OF FORMS & FORMAT

Form No.	Description
F-1	MANUFACTURER’S AUTHORIZATION FORM (ISSUED BY THE MANUFACTURER)
F-2	PERFORMANCE STATEMENT (OF THE BIDDER)
F-3	LIST OF ITEMS QUOTED
F-4	PROFORMA OF "BANK GUARANTEE" FOR "EARNEST MONEY DEPOSIT / BID SECURITY"
F-5	DECLARATION REGARDING HOLIDAY/BANNING
F-6	PROFORMA OF "BANK GUARANTEE" FOR "CONTRACT PERFORMANCE SECURITY / SECURITY DEPOSIT"
F-7	AGREED TERMS & CONDITIONS
F-8	E-BANKING MANDATE FORM
F-9	TECHNICAL COMPLIANCE SHEET

MANUFACTURER'S AUTHORIZATION FORM
(Issued by the Manufacturer)

TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354

DATED: 08.02.2024

To,

Respected Sir,

We.....who are established and reputable manufacturers of.....having
factories at.....registered office
at.....possessing manufacturing License no.
.....dated.....valid up to..... hereby
authorize.....(name and address of representative and firm), to submit a
bid and subsequently negotiate and sign the contract with you against the above mentioned tender
for the following quoted.

1.

2.

We hereby certify that the Machine/spare parts do not contain any recycled or reconditioned parts
or components.

We hereby extend our full guarantee and warranty as per clauses of contract for the goods offered
for supply against this Invitation for Bid by the above firm.

(Attach Separate sheet if necessary)

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OF THE FIRM:

PERFORMANCE STATEMENT (OF THE BIDDER)

TENDER NO: DHS/DBR/23-24/CSR/BCPL/354

Sl. No.	Name of the product (similar items)	Year	Value	Name and full address of the purchaser
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

(Please use additional sheets if required)

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OF THE FIRM :

F-3

LIST OF ITEMS QUOTED

TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354

Sr. No.	Description of item	QTY	Manufacturer's Name	Make / Model No	Warranty Period in Years	Price Quoted / Not Quoted	Technical Specifications Attached / Not Attached

SIGNATURE :

NAME & DESIGNATION :

DATE :

NAME & ADDRESS OF THE FIRM:

**PROFORMA OF "BANK GUARANTEE" FOR "EARNEST MONEY DEPOSIT/ BID
SECURITY"**

(To be stamped in accordance with the Stamp Act)

Ref.....

Bank Guarantee No.....

Date.....

To,

TENDER INVITING AUTHORITY

SUB: "PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS".

TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354

Dear Sir(s),

In accordance with Tender Document under your reference No _____ M/s. _____ having their Registered / Head Office at _____ (hereinafter called the Tenderer/Bidder), wish to participate in the said tender for _____

As an irrevocable Bank Guarantee against Earnest Money Deposit for the amount of _____ is required to be submitted by the bidder as a condition precedent for participation in the said Tender Document which amount is liable to be forfeited on the happening of any contingencies mentioned in the Tender Document.

We, the _____ Bank at _____ having our Head Office _____ (Local Address) guarantee and undertake to pay immediately on demand without any recourse to the Bidder by Tender Inviting Authority, the amount _____ without any reservation, protest, demur and recourse. Any such demand made by Tender Inviting Authority, shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder.

This guarantee shall be irrevocable and shall remain valid up to _____ [this date should be two (02) months beyond the validity of the bid]. If any further extension of this guarantee is required, the

same shall be extended to such required period on receiving instructions from Bidder M/s. _____ on whose behalf this guarantee is issued.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on this _____ day of _____ 20__ at _____.

WITNESS:

(SIGNATURE)
(NAME)

(SIGNATURE)
(NAME)
Designation with Bank Stamp

(OFFICIAL ADDRESS)

Attorney as per
Power of Attorney No. _____
Date: _____

INSTRUCTIONS FOR FURNISHING "BID SECURITY DEPOSIT/ EARNEST MONEY" BY
"BANK GUARANTEE"

1. The Bank Guarantee [from commercial bank] by Bidders will be given on non-judicial stamp paper as per "Stamp Duty" applicable. The non-judicial stamp paper should be in the name of the issuing Bank. In case of foreign Bank, the said Bank's Guarantee to be issued by its correspondent Bank in India on requisite non-judicial stamp paper
2. The expiry date should be 150 days (90 +60 days claim period) from bid opening date ".

.....

DECLARATION REGARDING HOLIDAY/BANNING

To,
TENDER INVITING AUTHORITY

SUB: "PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS".

TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354

Dear Sir,

We hereby confirm that presently we do not stand blacklisted by any Central or State government organization or debarred from participating in tenders of such organization.

Further, we also confirm that in case there is any change in status of the declaration prior to placement of order or till complete execution of the order, the same will be promptly informed to Tender Inviting authority.

Place:

[Signature of Authorized Signatory of Bidder]

Date:

Name:

Designation:

Seal:

**PROFORMA OF "BANK GUARANTEE" FOR "CONTRACT PERFORMANCE SECURITY
/ SECURITY DEPOSIT"**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

To,
TENDER INVITING AUTHORITY

SUB: "PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS".

TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354

Dear Sir(s),

M/s. _____ having registered office at _____ (herein after called the "contractor/supplier" which expression shall wherever the context so require include its successors and assignees) have been placed/ awarded the job/work of _____ vide PO/LOA /FOA No. _____ dated _____ for).

The Contract conditions provide that the SUPPLIER/CONTRACTOR shall pay a sum of ₹ _____ (Rupees _____) as full Contract Performance Guarantee in the form therein mentioned. The form of payment of Contract Performance Guarantee includes guarantee executed by Nationalized Bank/Scheduled Commercial Bank, undertaking full responsibility to indemnify....., in case of default.

The said M/s. _____ has approached us and at their request and in consideration of the premises we having our office at _____ have agreed to give such guarantee as hereinafter mentioned.

1. We _____ hereby undertake to give the irrevocable & unconditional guarantee to you that if default shall be made by M/s. _____ in performing any of the terms and conditions of the tender/order/contract or in payment of any money payable to we shall on first demand pay without demur, contest, protest and/ or without any recourse to the contractor to in such manner as may direct the said amount of Rupees _____ only or such portion thereof not exceeding the said sum as you may require from time to time.
2. You will have the full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the order/contract with the said _____ M/s.

TENDER NO. DHS/DBR/23-24/CSR/BCPL/354 FOR "PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS"

_____ and to enforce or to forbear from endorsing any powers or rights or by reason of time being given to the said M/s. _____ and such postponement forbearance would not have the effect of releasing the bank from its obligation under this debt.

3. Your right to recover the said sum of ₹ _____ (Rupees _____) from us in manner aforesaid is absolute & unequivocal and will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said M/s. _____ and/or that any dispute or disputes are pending before any officer, tribunal or court or arbitrator or any other authority/forum and any demand made by you in the bank shall be conclusive and binding. The bank shall not be released of its obligations under these presents by any exercise by you of its liberty with reference to matter aforesaid or any of their or by reason or any other act of omission or commission on your part or any other indulgence shown by you or by any other matter or changed what so ever which under law would, but for this provision, have the effect of releasing the bank.
4. The guarantee herein contained shall not be determined or affected by the liquidation or winding up dissolution or changes of constitution or insolvency of the said supplier/contractor but shall in all respects and for all purposes be binding and operative until payment of all money due to you in respect of such liabilities is paid.
5. This guarantee shall be irrevocable and shall remain valid up to _____ (this date should be 90 days after the expiry of defect liability period/ Guarantee period) _____. The bank undertakes not to revoke this guarantee during its currency without your previous consent and further agrees that the guarantee shall continue to be enforceable until it is discharged byin writing. However, if for any reason, the supplier/contractor is unable to complete the supply/work within the period stipulated in the order/contract and in case of extension of the date of delivery/completion resulting extension of defect liability period/guarantee period of the supplier/contractor fails to perform the supply/work fully, the bank hereby agrees to further extend this guarantee at the instance of the supplier/contractor till such time as may be determined byIf any further extension of this guarantee is required, the same shall be extended to such required period on receiving instruction from M/s. _____ (contractor) on whose behalf this guarantee is issued.
6. Bank also agrees that..... at its option shall be entitled to enforce this Guarantee against the bank (as principal debtor) in the first instant, without proceeding against the supplier/contractor and notwithstanding any security or other guarantee that may have in relation to the supplier's/ contractor's liabilities.
7. The amount under the Bank Guarantee is payable forthwith without any delay by Bank upon the written demand raised byAny dispute arising out of or in relation to the said Bank Guarantee shall be subject to the exclusive jurisdiction of courts at Dibrugarh.
8. Therefore, we hereby affirm that we are guarantors and responsible to you on behalf of the Supplier/Contractor up to a total amount of _____ (amount of guarantees in words and figures) and we undertake to pay you, upon your first written demand declaring the Supplier/Contractor to be in default under the order/contract and without caveat or argument,

any sum or sums within the limits of (amounts of guarantee) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein.

9. We have power to issue this guarantee in your favor under Memorandum and Articles of Association and the undersigned has full power to do under the Power of Attorney, dated _____ granted to him by the Bank.

Yours faithfully,

Bank by its Constituted Attorney

Signature of a person duly
Authorized to sign on behalf of the Bank

INSTRUCTIONS FOR FURNISHING

"CONTRACT PERFORMANCE SECURITY / SECURITY DEPOSIT" BY "BANK GUARANTEE"

1. The Bank Guarantee by successful Bidder(s) will be given on non-judicial stamp paper as per 'stamp duty' applicable. The non-judicial stamp paper should be in name of the issuing bank. In case of foreign bank, the said Bank Guarantee to be issued by its correspondent bank in India on requisite non-judicial stamp paper and place of Bid to be considered as Dibrugarh.
2. The Bank Guarantee by Bidders will be given from bank as specified in Tender.

AGREED TERMS & CONDITIONS

To,
TENDER INVITING AUTHORITY

SUB: "PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS".

TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354

This Questionnaire duly filled in, signed & stamped must form part of Bidder's Bid and must be submitted in Part –I (Un-priced Bid). Clauses confirmed hereunder need not be repeated in the Bid.

Sl. No.	DESCRIPTION	BIDDER'S CONFIRMATION
1.	Bidder's Name and address <i>(FOA / Order shall be released in this name)</i>	Bidder's Name : Vendor Code: Address:
2	Confirm quoted prices will remain firm and fixed till complete execution of the order.	
3	Confirm quoted prices are on FOT dispatch point basis inclusive of P&F, freight charges & transit insurance	
4	Confirm acceptance of Terms of Payment i.e. 100% payment to be released after successful installation and commissioning	
5	Confirm that Contract Performance Security / Security Deposit (CPS) will be furnished for 10% of order value to be valid till 3 months beyond warranty period.	
6	Confirm compliance to Delivery / Completion Period i.e. 60 days from placement of FOA/LOI/PO whichever is issued earlier	
7	Confirm acceptance of Price Reduction Schedule (PRS)	
8	Confirm your offer is valid for 3 months from Final/Extended Due Date of opening of Techno-commercial Bids.	
9	Please furnish EMD/Bid Security details: a) EMD/ Bid Security No. & date b) Value c) Validity	
10	Bidder accepts Warranty/Guarantee clause as per as per tender.	
11	Confirm that any correction in documents submitted in Physical form along with Un-priced part of bid Has been initialed and stamped by the authorized person.	
12	Confirmation towards submission of duly signed & stamped copy of blank SOR (Schedule of Rates) showing that rate is quoted in same format clearly mentioned as "QUOTED" for the items quoted	

Sl. No.	DESCRIPTION	BIDDER'S CONFIRMATION
13	a) Confirm that bidder has understood Schedule of Rates (SOR) completely and bidder has quoted accordingly.	
	b) No additional Condition / comment has been put in the Priced SOR	
14	All pages of tender document to be signed with official seal	
15	Bidder to confirm the nearest Service point from where the Service Engineer shall be mobilized to Dibrugarh/installation site.	
16	Indicate Name & Contact details of person(s) to whom queries, if any, are to be addressed against your bid: Name: Telephone No.: Mobile No.: Fax No.: E-Mail: Bidder's Offer No.: Offer Date:	

Place:

[Signature of Authorized Signatory of Bidder]

Date:

Name:

Designation:

Seal:

E-BANKING MANDATE FORM(To be issued on vendors **LETTER HEAD**)

1. Vendor/customer Name :
2. Vendor/customer Code :
3. Vendor /customer Address :
4. Vendor/customer e-mail id :
5. Particulars of bank account
 - a) Name of Bank :
 - b) Name of branch :
 - c) Branch code :
 - d) Address :
 - e) Telephone number :
 - f) Type of account (current/saving etc.) :
 - g) Account Number :
 - h) RTGS IFSC code of the bank branch :
 - i) NEFT IFSC code of the bank branch :
 - j) 9 digit MICR code :

I/We hereby authorize to release any amount due to me/us in the bank account as mentioned above.
I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or lost because of incomplete or incorrect information, we would not hold Tender Inviting Authority responsible.

(Signature of vendor/customer)

BANK CERTIFICATE

We certify that ----- has an Account no. ----- with us and we confirm that the details given above are correct as per our records.

Bank stamp

Date: (Signature of authorized officer of bank)

Sl. No.	Technical Specifications [Digital Radiography System with Flat Panel based Detector] SOR (1)	Compliance (Yes/ No)
1	X-RAY GENERATOR TYPE:	
	Microprocessor controlled High Frequency (50KHz) X-Ray Generator	
	POWER OUTPUT: 50 KW	
	kV RANGE: 40 kV to 125 kV in 1 kV/step	
	mA OUTPUT: 630 mA	
	mA RANGE: 1 to 200 mA	
2	X-RAY TUBE TYPE:	
	A Dual focus rotating anode X-Ray tube	
	<i>Focal spots:</i> Small Focus: 0.6 mm Large Focus: 1.5 mm	
	Anode heat storage capacity of the X-ray: 200 KHU	
	Anode Rotation Speed: 2700 RPM	
	H.V. Cable: 1 Pair of 08-10 meters length of HV cable compatible with the X-Ray Tube.	
	Collimator: A collimator having bright light source and auto shut provision of the light.	
	STAND:	
3	Integrated Tube & Detector stand.	
	Ceiling free stand with counter balanced movements.	
	Manual movements with electromagnet locks in longitudinal & vertical movements are provided with release switches on electromagnet panel mounted on Tube collimator assembly.	
	Telescopic Transverse movement of tube with manual lock is provided.	
	Tube incline angle indication on electromagnet panel to show tube angle position.	
	Continuous tube rotation around horizontal axis with manual lock.	
4	MOBILE TABLE:	
	Ceiling Free Stand	
	- Longitudinal movement of column on track: 1950 mm - Up/down movement of the tube head: 1200 mm - Tube head rotation: $\pm 180^\circ$	
	Detector Stand	
	- Up /down movement of panel detector: 1200 mm - Rotation movement of Panel detector: 0 to 90 degree - Mobile table with Fixed tabletop for ease of patient positioning. - Tabletops are made up of radiolucent material. - Locks are provided on the front wheel for immobilization during patient positioning.	
	Tabletop size: 2000 mm x 660 mm (preferable).	
	Weight carrying capacity: 200 Kg (preferable).	
	Tabletop material: Bakelite (preferable).	
5	FLAT PANEL DETECTOR:	
	A complete imaging solution with cutting edge performance integrated with our X-ray systems (One Nos.).	
	Receptor type: Amorphous Silicon	
	Scintillator: Cesium iodide	
	Size: 17" x 17" (43 cm x 43 cm)	
	Active Image Matrix: 3K x 3K	
	Pixel pitch: 139 μ m	

	OPERATING STATION/ WORKSTATION:	
	X-Ray/Image Control Console	
	(a) Fully integrated system with following features: • Digital Display of KV & mA. • KV & mA increase and decrease control on G.U.I (Graphical user interface). • Ready and X-Ray ON indication on G.U.I (Graphical user interface). • Self-diagnostic Program error message display error message codes for Earth Fault Error, KV Error, Filament Error & Tube's Thermal Overload. • Anatomical Programming Radiography (i.e., APR): Preprogrammed parameters of Anatomy which helps the user to select exposure parameters based on body part, examination view and size of the patient. Since it is a computer-based system (full system integration) so any number of Organ programming combinations is possible. The user can define his own Organ parameters and can edit the existing parameters to his satisfaction and comfort level. • APR programs: More than 1000 programs (Expandable as per user's requirement). • Hand switch with retractable cord for initiating the exposure.	
	(b) Image Acquisition Software Characteristics Software provides complete control of all image capture functions within the examination room. It enhances the entire workflow by delivering diagnostic images instantly. It also allows user to transfer X-Ray images electronically to remote workstations, image archives, and printers, also has an excellent performance on image quality control such as:	
6	(c) Outstanding Image Quality • Digital image processing technology. • Exam specific algorithms image processing.	
	(d) Shorter Patient's Waiting Time • Instantaneous acquisition of image. • Dedicated firmware/software for quick image processing.	
	(e) Dose Reduction • Advanced noise reduction technology & optimized image calibration technology which minimizes radiation dose.	
	(f) Image processing • Image processing tools for different anatomy. • Image storage >50,000 Images • Image cropping (can be done automatically according to configuration). • Image mirror, rotate (can be done automatically according to configuration). • Add image accept/ reject comments. • True size for printing with multiple printing formats.	
	(g) Excellent Maintainability • Remote online system diagnosis. • Remote online software upgrade. • Image quality control tools. • Easy and quick offset and gain calibration with bad pixel removal algorithm.	
	(h) Full DICOM 3.0 Compatibility • DICOM work list • Support DICOM image print • DICOM Store • Support DICOM MPPS	
7	OPERATING STATION WITH MONITOR PC along with 19" LCD display monitor.	
8	WARRANTY The system should be provided with 12 months standard warranty.	
9	SERVO STABILIZER Suitable rating servo stabilizer to be provided.	

Note: Equipment specification must comply with the above.

Sl. No.	Technical Specifications [Colour Doppler Ultrasound Unit] <u>SOR (2)</u>		Compliance (Yes/No)
1	A fully digital, cart-based ultrasound machine with provision for Doppler examinations.		
2	Suitable for abdominal, Obstetrics, Gynecological, Cardiac Vascular, Thoracic, Transcranial, Musculoskeletal, Urological, Small Parts, for adults and pediatric patients.		
3	Multiple preloaded as well as user configurable application presets should be available.		
4	The system should have advanced measurement, manual and automatic for all applications.		
5	The system should have an integrated high resolution TFT / LCD of minimum 21" (flicker free images) or more.		
6	The system should have image storage space of a minimum of 500GB or more.		
7	The system should have a minimum of 200000 or more digital processing channels and 256 or more grey shades.		
8	The system should have a scanning depth of 30 cm or more.		
9	The system to have a dynamic range of 250 decibels or more.		
10	System should support transducer technologies like phased array, convex, linear, endocavity, micro convex and 4D volumes etc.		
11	All transducers should be lightweight digital phased array broadband type transducers.		
12	The system should have 3 active ports and should have electronic switching ability between the transducers without the need for manual disconnection.		
13	Should be supplied with three transducers (one each):	Convex electronic phased array transducer: 2-6 (+/-1) MHz for abdominal imaging.	
		Linear transducer: 5-12 (+/-1) MHz for vascular and small part imaging.	
		TV/TR probe 4 -10 MHz for OB/ GYN, Transvaginal and Transrectal.	
14	Convex, TV/TR and Linear transducers shall have detachable reusable biopsy guides for different gauge needles.		
15	The system should have a frame rate of at least 1600 frames per second (fps) in B mode and more than 600fps in Color mode.		
16	The system should have line density more than 900.		
17	The system should have an ergonomic full alphanumeric soft keys keyboard with easy access scans control and trackball or touchpad.		
18	The Systems should have a cine loop review facility of not less than 400 sec/300000 images.		
19	The system should have the facility of digital storage and retrieval of B/W and colour image data.		
20	Provision for USB port and LAN transfer of data should also be present.		

21	The system shall support all DICOM functionality, Storage, Print, and Work List, also ready to connect to PACS.	
22	The system should have more than 500 user defined presets.	
23	Imaging modes of Real time 2D, Colour, Pulsed Wave, Continuous Wave and Power (energy) Doppler, Anatomical M-Mode should be available.	
24	The system should have boot up time not more than 2 min.	
25	The system should have a doppler velocity range from 0.1 cm/ sec – 1000 cm/ sec.	
26	Controls for 2D mode: Total gain, depth, TCG, dynamic range, acoustic power output.	
27	Controls for Colour Doppler: PRF, colour gain, position, and size of ROI, steering of ROI, colour maps and colour invert.	
28	Measurements for 2D mode: Multiple distances, area, and volume.	
29	Measurement for Doppler modes: Stenosis quantification in area percentage, Diameter, PSV, EDV, means, PI, RI, acceleration time and index. Automatic and manual measurements and display of pulsed Doppler calculations should be possible.	
30	Unit should function with 200-240 V, 50 Hz AC, and 5-amp power outlet power requirement to be specified.	
31	The system should have both Triplex and Duplex display and a wide range of probes, increases system versatility and adaptability to our clinical needs	
32	The system should be upgradable to Enhanced Needle Tracking, Panoramic Imaging, and 3D software in future.	
33	The system should be upgradable to 3D/ 4D imaging.	
34	System should have capability to compare the current exam to the previous exam.	
35	System should have continuous optimization of the images when scanning different tissues.	
36	The system should have an onboard contextual reference tool.	
37	The unit should be both United States Food and Drug Administration (FDA) and Conformity Europeans (CE) approved.	
38	The system should be supplied by UPS with 30-60 min backup & B/W thermal printer with compatible power output.	
39	The system should be provided with 12 months standard warranty.	

Note: Equipment specification must comply with the above [only cart-based ultrasound unit is required].

Sl. No.	Technical Specifications [Standard Laparoscopy System] <u>SOR (3)</u>	Compliance (Yes/ No)
1	Telescope 10mm 0 & 30 degree • Completely distortion free. • HD Optics for better contrast & colour reproduction. • Large field of view and depth of focus. • Laser welded, Sapphire tip and three tube design. • Autoclavable type and should be supplied with autoclavable tray.	
2	Telescope 5 / 5.5mm 0 & 30 degree • Completely distortion free. • HD Optics for better contrast & colour reproduction. • Large field of view and depth of focus. • Laser welded, Sapphire tip and three tube design. • Autoclavable type and should be supplied with autoclavable tray.	
3	Camera Control Unit & Camera Head with CMOS Technology - Full HD CMOS based Laparoscopic camera system should have following features: - Pure Digital HD technology with high-definition video of 1920 x 1080p native resolution. - Should have progressive scan technology. - Consistent use of 16:9 format for input and output for HDTV function. - CMOS having hi-fidelity image transmission with digital conversion at camera head itself. - The system should be able to optimize all the settings and should have surgery presets for use in different surgeries as per telescope size. - Should be compatible for remote controlled operation of various features. - Image Sensor: 1/3" CMOS. - AGC Microprocessor controlled. - Video Outputs HDTV-DVI-D/3GSDI/HDSDI. - Dedicated Full HD (1080p) medical grade USB recording system for still images and video recording. - Camera should have the function to identify blood vessels using edge & spectral enhancement algorithms. - Camera settings (e.g., white balance, zoom, gain, sharpness etc.) should be possible directly from the camera head buttons. The system should have digital zoom and optional optical zoom to enhance the quality of image size & cross specialty standardization of the camera system, regardless of the telescope used.	
4	Medical Grade Monitor - One Wide Screen Monitor having the following features: 27" or more, full HD medical grade monitor in 16: 9/10 HDTV format, LED display. - Resolution: Minimum of 1920 x 1080 pixels. - SDI/HD-SDI and DVI. - All required cables and connectors, which should be	

	specified. v. TFT/LED screen stand/Fixtures for connecting to Pendant System/Ceiling Light Arm. vi. Dustproof and Drip water protected.	
5	CO2 Insufflator Co2 insufflator - Fully automatic, electronically controlled gas fill. - Adjustable flow rate of 35/45 litres per minute or more and pressure range adjustable between 3 to 30 mm Hg. - Optical and acoustic warning signals in case of malfunction or excessive pressure with automatic release of over pressure by back flow. - Selective connection to medical gas pipelines as well as direct connection to high pressure CO2 cylinder should be available. - Control by keys on front panel. - Clear and adjacent front display of actual and preset flow rate, actual and preset pressure, indication for gas consumed/ remaining. - Facility for preheating gas to body temperature with either internal or external heating device. - Memory for retention of previous pressure settings. - Should include pin-index connection to small/big gas cylinder with regulator, high pressure hose, mains cord, silicone autoclavable tubing set, universal wrench, and gas filter.	
6	LED Light Source - LED cold light fountain with lux intensity equivalent to 300 Watts Xenon Light Source. - Colour temperature of at least 6000° K. - Manual or automatic adjustment of light intensity. - Brightness control to be regulated manually or automatically via the output signal of a video camera. - LED life 50000 hrs or more. - The light source should comply with IEC 60601-1, belong to Class II with a CE mark. - Light Guide Cable must be Autoclavable: High Resistance protection tube, Reduced diameter with high fiber density, Small bending radius for comfortable use, min. 230 cm length.	
7	Video Trolley - Made of Stainless Steel/ Epoxy coated metal with a minimum of 4 shelves. - Portable on 4 antistatic dual castors, 2 with locking brakes. - Required number of shelves for housing all the units of the set. - Cable Manager. - Power box with concealed wiring for providing electrical connections of proper rating to all the units suitable for Indian plugs.	
8	Warranty The system should be provided with 12 months standard warranty.	
9	Suitable UPS to be provided.	

Sl. No.	Technical Specifications [Fully Automated HPLC Analyzer] SOR (4)	Compliance (Yes/ No)
1	System should be compact bench top HPLC system.	
2	System should be fully automated and should not require any manual intervention for the operation of the system.	
3	System should be able to use whole blood sample.	
4	System should use not more than 20 µL of whole blood sample and 400 µL of diluted sample.	
5	System should not take more than 7 minutes to report the first result.	
6	System should not take more than 2.5 minutes to analyse every HbA1c sample.	
7	System should be equipped with auto-sampler capable of automated haemolysis and sample dilution.	
8	System should be equipped with primary tube sampling with cap-piercing facility.	
9	System should be equipped for loading at least 10 samples at a time. Optional ports for calibration.	
10	System should freely run manually diluted samples without any need of sample cup adapters.	
11	System should automatically differentiate manual dilution and auto dilution before sampling without any operator intervention.	
12	System should maintain the column at an ambient room temperature (20 - 30° C) and does not need temperature optimization for every change of kit.	
13	System should not require the on-board refrigeration for reagents.	
14	Each column should be able to withstand minimum 2500 injections.	
15	Each reagent kit should suffice for a minimum of 500 tests.	
16	System should have on-board inventory monitoring system along with real time pressure monitoring.	
17	System should have proper buffer delivery system along with inbuilt degassing feature.	
18	System should have built-in LED colorimetric unit for quantification.	
19	System should have touch screen display for easy operation.	
20	System should be equipped with built-in thermal printer for report delivery.	
21	System should be equipped with RS232/LAN/USB port for computer interfacing.	
22	System should be able to store more than 700 patient results.	
23	System should be able to detect stable HbA1c.	

24	Estimation of stable HbA1c should be by means of true chromatographic separation and should not be mediated by a software or algorithm.	
25	System should not need calibration on every change of Assay Kits.	
26	System should deliver CV < 3 %.	
27	System should be able to detect HbA1c between 3 % - 19 %.	
28	System should not have any interference from HbF up to 20% and any other haemoglobin derivatives.	
29	The system should be able to detect correct A1c values in presence of abnormal hemoglobin variants like HbD, HbE, HbS & HbC in heterozygous condition.	
30	System should not use primers before each run of batches and minimal reagent consumption during automated maintenance schedule.	
31	System should have minimal automated maintenance procedures.	
32	System should be free from regular decontamination processes and manual purging processes.	
33	System should have minimal fully automated maintenance procedures along with automated air-removal feature without any requirements of service personnel or tools.	
34	System should be LIMS compatible.	
35	System should have dedicated reporting software for data processing and unlimited chromatogram storage and easy review.	
36	The company should be able to provide chromatogram guidebook with normal and abnormal haemoglobins.	
37	Test results should be traceable to diabetes control and complications trial (DCCT) reference study.	
38	The System should be NGSP (National Glycohemoglobin Standardisation Program) Certified and traceable to IFCC reference method.	
39	The system must be USFDA or European CE approved.	
40	The system should be provided with 12 months standard warranty.	
41	Suitable UPS to be provided.	

Note: Equipment specification must comply with the above (Semi-Automatic HPLC Analyzer will not be accepted).

Sl. No.	Technical Specifications [Online UPS, Single Phase, 2 kVA] <u>SOR (5)</u>	Compliance (Yes/ No)
1	Power Rating: 2kVA/ 1.6kW (1-Phase Input / 1-Phase Output)	
2	Online Double Conversion: True Online configuration with double conversion UPS & Zero transfer time	
3	DSP Based System: DSP (Digital Signal Processing) based control with advanced technology	
4	Input Parameters:	
	Nominal Voltage: 230 Vac	
	Voltage Range: 110 ~ 300 Vac	
	Frequency: 40 ~ 70 Hz	
	Power Factor: > 0.85 @ nominal voltage (input voltage)	
5	Output Parameters:	
	Power Factor: > 0.85	
	Voltage: 220/ 230/ 240 Vac	
	Voltage Regulation: $\pm 1\%$ (Battery mode)	
	Frequency: 47 ~ 53 Hz (Synchronized Range)	
	Current Harmonic Distortion: $\leq 3\%$ (linear load); $\leq 6\%$ (non-linear load)	
	Overload Capability: < 105%: Continuous; 105% ~ 110%: 10 minutes; 110% ~ 130%: 1 minute; > 130% only 3 seconds	
	Crest Factor: 3:1	
6	Automatic Bypass Switch: UPS should be capable of automatic change	
7	Battery Backup/ Battery Bank & Charger for 2 kVA Online UPS: 45 minutes - 1 hour on 2 kVA load/ full load	
8	OVCD: Inbuilt OVCD (Over Voltage Cut-Off Device) with Surge Protection	
9	Batteries: With In-Built Batteries	
10	Receptacle: Minimum India socket x 2 + Terminal block x 1	
11	Efficiency: Online Mode: 88-90%	
12	Audible Noise: < 50dBA @ 1 meter	
13	Display: LCD	
14	Communication Interfaces: Mini Slot x 1, RS-232 Port x 1, USB Port x 1	
15	Environment: Operating Temperature 0 ~ 40°C	
16	Relative Humidity: 20% ~ 90% (non-condensing)	
17	Preferable Dimensions (W x D x H): 400 x 150 x 220 mm	
18	Preferable Weight: 7-8 kgs	
19	Warranty: 2 years onsite for UPS and 1 year for Batteries	
20	Product Safety Certifications (Conforming with IEC 62040-1:2017, IEC 62040-2:2016, IEC 62040-3:2021, IEC 62040-4:2013): - General and safety requirements for UPS - Electromagnetic compatibility (EMC) requirements - Method of specifying the performance and test requirements - Environmental aspects – Requirements and reporting	
21	De-rate capacity to 80% when the output voltage is adjusted to 200 Vac or 208 Vac	

Note: Equipment specification must comply with the above.

Sl. No.	Technical Specifications [Laboratory Deep Freezer -20°C] <u>SOR (6)</u>	Compliance (Yes/ No)
1	Temperature: -20°C	
2	Capacity: 340 liters	
3	Design configuration: Vertical / Horizontal	
4	Outer cabinet: Powder coated steel sheet	
5	Inner chamber: Stainless steel 304.	
6	Door: Solid insulated door with lock & key.	
7	Insulation: PUF insulation.	
8	Shelves: 3, 4, 5 made of SS wire mesh.	
9	Refrigeration: Hermetically sealed compressors with CFC free refrigerant.	
10	Sensor: Pt100 RTD sensor.	
11	Alarm: Audiovisual alarm for high/ low set points.	
12	Mounting: Casters with brake.	
13	Others: GMP Construction (All SS 304 / 316). Data logger with computer interface. Temperature chart recorder. Extra port. Auto/ manual defrost. Voltage stabilizer.	

Note: Equipment specification must comply with the above.

Sl. No.	Technical Specifications [REAGENT REFRIGERATOR] <u>SOR (7)</u>	Compliance (Yes/ No)
1	Temperature: 2°C to 8°C	
2	Capacities (Litres) – 300 or 400	
3	Temperature Controller positioned at eyelevel for better visibility and temperature monitoring	
3	Design configuration/ Type: Vertical	
4	Magnetic door gaskets	
5	Internal Fan positioned at 45 degrees for uniform temperature maintenance all along the inside of the cabinet. Automatic switch-off of the internal fan prevents the loss of cold air when the cabinet door is open.	
6	Separate Inner acrylic door with magnetic latch ensures minimal loss of cooling.	
7	Hotline around the mouth of the cabinet to prevent moisture condensation.	
8	Inner chamber: 22SWG Stainless Steel Sheet.	
9	CE, EUroHS, ISO 9001: 2008, EN ISO 13485:2012	
10	No. of Baskets/ Shelves: 4, No. of doors: 1 (Glass).	

Note: Equipment specification must comply with the above.

SECTION – IV

SPECIAL CONDITIONS OF CONTRACT (SCC)

1. MANUFACTURER’S AUTHORIZATION

Authorization letters from all the manufactures concerned in the format at FORM F-1 must be submitted. Bids without authorization letters will be disqualified.

2. Execution of Similar Contracts of Bidder:

Details of supplies (similar items) made during the last 5 financial years with summary of Purchase Orders and Performance Certificates issued by clients in the specified format (refer Annexure F2). Items supplied to Govt. institutions and to programs sponsored by WHO, UNICEF etc., if any, during the past 5 financial years should be highlighted. Copies of at orders should be submitted.

3. List of Items Quoted

The list of items quoted shall be furnished as per Form F-3 .The list shall specifically indicate manufacturer’s name along with warranty period offered for each item.

4. Technical cum Compliance Specification Sheet:

Technical cum Compliance Specification Sheet as per Section V of tender.

The above documents should be sealed in a separate cover super scribed as “**TECHNICAL BID, COVER “A” (TENDER FOR PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS DUE ON 22.02.2024)**”

5. Delivery Period

The supply should be completed within 60 (days) maximum, unless otherwise specified in the order.

6. Delivery Point/Destination

The items shall be delivered at:

BARBARUAH BLOCK PHC, DIBRUGARH-786006

7. PAYMENT PROVISIONS:

- A. Payments toward the supply of items will be made strictly as per rules of the tender inviting Authority. 100% payment will be released only after completion of supply& installation & commissioning.
- B. On completion of supply of supplied quantities, invoices with challans along with installation reports (certified by the Head of the Health Institution) and warranty certificates should be submitted in triplicate, addressed to the Tender inviting Authority.

- C. Tender Inviting Authority has every right to receive supply even after expiry of contractual delivery date and in such case: price reduction as specified will be applicable.
- D. If supply is received in damaged condition it shall not be accepted. In case of damage in the packing, the supply will be accepted only after levying penalty as decided by the Tender Inviting Authority on the total value of supply to that particular warehouse/institution.

8. SECURITY DEPOSIT

The successful bidder, within 10 days of signing of the agreement, shall be required to submit security deposit of 10% of the order value in the form of bank guarantee from any Indian scheduled bank in favour of "DEVELOPMENT OF INFRASTRUCTURE OF PRIMARY HEALTH CENTRE, BARBARUAH (CIVIL WORK)" valid for the entire warranty period. However, if the supplier fails to execute the order or fails to perform the services as per agreement, in addition to other penal action, the bank guarantee shall be encashed and the amount will be forfeited.

9. WARRANTY PROVISIONS

The successful bidder (supplier) warrants that the goods supplied under the contract/purchase order are new, unused, or the most recent of current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, material or workmanship or from any act or omission of the supplier that may develop under normal use of the supplied goods. Upgradation of software shall be done Free of cost during warranty.

The warranty period shall be 36 months from the date of installation or 42 months from the date of supply, whichever is earlier.

10. COMPREHENSIVE MAINTENANCE CONTRACT (CMC) :

Bidder should consider 4 years CMC after warranty period for all the quoted items while offering their rate.

11. SERVICE POINT OF CONTACT

Bidder to ensure that the Service Engineer shall be mobilized to Dibrugarh/installation site from the nearest Service point within 24 hours of notification by end user (e-mail/telephone/letter may be the form of communication)

12. CONSUMABLES/TEST KIT

For pathological instruments like HPLC Analyzer, Immunoassay Analyzer etc., bidder to offer consumable worth Rs 50,000/- with each equipment.

13. PRS

In case of delay in delivery of equipment/materials or delay in completion, total Contract Price / Purchase Order Value shall be reduced by ½% (half percent) of the total Contract Price / Purchase Order Value per complete week of delay or part thereof [which is genuine pre-estimate of the loss/damage agreed between the Supplier and Purchaser without any proof of the actual loss/or damage

caused by such breach/delay] subject to a maximum of 5% (five percent) of the total Contract Price / Purchase Order Value(excluding GST)

In a supply Contract, if a portion of supply completed in all respect within the contractual delivery period and which can be used for commercial operation, the PRS shall be applicable only on remaining supplies which are completed beyond the contractual delivery period, @½ % (half percent) of the delayed delivery value maximum upto 5% (five percent) of the total Purchase Order Value.

Decision of the Purchaser in the matter of usage for commercial operation shall be final and binding

14. OTHER TERMS & CONDITIONS

- a. Packing/ forwarding, transportation, loading/unloading and insurance are supplier's responsibility. However, to protect the equipment from physical damages and/or deterioration due to weather during transit, you are to ensure proper packing & lifting arrangements.
- b. The purchaser/buyer reserves the right to delete or defer the purchase of any one or more of items as listed in the Tender Document/SOR without assigning any reason to the bidder for such deletion or deferment. Such deletion or deferment may be declared at any stage of the tendering process.

SECTION – V

TECHNICAL SPECIFICATIONS (TS)

TECHNICAL COMPLIANCES SHEET TO BE SUBMITTED BY BIDDER

Please submit the dully filled and signed copy of **TECHNICAL COMPLIANCES SHEET** (provided in form of **TABLE**) **with legible stamp for technical evaluation purpose** and **confirm your acceptance to supply the material as per technical specification provided below in the table against respective SOR items:**

SOR (1)

Digital Radiography System with Flat Panel based Detector

(Acceptable Make: Allengers, Agfa, Carestream, Fuji, Siemens or Equivalent)

TECHNICAL SPECIFICATION

Digital Radiography System with Flat Panel detector suitable for general radiography

1. X-RAY GENERATOR

TYPE	:	Microprocessor controlled High Frequency (50KHz) X-Ray Generator
POWER OUTPUT	:	50 KW
KV RANGE	:	40 kV to 125 kV in 1 kV/step
mA OUTPUT	:	630 mA
mA RANGE	:	1 to 200 mA

2. X-RAY TUBE

TYPE	:	A Dual focus rotating anode X-Ray tube Focal spots: Small Focus: 0.6 mm Large Focus:1.5 mm Anode heat storage capacity of the X-ray: 200 KHU. Anode Rotation Speed: 2700 RPM
H.V. CABLE	:	1 Pair of 08-10 meters length of HV cable compatible with the X-Ray Tube
COLLIMATOR	:	A collimator having bright light source and auto shut provision of the light

3. STAND

	:	• Integrated Tube & Detector stand. • Ceiling free stand with counter balanced movements. • Manual movements with electromagnet locks in longitudinal & vertical movements are provided with release switches on electromagnet panel mounted on Tube collimator assembly. • Telescopic Transverse movement of tube with manual lock is provided. • Tube incline angle indication on electromagnet panel to show tube angle position. • Continuous tube rotation around horizontal axis with manual lock.
--	---	--

<u>4. MOBILE TABLE</u>	Ceiling Free Stand: • Longitudinal movement of column on track: 1950 mm • Up/down movement of the tube head: 1200 mm • Tube head rotation: $\pm 180^\circ$ Detector Stand: • Up /down movement of panel detector: 1200 mm • Rotation movement of Panel detector: 0 to 90 degree • Mobile table with Fixed tabletop for ease of patient positioning. • Tabletops are made up of radiolucent material. • Locks are provided on the front wheel for immobilization during patient positioning. Tabletop size: 2000 mm x 660 mm. Weight carrying capacity: 200 Kg (preferable). • Tabletop material: Bakelite (preferable).
-------------------------------	---

5. FLAT PANEL DETECTOR

A complete imaging solution with cutting edge of performance integrated with our X-ray systems (One Nos.)

Receptor type	Amorphous Silicon
Scintillator	Cesium iodide
Size	17" x 17" (43 cm x 43 cm)
Active Image Matrix	3K x 3K
Pixel pitch	139 μ m

6. OPERATING STATION/ WORKSTATION:

a. <u>X-RAY/IMAGE CONTROL CONSOLE</u>	Fully integrated system with following features: • Digital Display of KV & mA. • KV & mA increase and decrease control on G.U.I (Graphical user interface). • Ready and X-Ray ON indication on G.U.I (Graphical user interface). • Self-diagnostic Program error message display error message codes for Earth Fault Error, KV Error, Filament Error & Tube's Thermal Overload. • Anatomical Programming Radiography (i.e., APR): Preprogrammed parameters of Anatomy which helps the user to select exposure parameters based on body part, examination view and size of the patient. Since it is a computer-based system (full system integration) so any number of Organ programming combinations is possible. The user can define his own Organ parameters and can edit the existing parameters to his satisfaction and comfort level. • APR programs: More than 1000 programs. (Expandable as per user's requirement). • Hand switch with retractable cord for initiating the exposure.
---	--

b. IMAGE ACQUISITION SOFTWARE CHARACTERISTICS

Software provides complete control of all image capture functions within the examination room. It enhances the entire workflow by delivering diagnostic images instantly. It also allows user to transfer X-Ray images electronically to remote workstations, image archives, and printers, also has an excellent performance on image quality control such as:

Outstanding Image Quality	• Digital image processing technology. • Exam specific algorithms image processing.
Shorter Patient's Waiting Time	• Instantaneous acquisition of image. • Dedicated firmware/software for quick image processing.
Dose Reduction	• Advanced noise reduction technology & optimized image calibration technology which minimizes radiation dose.

Image processing		• Image processing tools for different anatomy • Image storage >50,000 Images • Image cropping (can be done automatically according to configuration) • Image mirror, rotate (can be done automatically according to configuration) • Add image accept/ reject comments • True size for printing with multiple printing formats
Excellent Maintainability		• Remote online system diagnosis • Remote online software upgrade • Image quality control tools • Easy and quick offset and gain calibration with bad pixel removal algorithm
Full DICOM 3.0 Compatibility		• DICOM work list • Support DICOM image print • DICOM Store • Support DICOM MPPS
<u>7. OPERATING STATION WITH MONITOR</u>	:	PC along with 19" LCD display monitor
<u>8. WARRANTY</u>		The system should be provided with 12 months standard warranty
<u>9. UPS</u>		Suitable rating servo stabilizer to be provided

SOR (2)

Whole body Colour Doppler Ultrasound Unit

(Acceptable Make: Fuji, GE, Siemens or Equivalent)

TECHNICAL SPECIFICATION

1. A fully digital, cart-based ultrasound machine with provision for Doppler examinations.
2. Suitable for abdominal, Obstetrics, Gynecological, Cardiac Vascular, Thoracic, Transcranial, Musculoskeletal, Urological, Small Parts, for adults and pediatric patients.
3. Multiple preloaded as well as user configurable application presets should be available.
4. The system should have advanced measurement, manual and automatic for all applications.
5. The system should have an integrated high resolution TFT / LCD of minimum 21" (flicker free images) or more.
6. The system should have image storage space of a minimum of 500GB or more.
7. The system should have a minimum of 200000 or more digital processing channels and 256 or more grey shades.
8. The system should have a scanning depth of 30 cm or more.
9. The system should have a dynamic range of 250 decibels or more.
10. System should support transducer technologies like phased array, convex, linear, endo cavity, micro convex and 4D volume etc.
11. All transducers should be lightweight digital phased array broadband type transducers.
12. The system should have 3 active ports and should have electronic switching ability between the transducers without the need for manual disconnection.
13. Should be supplied with three transducers (one each):
 - i. Convex electronic phased array transducer: 2-6 (+/-1) MHz for abdominal imaging.
 - ii. Linear transducer: 5-12 (+/-1) MHz for vascular and small part imaging.
 - iii. TV/TR probe 4 -10 MHz for OB/ GYN, Transvaginal and Transrectal.
14. Convex, TV/TR and Linear transducers shall have detachable reusable biopsy guides for different gauge needles.
15. The system should have a frame rate of at least 1600 frames per second (fps) in B mode and more than 600 fps in Color mode.
16. The system should have line density more than 900.

17. The system should have an ergonomic full alphanumeric soft keys keyboard with easy access scans control and trackball or touchpad.
18. The Systems should have a cine loop review facility of not less than 400 sec/300000 images.
19. The system should have the facility of digital storage and retrieval of B/W and colour image data.
20. Provision for USB port and LAN transfer of data should also be present.
21. The system shall support all DICOM functionality, Storage, Print, and Work List, also ready to connect to PACS.
22. The system should have more than 500 user defined presets.
23. Imaging modes of Real time 2D, Colour, Pulsed Wave, Continuous Wave and Power (energy) Doppler, Anatomical M-Mode should be available.
24. The system should have boot up time not more than 2 min.
25. The system should have a doppler velocity range from 0.1 cm/ sec – 1000 cm/ sec.
26. Controls for 2D mode: Total gain, depth, TCG, dynamic range, acoustic power output.
27. Controls for Colour Doppler: PRF, colour gain, position, and size of ROI, steering of ROI, colour maps and colour invert.
28. Measurements for 2D mode: Multiple distances, area, and volume.
29. Measurement for Doppler modes: Stenosis quantification in area percentage, Diameter, PSV, EDV, means, PI, RI, acceleration time and index. Automatic and manual measurements and display of pulsed Doppler calculations should be possible.
30. Unit should function with 200-240 V, 50 Hz AC, 5-amp power outlet power requirement to be specified.
31. The system should have both Triplex and Duplex display and a wide range of probes, increases system versatility and adaptability to our clinical needs.
32. The system should be upgradable to Enhanced Needle Tracking, Panoramic Imaging, and 3D software in future.
33. The system should be upgradable to 3D/ 4D imaging.
34. System should have capability to compare the current exam to the previous exam.
35. System should have continuous optimization of the images when scanning different tissues.
36. The system should have an onboard contextual reference tool.
37. The unit should be both United States Food and Drug Administration (FDA) and Conformity Europeans (CE) approved.
38. The system should be supplied by UPS with 30-60 min backup & B/W thermal printer.
39. The system should be provided with 12 months standard warranty.

SOR (3)

Standard Laparoscopy System

(Acceptable Make: Ackermann, Stryker, Karl Storz, ERBE or Equivalent)

TECHNICAL SPECIFICATION

1. Telescope 10mm 0 & 30 degree

- a. Completely distortion free.
- b. HD Optics for better contrast & colour reproduction.
- c. Large field of view and depth of focus.
- d. Laser welded, Sapphire tip and three tube design.
- e. Autoclavable type and should be supplied with autoclavable tray.

2. Telescope 5 / 5.5mm 0 & 30 degree

- a. Completely distortion free.
- b. HD Optics for better contrast & colour reproduction.
- c. Large field of view and depth of focus.
- d. Laser welded, Sapphire tip and three tube design.

- e. Autoclavable type and should be supplied with autoclavable tray.

3. Camera Control Unit & Camera Head with CMOS Technology

- b. Full HD CMOS based Laparoscopic camera system should have following features:
 - xiii. Pure Digital HD technology with high-definition video of 1920 x 1080p native resolution.
 - xiv. Should have progressive scan technology.
 - xv. Consistent use of 16:9 format for input and output for HDTV function.
 - xvi. CMOS having hi-fidelity image transmission with digital conversion at camera head itself.
 - xvii. The system should be able to optimize all the settings and should have surgery presets for use in different surgeries as per telescope size.
 - xviii. Should be compatible for remote controlled operation of various features.
 - xix. Image Sensor: 1/3" CMOS.
 - xx. AGC Microprocessor controlled.
 - xxi. Video Outputs HDTV-DVI-D/3GSDI/HDSOI.
 - xxii. Dedicated Full HD (1080p) medical grade USB recording system for still images and video recording.
 - xxiii. Camera should have the function to identify blood vessels using edge & spectral enhancement algorithms.
 - xxiv. Camera settings (e.g., white balance, zoom, gain, sharpness etc.) should be possible directly from the camera head buttons.
 - xxv. The system should have digital zoom and optional optical zoom to enhance the quality of image size & cross specialty standardization of the camera system, regardless of the telescope used.

4. Medical Grade Monitor

- b. One Wide Screen Monitor having the following features:
 - vii. 27" or more, full HD medical grade monitor in 16: 9/10 HDTV format, LED display.
 - viii. Resolution: Minimum of 1920 x 1080 pixels.
 - ix. SDI/HD-SDI and DVI.
 - x. All required cables and connectors, which should be specified.
 - xi. TFT/LED screen stand/Fixtures for connecting to Pendant System/Ceiling Light Arm.
 - xii. Dustproof and Drip water protected.

5. CO2 Insufflator Co2 insufflator

- j. Fully automatic, electronically controlled gas fill.
- k. Adjustable flow rate of 35/45 litres per minute or more and pressure range adjustable between 3 to 30 mm Hg.
- l. Optical and acoustic warning signals in case of malfunction or excessive pressure with automatic release of over pressure by back flow.
- m. Selective connection to medical gas pipelines as well as direct connection to high pressure CO2 cylinder should be available.
- n. Control by keys on front panel.
- o. Clear and adjacent front display of actual and preset flow rate, actual and preset pressure, indication for gas consumed/ remaining.
- p. Facility for preheating gas to body temperature with either internal or external heating device.
- q. Memory for retention of previous pressure settings.
- r. Should include pin-index connection to small/big gas cylinder with regulator, high pressure hose, mains cord, silicone autoclavable tubing set, universal wrench, and gas filter.

6. LED Light Source

- h. LED cold light fountain with lux intensity equivalent to 300 Watts Xenon Light Source.
- i. Colour temperature of at least 6000° K.
- j. Manual or automatic adjustment of light intensity.

- k. Brightness control to be regulated manually or automatically via the output signal of a video camera.
- l. LED life 50000 hrs or more.
- m. The light source should comply with IEC 60601-1, belong to Class II with a CE mark.
- n. Light Guide Cable must be Autoclavable: High Resistance protection tube, Reduced diameter with high fiber density, Small bending radius for comfortable use, min. 230 cm length.

7. Video Trolley

- f. Made of Stainless Steel/ Epoxy coated metal with a minimum of 4 shelves.
- g. Portable on 4 antistatic dual castors, 2 with locking brakes.
- h. Required number of shelves for housing all the units of the set.
- i. Cable Manager.
- j. Power box with concealed wiring for providing electrical connections of proper rating to all the units suitable for Indian plugs.

8. Warranty

The system should be provided with 1-year standard warranty.

- 9. Suitable UPS to be provided.

SOR (4)

**Fully Automated, Dedicated HPLC Analyzer for Direct Estimation of Stable HbA1c
(Acceptable Make: Biorad, Tosoh or Equivalent)**

TECHNICAL SPECIFICATION

1. System should be compact bench top HPLC system.
2. System should be fully automated and should not require any manual intervention for the operation of the system.
3. System should be able to use whole blood sample.
4. System should use not more than 20 µL of whole blood sample and 400 µL of diluted sample.
5. System should not take more than 7 minutes to report the first result.
6. System should not take more than 2.5 minutes to analyse every HbA1c sample.
7. System should be equipped with auto-sampler capable of automated haemolysis and sample dilution.
8. System should be equipped with primary tube sampling with cap-piercing facility.
9. System should be equipped for loading at least 10 samples at a time. Optional ports for calibration.
10. System should freely run manually diluted samples without any need of sample cup adapters.
11. System should automatically differentiate manual dilution and auto dilution before sampling without any operator intervention.
12. System should maintain the column at an ambient room temperature (20 - 30° C) and does not need temperature optimization for every change of kit.
13. System should not require the on-board refrigeration for reagents.
14. Each column should be able to withstand minimum 2500 injections.
15. Each reagent kit should suffice for a minimum of 500 tests.
16. System should have on-board inventory monitoring system along with real time pressure monitoring.
17. System should have proper buffer delivery system along with inbuilt degassing feature.
18. System should have built-in LED colorimetric unit for quantification.
19. System should have touch screen display for easy operation.
20. System should be equipped with built-in thermal printer for report delivery.
21. System should be equipped with RS232/LAN/USB port for computer interfacing.
22. System should be able to store more than 700 patient results.
23. System should be able to detect stable HbA1c.
24. Estimation of stable HbA1c should be by means of true chromatographic separation and should not be mediated by a software or algorithm.
25. System should not need calibration on every change of Assay Kits.
26. System should deliver CV < 3%.
27. System should be able to detect HbA1c between 3 % - 19 %.

28. System should not have any interference from HbF up to 20% and any other haemoglobin derivatives.
29. The system should be able to detect correct A1c values in presence of abnormal haemoglobin variants like HbD, HbE, HbS & HbC in heterozygous condition.
30. System should not use primers before each run of batches and minimal reagent consumption during automated maintenance schedule.
31. System should have minimal automated maintenance procedures.
32. System should be free from regular decontamination processes and manual purging processes.
33. System should have minimal fully automated maintenance procedures along with automated air-removal feature without any requirements of service personnel or tools.
34. System should be LIMS compatible.
35. System should have dedicated reporting software for data processing and unlimited chromatogram storage and easy review.
36. The company should be able to provide chromatogram guidebook with normal and abnormal haemoglobins.
37. Test results should be traceable to diabetes control and complications trial (DCCT) reference study.
38. The System should be NGSP (National Glycohemoglobin Standardisation Program) Certified and traceable to IFCC reference method.
39. The system must be USFDA or European CE approved.
40. The system should be provided with 12 months standard warranty.
41. Suitable UPS to be provided.

SOR (5)

Online UPS, Single Phase, 2 kVA (2 Nos.)

(Acceptable Make: Delta, Microtek, Luminous or Equivalent)

Technical Specifications

Power Rating		2kVA/ 1.6kW (1-Phase Input / 1-Phase Output)
Online Double Conversion		True Online configuration with double conversion UPS & Zero transfer time
DSP Based System		DSP (Digital Signal Processing) based control with advanced technology
Input	Nominal Voltage	230 Vac
	Voltage Range	110 ~ 300 Vac
	Frequency	40 ~ 70 Hz
	Power Factor	> 0.85 @ nominal voltage (input voltage)
Output	Power Factor	> 0.85
	Voltage	220/ 230/ 240 Vac
	Voltage Regulation	± 1% (Battery mode)
	Frequency	47 ~ 53 Hz (Synchronized Range)
	Current Harmonic Distortion	≤ 3% (linear load); ≤ 6% (non-linear load)
	Overload Capability	< 105%: Continuous; 105% ~ 110%: 10 minutes; 110% ~ 130%: 1 minute; > 130% only 3 seconds
Crest Factor		3:1
Automatic Bypass Switch		UPS should be capable of automatic change
Battery Backup/ Battery Bank & Charger for 2 kVA Online UPS		45 minutes - 1 hour on 2 kVA load/ full load
OVCD		Inbuilt OVCD (Over Voltage Cut-Off Device) with Surge Protection
Batteries		With in-Built Batteries
Receptacle		Minimum India socket x 2 + Terminal block x 1
Efficiency		Online Mode: 88-90%
Audible Noise		< 50dBA @ 1 meter
Display		LCD

Communication Interfaces	Mini Slot x 1, RS-232 Port x 1, USB Port x 1
Environment	Operating Temperature: 0 ~ 40°C
Relative Humidity	20% ~ 90% (non-condensing)
Preferable Dimensions (W x D x H)	400 x 150 x 220 mm
Preferable Weight	7-8 kgs
Warranty	Warranty-2 years onsite for UPS and 1 year for Batteries
Product Safety Certifications (Conforming with IEC 62040-1:2017, IEC 62040-2:2016, IEC 62040-3:2021, IEC 62040-4:2013)	• General and safety requirements for UPS • Electromagnetic compatibility (EMC) requirements • Method of specifying the performance and test requirements • Environmental aspects – Requirements and reporting
** De-rate capacity to 80% when the output voltage is adjusted to 200 Vac or 208 Vac.	

SOR (6)

Laboratory Deep Freezer -20°C

(Acceptable Make: Celfrost, Thermo Fisher, Terumo Penpol or Equivalent)

Technical Specifications

Sl. No.	Technical Specifications [Laboratory Deep Freezer -20°C]
1	Temperature: -20°C
2	Capacity: 340 liters
3	Design configuration: Vertical / Horizontal
4	Outer cabinet: Powder coated steel sheet
5	Inner chamber: Stainless steel 304.
6	Door: Solid insulated door with lock & key.
7	Insulation: PUF insulation.
8	Shelves: 3, 4, 5 made of SS wire mesh.
9	Refrigeration: Hermetically sealed compressors with CFC free refrigerant.
10	Sensor: Pt100 RTD sensor.
11	Alarm: Audiovisual alarm for high/ low set points.
12	Mounting: Casters with brake.
13	Others: GMP Construction (All SS 304 / 316). Data logger with computer interface. Temperature chart recorder. Extra port. Auto/ manual defrost. Voltage stabilizer.

SOR (7)

REAGENT REFRIGERATOR

(Acceptable Make: Celfrost, Thermo Fisher, Terumo Penpol or Equivalent)

Technical Specifications

Sl. No.	Technical Specifications [REAGENT REFRIGERATOR]
1	Temperature: 20C to 80C
2	Capacities (Litres) – 300
3	Temperature Controller positioned at eyelevel for better visibility and temperature monitoring
3	Design configuration/ Type: Vertical
4	Magnetic door gaskets
5	Internal Fan positioned at 45 degrees for uniform temperature maintenance all along the inside of the cabinet. Automatic switch-off of the internal fan prevents the loss of cold air when the cabinet door is open.
6	Separate Inner acrylic door with magnetic latch ensures minimal loss of cooling.
7	Hotline around the mouth of the cabinet to prevent moisture condensation.
8	Inner chamber: 22SWG Stainless Steel Sheet.
9	CE, EU RoHS, ISO 9001: 2008, EN ISO 13485:2012
10	No. of Baskets/ Shelves: 4, No. of doors: 1 (Glass).

SECTION – VI

SCHEDULE OF RATES (SOR) “**UN-PRICED**”

SUB: "PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS".

TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354

Item. No.	Material Description	UoM	QTY	Unit Price [Including Packing & Forwarding, Duties & Freight Charges]	GST Rate (%)	GST Amount (₹)	Total Amount (₹)
A	B	C	D	E	F	G	H
1	Digital Radiography System with Flat Panel based Detector	EA	1	QUOTED/NOT QUOTED (Please tick as applicable)		DO NOT QUOTE HERE	
2	Whole body Colour Doppler Ultrasound Unit	EA	1	QUOTED/NOT QUOTED (Please tick as applicable)		DO NOT QUOTE HERE	
3	Standard Laparoscopy System	EA	1	QUOTED/NOT QUOTED (Please tick as applicable)		DO NOT QUOTE HERE	
4	Fully Automated, Dedicated HPLC Analyzer for Direct Estimation of Stable HbA1c	EA	1	QUOTED/NOT QUOTED (Please tick as applicable)		DO NOT QUOTE HERE	
5	Online UPS, Single Phase, 2 kVA	EA	1	QUOTED/NOT QUOTED (Please tick as applicable)		DO NOT QUOTE HERE	
6	Laboratory Deep Freezer -20°C	EA	1	QUOTED/NOT QUOTED (Please tick as applicable)		DO NOT QUOTE HERE	
7	Reagent Refrigerator	EA	1	QUOTED/NOT QUOTED (Please tick as applicable)		DO NOT QUOTE HERE	
COLUMN-WISE TOTAL AMOUNT:						DO NOT QUOTE HERE	
TOTAL AMOUNT (AFTER SUMMING UP COLUMN H) IN FIGURE:						DO NOT QUOTE HERE	
Name of authorized person submitting the tender on behalf of the Bidder (s):							
Designation of authorized person:							
Name of firm / Contractor:							
Address of firm / Contractor:							
Date:							

[PRICED SOR (BoQ) TO BE SUBMITTED IN e-MODE IN NIC CPP PORTAL]

<https://etenders.gov.in/eprocure/app>

CUT-OUT SLIPS

ENVELOPE –1: CONTAINING ORIGINAL EMD DOCUMENT

DO NOT OPEN – THIS IS A QUOTATION

SUB: PROCUREMENT OF VARIOUS MEDICAL EQUIPMENTS.

TENDER NO.: DHS/DBR/23-24/CSR/BCPL/354

BID SUBMISSION DUE DATE & TIME: 22.02.2024 at 14:30 Hrs.

TO

**OFFICE OF THE JOINT DIRECTOR OF HEALTH SERVICES,
GRAHAM BAZAR, DIBRUGARH-786001, ASSAM**

FROM

**TO BE PASTED ON THE OUTER ENVELOPE CONTAINING
ORIGINAL EMD DOCUMENT**