

Amendment-II

Tender Enquiry No. : HSCC/KCGMC/Medical Equipment/2015-06/15 dated: 15/09/2017

Bidders are requested to note the following technical amendment:

Item no.2 - 500 Ma X -Ray Machine

Sr. No	Point No	Technical Specifications	Amendment
1	II.b	X-Ray Tube: Focul Spot : Large Focus: 1.2/2.0 mm or less with a minimum output 80 KW	X-Ray Tube: Focul Spot : Large Focus: 1.2/2.0 mm or less with a minimum output 75 KW
2		Addeed point (e.)	e. AEC Required
3	IV.b	65 cm travel movement arrested by electromagnetic breaks	50 cm travel movement arrested by electromagnetic breaks
4	V	X-Ray ceiling column	X-Ray ceiling column (Floor to Ceiling column)
5	VIII.c	High voltage filament transformer with silicon rectifier. Solenoid operated change over switch, federal bushings All Immersed in high grade high dielectric strength transformer oil sleaving 8 Nos and high voltage cables.	High voltage filament transformer with silicon rectifier. All Immersed in high grade high dielectric strength transformer oil
6	XI.a	The table should be horizontal 4 way movements	Deleted

Item No. 3 – Ultrasound Machine - Radiology

Sr. No	Point No	Technical Specifications	Amendment
1	2	System must be offered with a minimum of 200000 digital processed channels. Original technical data sheet should be enclosed in technical bid to support the number of channels on the systems. If not mentioned Please attach a letter from manufacturer along with the technical bid clearly stating the digital processed channels of the offered system.	System must be offered with a minimum of 200000 digital processed channels or 192 hardware channels(Tx/Rx) . Original technical data sheet should be enclosed in technical bid to support the number of channels on the systems. If not mentioned Please attach a letter from manufacturer along with the technical bid clearly stating the digital processed channels of the offered system.
2	5	System should have at-least 4 Imaging universal active probe ports (3 +1)with electronic switching facility from key board without probe adapter and an extra parking slot would be preferable.	System should have at-least 4 Imaging universal active probe ports 4 with electronic switching facility from key board without probe adapter and an extra parking slot would be preferable.

3	18	The System should be quoted with Strain based Elastography for Breast Imaging accompanied by quantification package software. One touch entry into Elastography mode.	The System should be quoted with Strain based Elastography for Breast Imaging accompanied by quantification package software.
4	19	The System should be quoted with Strain based Elastography for Gynaecology Imaging accompanied by quantification package software. One touch entry into Elastography mode.	The System should be quoted with Strain based Elastography for Gynaecology Imaging accompanied by quantification package software.
5	20	The System should be quoted with Liver Elastography imaging using acoustic push pulses and tracking pulses to assess diffused liver and tissue stiffness. The reading must be in both in m/s and kPa	The System should be quoted with (Shear wave) Liver Elastography imaging using acoustic push pulses and tracking pulses to assess diffused liver and tissue stiffness. The reading must be in both in m/s and kPa
6	21	The System should be quoted with protocol driven workflow for assessing the fetal heart data set and giving views as recommended by ISUOG Fetal Cardiac Screening Guidelines.	The System should be quoted with protocol driven workflow for assessing the fetal heart data set and giving views as recommended by ISUOG Fetal Cardiac Screening Guidelines. System with STIC will be preferred
7	22	Added Pont No. 22	The system should be upgradable to fusion image & navigation
		TRANSDUCERS	
8	2	3–(14+/-2)MHz Electronic Linear Array Transducer for Breast, Musculoskeletal, small parts and vascular imaging with capabilities of Elastography imaging. Must have Tissue Harmonic Imaging. Please mention the Elastography technology used in the transducer by attaching technical data sheet of transducer. Shear wave preferred.	3–(14+/-2)MHz Electronic Linear Array Transducer for Breast, Musculoskeletal, small parts and vascular imaging with capabilities of Elastography imaging. Must have Tissue Harmonic Imaging. Please mention the Elastography technology used in the transducer by attaching technical data sheet of transducer.
9	3	3-10(Mhz) Electronic broadband curved array transducer for Endocavitary applications including urology	3-10(Mhz) ± 1 MHz Electronic broadband curved array transducer for Endocavitary applications including urology
10	7	Added Pont No. 7	Biopsy guides for TVS & Convex probes
11	8	Added Pont No. 8	2-4 MHz Phased array adult transducer to be supplied with 1 Machine
		System should be supplied with the following peripheral devices/ inbuilt software in the machine	
12	1	Reputed International make Thermal B/W Printer with 100 rolls of papers and colour DICOM inkjet printer is required, one with each system	Reputed International make Thermal B/W Printer with 100 rolls of papers and colour DICOM ink Tank printer is required, one with each system
13	2	2 KVA ONLINE UPS with at least half hours backup , one with each system.	2 KVA ONLINE UPS with at least half hours backup , one with each system.(APC/ Evergreen)

14	4a	Elastography quantification like strain rate, strain ratio, total strain and graphs	Deleted
15	4b	Review of 3D/4D, colour 3D and STIC data sets.	Deleted
16	4c	Tomographic Ultrasound Imaging Quantification to analyse and documentation of dynamic studies.	Deleted

Item No 9 Bi Pap Non Invasive Ventilator

Sr. No	Point No	Technical Specifications	Amendment
1	6	Loops: Volume/ Pressures - (Optional).	Deleted

Item No 10 Automated Resuscitation Device

Sr. No	Point No	Technical Specifications	Amendment
1	9	It Should have integrated basic ventilator for synchronized ventilation as per CPR Protocol	Optional
2	10	The battery should be made of oil - ion technology which enables to provide continuous compression of minimum 30 minutes or more when charges fully and also capable of running on AC power	The battery should be made of oil - ion technology which enables to provide continuous compression of minimum 30 minutes or more when charges fully and also capable of running on AC /Battery power
	13	Biphasic Defibrillator should be quoted separately which must be a USFD certificate with ECG , SPO2, NIBP, (Showing 2 wave forms or more) and upgradability to ETCO2 with 10 disposable defibrillation and pacing pads in addition to standard paddles	Biphasic Defibrillator should be quoted separately which must be a USFD certificate with ECG , SPO2, (Showing 2 wave forms or more) and upgradability to ETCO2 with 10 disposable defibrillation and pacing pads in addition to standard paddles
3	20	One additional battery & Battery charger and 3 patient bands	One additional battery & Battery charger and 5 patient bands

REVISED SPECIFICATION FOR PATHOLOGY

13. Fully Automated Rotary Microtome with accessories

Qty-1

1. A state of the art fully motorized heavy duty automated microtome: Single stroke, continuous stroke, rocking stroke and programmed mode for the sectioning of soft, hard, paraffin and resin embedded blocks.
2. Section thickness range should be between 0.25 to 100 μ m with increments in the range of 0.5 μ m, 1 μ m, 5 μ m with LED display.
3. Trim thickness range should be 1-600 μ m with 1 μ m, 2 μ m, 5 μ m and 10 μ m increments, respectively with LED display.
4. Vertical stroke 70-80mm. Specimen advance 30-35mm.
5. Setting values :
 - 0.5 to 5 micron in 0.5 micron increments
 - 5 to 20 micron in 1 micron increment
 - 20 to 60 micron in 5 micron increment
 - 60 to 100 in 10 micron increment
6. Horizontal specimen feed
 - 24 to 28 mm +/- 1 mm, feed motion via step motor
7. Coarse feed
 - Motorised coarse feed in two steps i.e 300 micron /sec and 800-900 micron/sec.
8. Section counter, knife angle position locator and specimen orientation light facility should be there.
9. Emergency stopping facility and lockable hand wheel should be present.
10. It should have option of foot pedal operation and emergency stop button in automated mode.

11. Automatic object return to starting point
12. Directional specimen holder fixture with quick clamping system, standard clamp and universal cassette clamp.
13. Universal knife holder base, disposable blade holder, disposable blades should be present. The specimen holder of microtome should be capable of holding resin blocks for sectioning.
14. Should have spacious, removable section waste tray with integrated armrest.
15. Instrument should have an operating voltage suitable for Indian plugs. Voltage supply • 230 V-50/60 Hz.
16. High profile disposable blades pack as well as low profile disposable blade pack (Five packets each) and two sets of brushes.
17. The microtome system has to be quoted with all other accessories, such as stabilizer if required, power cords. Quotation missing any of the above mentioned items or their parts would be disqualified straightway.
18. Five years of warranty and validation of instrument should be done every six months.
19. The bidder should justify each specification point by point in their order of requirement and should provide the evidence for the same in the technical brochures of the instrument with page number. Photocopied catalogues will not be considered for technical specification evaluation. Quotation not done in the proper form may invite technical rejection and will be technically disqualified
20. The equipment should be USA- FDA and European- CE approved
21. Documents supporting track record and satisfactory performance from institutions of national importance (minimum of one) should be provided
22. Should be provided with UPS.

Item no 14. Pentahead microscope with high end optics

1

A. Binocular Microscope

1. Optical System - Universal infinity optical system, having objective parfocal distance of 45mm.
2. Objectives: Plan Semi Apochromat 5x/0.15, Apochromatic Objective lenses - 10x/0.45; 20x/0.80; 40x/0.85 (spring); 100x/1.40 (Spring,oil.)with antifungus treatment.
3. Frame: Ergonomic design for comfort and ease of performance with ergonomically controls
4. Stage: Ceramic coated rectangular mechanical stage with coaxial X and Y motion control knob on right-hand
5. Eye Piece tube: Wide field trinocular tube with eyepiece 10x with field of vision 23 or better with titling angle and adjustable inter-pupillary distance. Interpupillary distance adjustment should range from 48-75 mm,
6. Eye Piece: Wide field paired eye pieces of 10x, N.A.22 (Field No.22)
7. Nose Piece: 6 position nosepiece to accommodate 6 objectives at a time. It should also have slot for polarizer. Arrow pointer attachment should also be provided.
8. Illumination: Built-in Kohler illumination 12v 100w LED lamp, pre-centered and pre-focussed.
9. Condenser & the light relay system fitted with high performance aspheric lenses for bright & uniform illumination
10. Filters: Daylight blue correction filter, neutral density filters and green filter with light Intensity control.
11. Condenser: Bright field condenser with N.A. 0.9 or more

B. Petaheaded Attachment

It should have modular accessories for simultaneous observations of the same specimen by five persons, two each on either side sitting face to face, while giving the same constant degree of brightness, orientation and viewing height.

There should be LED arrow pointer with variable intensity and with Green / Red colour selection

C. Polarizing Attachment

Polarizer analyzer to be fitted into the arm of the microscope.

D. Camera & Software - with HDMI Multi output with 10 bit digitization, 2048x1500. Exposure time 1.6 ms to 17.8min in 1us increments with Fire wire port Photographic camera (> 5 MP) including Software capture and image processing.

E. Computer System - i5 processor, 8GB RAM, 500GB HDD, DVR R/W, TFT 20".

F. There should be provision for demonstration before final approval of equipment

G. Microscope should be CE Europe and US FDA certified.

H. Should be provided UPS

I The bidder should justify each specification point by point in their order of requirement and should provide the evidence for the same in the technical brochures of the instrument with page number. Photocopied catalogues will not be considered for technical specification evaluation.

Item no 15. TRINOCULAR MICROSCOPE WITH CAMERA QTY -1

1. Optical system - Infinity corrected system
2. Focus -Vertical stage movement 25mm or more per course stroke, Vertical stage movement 1 micron or less per fine stroke
3. Illumination - Lamp House for LED with connecting cable having life span of 20,000 hrs or more.
4. Revolving nosepiece Reversed Sextuple revolving nosepiece. Should be upgradeable to DIC in future.
5. Objectives
Plan Semi Apochromat 5x/0.15, Apochromatic Objective lenses - 10x/0.45; 20x/0.80; 40x/0.85 (spring); 100x/1.40 (Spring,oil.)

6. Observation tube - Wide field three way Trinocular Eyepiece Tube with 10X eyepiece of minimum 22mm F.O.V
7. Stage - Ceramic coated surface mechanical stage with right-hand low drive control with left hand for two specimens
8. Condenser - Swing out condenser usable form 2X-100X) with built in Daylight blue correction filter, Neutral Density Filters and Green filter (minimum 3 built-in filters) with light intensity control.
9. Camera & Software - with HDMI Multi output camera Minimum 5MP with Projector & Ultra HD TV > 52 inches & Screen including Software Capable of Brightfield& Immunofluorescence Photography with connectivity to projector & LED TV (At least 55 inches Ultra HD)
10. Computer System - i5 processor 8GB RAM, 500GB HDD, DVR R/W,TFT 20”.
11. Product specification - Camera and microscope should be manufactured by the same manufacturer.
13. Additional display - In addition to TFT screen and the monitor should be wall mounted by the vendor during installation.
14. Performance certificate -Vendor should furnish satisfactory performance certificate of the model quoted from an institution of National Importance.
15. Product demonstration - There should be provision for demonstration before final approval of equipment.
16. Regulatory body approval - The equipment should be USA-FDA and European-CE approved, necessary approval certificates should be attached with quotation.
- 17 Should be provided to be UPS.
- 18 Instrument should have an operating voltage suitable for Indian plugs.Voltage supply 230 V-50/60 Hz.
- 19 The bidder should justify each specification point by point in their order of requirement and should provide the evidence for the same in the technical brochures of the instrument with page number. Photocopied catalogues will not be considered for technical specification evaluation.

16. Automated immunohistochemistry stainer with antigen retrieval system 1

- 1) The System should be fully automated Immuno staining system for ImmunoHistochemistry and In-situ hybridization.
 - 2) It should perform all the process automatically from baking to counterstain.
 - 3) Totally hands free day or night with option of delay start.
 - 4) Equipment should be compatible with primary antibodies and secondary reagents from all be companies.
 - 5) Antibody dispensing should be flexible volume of minimum 50 µl.
 - 6) Antibody and microreagent consumption per slide should not be more than 100 µl.
 - 7) Compatible with paraffin wax and frozen section and cytology smears.
 - 8) Antibody menu of more than 20 primary antibodies at one time.
 - 9) Antibody dispersion should be flexible and range from 100 µl to maximum of 150 µl.
- Should be compatible to use with standardized protocols as well as user defined protocols

- 10) Capable of operating at temperature of 20- 32 degrees C.
- 11) The ImmunoStainer should have the capacity of staining 30 Slides at a time
- 12) The Staining System should have inbuilt antigen Retrieval system for Heat treatment required for antibodies.
- 13) The Immunostainer system should have the Convertile.
- 14) The system protocol should include deparaffinzation.
- 15) Fume extraction with integrated charcoal filter and connection for an external exhaust system.
- 16) The Stainer should have Liquid Level Sensing (LLS). It should also alert when reagents are low or waste is full.
- 17) The Stainer should have Robotic ID Imager/RFID technology to identify the slides and reagents loaded in the Processing Module.
- 18) Ability to perform multiple staining protocols in a single run.
- 19) The Stainer should have Optical Character Recognition (OCR)/bar code reader.
- 20) Modular system with computer and upgradable software. Branded computer with 2 GHz
- 21) The Immuno Staining system should have the facility of LIS connectivity.(optional)
- 22) The equipment should be LAN/HIS compatible.
- 23) Key board for instrument operations and patients data entry.
- 24) 220- 440 VAC, 50 Hz with Indian Plug and Online UPS and at least 6 hour backup.
- 25) The equipment should be US- FDA and European CE approved.
- 26) Installation, training and commissioning should be done free of cost.
- 27) The instrument should be bench top model and can do continuous processing.
- 28) The after sales service should be available within 24 hours and with trained service personnel.
- 29) Washing kit should be supplied with the instrument.
- 30) Start-up kit for 200 tests should be given.
- 31) Documents supporting track record and satisfactory performance from institutions of national importance (minimum of one) should be provided
- 32) The bidder should justify each specification point by point in their order of requirement and should provide the evidence for the same in the technical brochures of the instrument with page number. Photocopied catalogues will not be considered for technical specification evaluation. Quotation not done in the proper form may invite technical rejection and will be technically disqualified

17. Fully automated high throughput multistainer workstation 1

- 1 High throughput robotic stainer for Multiple staining applications and should run up to 12 racks in parallel.
2. Simultaneous staining of various different staining protocols. Capable of handling user defined protocol.
3. Solvent resistant color touch screen to monitor the staining process using the graphical process representation.

4. Racks should be assigned to the correct Staining Protocol based on transponder & Color –code system.
5. 34 reagent stations and 6 wash stations of 450ml capacity.
6. Optional Integrated oven with temperature setting from 40C^o to 70^o for optimal slide drying.
7. Continuous loading and unloading of slides via rack entry and exit door.
8. Specimen slide throughput of at least 200 slides per hour up to 600 slides per hour.
9. Agitation programmable from 0 to 20 times or continuous.
10. Reagent management System , Station information on touch screen & Data Logging.
11. Programmable up and down movement of robotic arm.
12. Fume extraction fan with charcoal filter to remove hazardous fumes.
13. Gentle vibration to slide rack during lifting to reduce carry over contamination.
14. This instrument can be attached to the coverslipper in future.
15. CE Europe and US FDA approved
16. Documents supporting track record and satisfactory performance from institutions of national importance (minimum of one) should be provided.
17. Should be provided with ups.
18. Should work on 220-240V/50-60 Hz.
19. The bidder should justify each specification point by point in their order of requirement and should provide the evidence for the same in the technical brochures of the instrument with page number. Photocopied catalogues will not be considered for technical specification evaluation.

18. Fully automated Flexible Coverslipping workstation 1

1. Should produce slides with superior optical quality for reliable long-term storage.
2. It should allow for each single glass slide separately and without bubbles.
3. It should have active carbon filters for safety.
4. It should have the storage capacity of about 350 pcs. of slides.

5. Should be capable of cover slipping 200- 300 slides per hour
6. Should be able to handle slide racks of various manufacturers and should be adaptable to individual laboratory requirements
7. Should be used with common range of mounting media including mounting with wet mountants. Should dispense adequate amount of mount ant for coverslipping each slide.
8. Should be equally useful for histopathology and cytopathology slides
9. Should be highly reliable, cause minimum wastage and form a fully automated walk-away system.
10. Should have an inbuilt system for fume extraction so as to minimize exposure of lab personnel
11. Documents supporting track record and satisfactory performance from institutions of national importance(minimum of one) should be provided.
12. The equipment should be USA- FDA and European- CE approved
13. Instrument should have an operating voltage suitable for Indian plugs.Voltage supply 230 V-50/60 Hz.
14. Should be provided with UPS.
15. The bidder should justify each specification point by point in their order of requirement and should provide the evidence for the same in the technical brochures of the instrument with page number. Photocopied catalogues will not be considered for technical specification evaluation.

Item no. 19)Specifications of Binocular Microscope with high end semiapochromatic optics of international standard.

Body: Binocular, sturdy, stable base body with focus adjustment controls.

Eye piece: Paired, high quality, (the image of the object as seen through the binocular eyepiece should be well defined centrally in at least 2/3 field of view), semiapochromatic, wide field, 10x with inbuilt pointer. The eyepiece should be aplanatic and have a minimum field number of 18 Diopter adjustment must be present on one/ both eye pieces or on the eye piece tube.

Optical system should be infinity corrected.

System complete with illumination system is required

Objective:. Plan Semi Apochromatic 5x/0.15,Semi Apochromatic Objective lenses - 10x/0.45; 20x/0.80; 40x/0.85 (spring); 100x/1.40 (Spring,oil.)

100x should have numerical aperture of 1.25 and should be of oil immersion and spring loaded type. Suitable prominent marking should be provided on 100x for easy identification. Unbreakable containers to be provided for storing the objectives. All objectives should be wide field, semi apochromatic and parfocal.

Making for the Objectives : Each objective should be engraved with the following information's :

Name of the manufacturer-

Magnification and numerical aperture, for example, 10x/0.25

100x objective should be engraved with the word 'Oil' in changing from one objective to another or reintroducing the same objective by rotation of the nosepiece, the object at the center of the field should not appear displaced by more than 0.02 mm in the object plane in any direction.

Nose piece: Revolving nose piece to accommodate a minimum of five to six objectives with click stops. It should be provided with ribbed grip for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment. Extra ports if any should be fitted with dust proof metallic/ebonite caps.

Stage uniformly horizontal, mechanical stage having dimensions of length 140 mm (+/- 20mm) with fine vernier graduations (minimum reading accuracy of 0.1 mm). The stage should be provided with spring loaded slide holder for exact positioning of specimen/ slide. It should be designed with convenient sub-stage vertical coaxial adjustment for slide manipulation. The stage should have ball-bearing arrangement to allow smooth travel in transverse directions i.e. 80 mm (+/-5mm) and front to back direction, 50mm (+/-5mm).

Sub-stage condenser: Abbe-type condenser, numerical aperture (N.A.) 1.25 focusable with rack and pinion arrangement incorporating a spherical lens and an iris-diaphragm. The condenser should have a filter holder and removable/ swing in/ out blue filter (suitable for bright field Microscopy), neutral density filter and green filter (minimum 3 built in filters) with light intensity control.

Sub-stage illuminator:

The system should have a build-in variable light source (Illuminator). This light source should be LED. The circuitry for the light source should include a constant voltage supply.

The system should be provided with a step down transformer and an on-off switch and intensity control. The lamp should be provided with a lamp socket which has the facility for easy replacement of the bulb,

Power supply: Voltage 220 V AC, 50Hz. should have one on-off power switch, 3 core power cord with a 3 point male plug.

The system should have an inbuilt protective/ safety device to withstand fluctuations of voltage from 140 V to 280 V.

A plano-concave mirror in fork mounting should be supplied which would be attachable to the base for field use when power is not available.

The fuse for the LED lamp should be easily accessible to the operator

The Illuminator should have a build-in field diaphragm for Kohler illumination.

Eye piece tubes: Binocular eye piece tubes, inclined at 45 degrees, rotatable through an angle of 360 degrees, having inter-pupillary distance range of 54-74 mm or wider, covering the above mentioned range.

Focusing knob: Co-axial coarse and fine focusing knobs capable of smooth fine focusing movement over the full range of coarse travel. The fine focusing movement should have sensitivity of two microns or less (finer) over the entire coarse focusing stop safety arrangement should be provided.

General:

All optical parts including objectives, eye pieces and prisms should have anti-reflective coating which also gives anti-fungal property.

All metallic parts should be corrosion-proof, acidproof and stain-proof.

Working manual should be provided with each microscope.

A bottle of at least 25 ml immersion oil, a roll of lens tissue paper and lens cleaning solution (100 ml) should be provided with each microscope and atleast 5 LED lamps .

One anti static cleaning brush should be provided with each Microscope for cleaning purpose.

Microscope should be supplied with all spare parts including Fuses 6 Nos.

All consumables required for installation and standardization of system and microscope cover to be given free of cost.

The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%.

Should be FDA and CE Europe certified .

Three years warranty, 5 yrs comprehensive AMC should be available with service centers in close proximity.

User/Technical/Maintenance manuals to be supplied.

Certificate of calibration and inspection from factory.

List of important spare parts and accessories with their part number and costing.

8. Sample to be shown

9. The bidder should justify each specification point by point in their order of requirement and should provide the evidence for the same in the technical brochures of the instrument with page number. Photocopied catalogues will not be considered for technical specification evaluation.

Bid sale, submission and opening date for all items has been extended as per details given in Table -1:

Table -1

Sl. No.	Description Revised Schedule	Revised Schedule
i.	Sale date of the tender	31.10.2017, 3.00 PM.
ii.	Closing date & time for receipt of tender	31.10.2017, 3.30 PM
iii.	Time and date of Opening of Tenders	31.10.2017, 4.00 PM

All other terms and conditions of the tender enquiry document shall remain unchanged.

Prospective bidders are advised to regularly visit HSCC website/ CPPP website for corrigendum /amendments etc. if any, as these will be notified on these portals only. No separate advertisement will published in the news papers in this regard.

s/d
CGM, HSCC India Limited
For and on behalf of DGMER, Panchkula