

AMENDMENT-II

Ref: Tender Enquiry No.: HSCC/SJH/Med. Eqpt. /35 dated 18.10.2017

Sub.: Procurement of Medical Equipment for New Emergency Block & Super- Specialty Block at Safderjung Hospital, New Delhi.

Amendments have been received Safdarjung Hospital for Item No. 1 to 8. It is therefore extended the bid submission date from 22.11.2017 to 29.11.2017 for Item No. 1 to 8

Also please find attached the Amended Price schedules in view of the GST rules.

Amendment to be issued will be uploaded on websites www.tenderwizard.com/HSCC & www.hsccltd.com.

All other tender terms and conditions remain unchanged.

Amended Specifications are as follows:-

Item No. 1**Cerebral & Somatic Oximeter Monitor (with accessories) (10 nos. TEN)**

1	The Cerebral/ Somatic Oximeter monitor is a noninvasive oximeter which simultaneously monitors changes in regional blood oxygen saturation in the brain and skeletal muscle tissue of the body.
2	It may be used for cerebral oximetry, somatic oximetry or both simultaneously
3	It must be available in four data channels
4	Monitor should be large for good vision
5	Should have preamplifier cable length of atleast 4.0 meter or more & soma sensor cable length of atleast 1.0 meter or more
6	Should have rSO2 range between 20 to 90
7	Should have data storage memory of 500 hours or more
8	Should have battery back of minimum 15 minutes
9	Should have digital output RS-232 & USB Port or Bluetooth to transfer the data
10	Should have specialized analytical tool to generate graphical & tabular data for reviewing the rsO2 patient data in more detailed form
11	Should have input voltage of 220-240 VAC & Frequency of 50 Hz
12	Should have sensor for Adult, Pediatric & Neonate patient range
13	Should provide accurate reading during non- normocapnic conditions

14	Should have published emitter-sensor spacing validation
15	Should have at least two clinical study with improved patient outcome
16	Should have atleast 100 or more published / peer reviewed articles
17	Should have US FDA certification & should be installed in apex Govt. Institutes.
18	Appropriate Operating voltage for Indian conditions.

Item No. 2

Technical Specification for Item No. 2 Bi-Spectra Index Monitor remains unchanged.

Item No. 3

SPECIFICATIONS FOR SINGLE CHAMBER PACEMAKER EXTERNAL (10nos. TEN)

Modes	VVI, AAI, VOO, AOO
Rate	30-180 ppm & above
Rapid Atrial Pacing	80-800 ppm
Output amplitude	0.1 mA to 25 mA
Pulse width	0.75 ms or more
Sensitivity	0.4 to 20mV
Operating conditions	10 C to 40 C (50 F to 104 F)
Dimensions	Small size
Weight	Light weight
Battery Type	Standard AA batteries / 9volt alkaline
Battery Life	Atleast 19 days (under typical conditions)*
Battery Status indicator	Yes, gauge type to see what power remains
Low battery behavior	Red LED on gauge indicator
Operating time during battery change-out	30 s (Minimum)
Electrode type	Unipolar or bipolar
Connector compatibility	Compatible with standard isolate jack which I used with all temporary pacing wires
Defibrillator protection	Internal defibrillation discharges up to 50 J (watt-seconds) and external defibrillation discharges up to 360 J
Display	Analog / Digital (LCD, with power saving backlight)
Run Away Rate Protection	Yes
Lock feature to prevent accidental change of parameters	Yes
Output pacing Circuitry	Constant Current Design

Autolock Function	Yes after 60 seconds of inactivity
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Item No. 4

SPECIFICATION FOR PACEMAKER DUAL CHAMBER (10Nos. TEN)

Pacing Modes	Fast access to: AAO, AAI, VOO, VVI, DOO and DDD
Other Modes	DDI
Pacing Rate	30-200 ppm
RAP, Burst Pacing, or Overdrive Pacing	80-800ppm
Pulse Output Amplitude	Atrial: 0.1-20mA, Ventricular: 0.1-25mA
Output Waveform	Constant Current – Squarewave
Pulse width	A: 1.0ms, V:1.5ms
AV Delay	20-300ms
Sensitivity	Atrial: 0.4 to 10 mV or more, AsYNC: Ventricle: 0.1 to 20mV, ASYNC
Refractory	A: 150-500ms, V: NA
Battery Source	2-AA Batteries / 9 volt alkaline
Battery Life Expectancy	7 days (minimum)
Dimensions	Small size
Weight	Light weight
Displayed Parameters	Rate, Atrial Output, Ventricular Output, Mode, Battery Status
Digital Display	Yes, LCD, with power saving backlight
Other Features	RAP, Pacing and Sensing status bar, Screen Lock, Pacing Pause Mode, Emergency Mode, Pacing continuation after battery removal (30s), RAP, Automatic adjustments for Atrial Tracking, PVARP and AV interval, Upper rate, Backlit LCD display, automatic PVARP, Timing violations/Warnings, automatic adjustment, Safety Pacing.

Item No. 5 Existing As : HAEMODIALYSIS MACHINE – 01Nos. (One)

Item No. 5Amended As : HAEMODIALYSIS MACHINE – 01Nos. (One) with Portable RO Unit

<u>SPECIFICATION FOR HAEMODIALYSIS MACHINE – 01Nos. (One)</u>	
	Dialysis Machine (Haemodialysis Machine)
1	Capable of providing conventional hemodialysis, SLED, haemofiltration and online haemodiafiltration.
2	The machine should be with latest technology and microprocessor controlled

3	It should have high resolution large coloured touch screen with functional keys.
4	It should have Acetate & Bicarbonate, dry powder and sequential dialysis facility.(isolated UF)
5	It should have Arterial Venous & Transmembrane pressure monitoring facility.
6	Optional both pre dilution and post dilution of blood should be available.
7	HDF substitution fluid be produced online with a delivery rate of wide range (20-500ml/mt)
8	Blood pump flow rate should be from 15ml/min. to 600ml/min. blood tubing pump segment should be operator changeable for use of pediatric (4mm) or large size (8mm) blood tubing sets.
9	It should have Single Needle dialysis facility.
10	It should have Volumetric Ultrafiltration System.
11	It should have On-line Dialysate fluid filter system for ultra pure Dialysis delivery with endotoxin retention capacity of at least 106 IU.
12	It should have In-line Bicarbonate mixing with dry sterile bicarbonate powder cartridge and solution preparation facility during dialysis.
13	It should have real time clearance surveillance for monitoring dialysis dose Kt/V without any extra cost for disposables. It should monitor Urea Clearance, Plasma Sodium and Kt/V.
14	It should have Air bubble detector with Optical Sensor (to check the presence of blood in extracorporeal blood circuit) at Venous clamp with automatic clamp.
15	It should have water and dialysate flow alarm.
16	Wide range dialysate temperatures selectivity. With alarm for temperature & automatic bypass
17	It should have Heparin Infusion Pump with variable syringe size with wide infusion rate (in 0.1ml/hr increments).
18	It should have Blood leak Sensor which can differentiate between impurities and real blood.
19	Should accept different concentrate formulation, different Dialyzers and blood tubing sets.
20	It should have Variable Dialysate flow from 100 to 1000 ml/min with increments of 100ml/min.
21	Ultrafiltration rate should be from 0.1 to 4.00 L/Hr. with volumetric control.
22	In house water filter assembly with cartridge filter.
23	Auto priming and rinsing of dialyzer and blood lines.
24	Integrated heat and chemical disinfection facility.
25	It should have Ultrafiltration and Sodium Profiling facility.
26	It should have Non-Invasive patient blood pressure monitoring.
27	All important data be pre-settled so that machine can be used without feeding data every time.
28	Automatic self test facility
29	Facility to show treatment parameter trends every 15-20 minutes digitally as well as by graph.
30	It should have Automatic Battery back up of at least 30 minutes for complete Extracorporeal blood system during power failure.
31	Must have the facility to upgrading to latest technology in future.
32	It should be US FDA approved or CE certified.
33	Undertaking from the company/dealer that the price of proprietary AV tubing's required for the machine will be frozen for 05 years.
34	Should be installed in apex Govt. Institutes.
35	Power supply - 220 v AC + 15%, 50Hz + 3%
36	Should work on AC mains without batteries.
37	Operating & service manual with detail circuit diagram, should be provided.
38	On line monitoring for urea & Kt/V to assess adequacy of dialysis.
39	Training to MEC Engineer.
40	User's list with the addresses & contact Nos to be provided.
41	Demonstration compulsory.
42	Tropicalization:
	Operating room Temp. upto 40°C
	Strong room temp upto 60°C
	Relative humidity upto 90% non condensiry

Specification for portable RO unit	
	Pre-treatment
1	Should have raw water inlet units with solenoid valve and mesh filter of 50micron or above
2	Should have raw water storage tank of food grade quality or equivalent of 750 ltr or above
3	Raw water pump of
4	Should have sand/multimedia filter with polyglass vessel and high TDS control, with automatic backwash and sample valve.
	Treatment – main RO
5	Should be able to provide water quality as per both ISO-13959/23500 and AAMI standards for dialysis
6	Should have compact design & portable type (easy to move on wheels) in a stainless steel/powder coated chassis
7	Should be able to produce 125lt/hr of permeate at 1.5 bar, able to support upto 5HD machines respectively
8	Should be microprocessor based and capable to display parameters such as permeate conductivity/temperature/flow, feed flow, concentrate flow, yield’.
9	In build capabilities to show on display for Permeate (supply in Litre/min. temperature) & for Raw water (Consumption in Ltr./min & pressure)
10	Should have built in dual column softener (alternate mode) with fully automatic brine, fill & clean cycles, also have a brine tank incorporated in the system
11	Should have built in cartridge type charcoal filter
12	Should have semi-automatic decalcification system in place
13	Should have built in cartridge filter of 10 & 20 micron
14	Should have programmable fully automated Rinse cycle for membrane wash
15	There should be a provision of OFF line mode and ONLINE mode of Permeate supply. In case of permeate supply is to be used to run dialysis machine directly with collecting permeate to tank it should be possible
16	There should be water saving system in place which adjusts the output to the number of machine in use and control yield accordingly.
17	Yield setting should be >50%
18	Should have an internal leakage sensor
19	Should have an in-built UV lamp before RO membrane
20	Should have EC certification attached with a tender document
21	Should be operatable on single phase power supply of 220-240V AC, 50 Hz
22	Should have ‘AUTO START/STOP programming’ facility
	POST TREATMENT
23	Should have permeate RO o/p Storage tank of 750 ltr with food grade quality or equivalent
24	Should have transfer/Booster pump S/S 316 grade for permeate supply to HD Machines
25	Should have sub-micron bacterial filter of 0.2 micron manually backwashable.
26	Should be installed with PEX Piping including push-pull type 316 grade S/S connectors to supply to 5HD machines.

Item No. 6

Technical Specification for Item No. 6 Re –Do Sternal Saw remains unchanged.

Item No. 7

Technical Specification for Item No. 7 ETO Gas Sterilizer remains unchanged.

Item No. 8

SPECIFICATION FOR ANGIOGRAPHY SYSTEM FOR INTERVENTIONAL AND HYBRID RPOCEDURES INCLUDING TAVI

State of the art, single floor/ceiling mounted C-arm/G-arm system with flat detector technology digital imaging system for hybrid, interventional and TAVI procedure in Hybrid OR environment.

A) C-ARM/G-ARM MULTI-DIRECTIONAL FLOOR/CEILING MOUNTED:-

- 1 All movements should be motorized with C-Arm angulations of minimum RAO/LAO+110 deg. /- 110 deg. CRAN/CAUD + - 45 deg. At head end position. With 20 deg. /sec. or more speed for LAO/RAO and 15 deg./sec or more speed for CRAN/CAUD.
- 2 The system should have user defined 50 programmed position of the C-Arm and table.
- 3 Motorized parking of C-Arm away from table for operations on table when C- Arm not in use. C Arm mounting/base should not come in the area of the operation table and operating area.
- 4 The C-arm should have auto collision protection with patient and the table.
- 5 C-arm must not interfere with laminar airflow and accommodate planer of min size of 2400x2400 cm on ceiling and OT lights on table in working position or while moving the C arm to different positions.

B) TABLE:-

- 1 Floor mounted table with flat table with radiolucent table top and floating functions with rotation from the base.
- 2 Table should be integrated with the system and should have motorized vertical movement.
- 3 The table should have Integrated Emergency Stop; all motorized movements (including table), are stopped when the System emergency stop button is pressed. The table should have Integrated Collision detection, all motorized movements (including table),are slowed down or stopped when detects the patient Workflow.
- 4 The table should have motorized axis tilt (head-down and head-up as well lateral tilt) with at least 15 deg.
- 5 The system should have provision for collision protection
- 6 Table should support wide range of accessories like arm rest, surgical screen, instrument tray, hand grips, and one IV pole.
- 7 Gantry controls, table system controls, Collimation controls to be mounted on trolley away from table for better flexibility.
- 8 Table should support patient weight up to 200Kgs or more& should take full patient weight during CPR in extended table position.
- 9 The table should have head to toe coverage without need for repositioning of the patient . Please specify the table dimensions.
- 10 System should have well designed & light weight footswitch for releasing fluoroscopy, acquisition and table brakes.

C) X-RAY GENERATOR:

- 1 100 KW or more compatible with high resolution imaging

- 2 High frequency X-ray generator with automatic regulation of radiation dose rate for all fluoro DSA and acquisition imaging.
- 3 The minimum power rating should be 100 KW OR more at 100 KV compatible with high resolution imaging.
- 4 Fluoroscopy exposure and mA should be automatically controlled.
- 5 System should have pulsed fluoroscopy system.

D) X-RAY TUBE:

- 1 X-Ray tube should be with fine focal spots (2/3 focal spots for different application) with high cooling rate to ensure continuous operation, capable of pulsed fluoroscopy. The large Focus power output should be 65 kw to 80 kW or more. The pulse Fluoroscopy should be offered with pulse rate of 3.75 Frame/sec to 30 frames/sec.
- 2 The X-ray tube should have Anode heat storage capacity of at least 05 MHU or more to run continuously for 6-8 hours without shutting off.

E) RADIATION PROTECTION:

- 1 The system should have integrated computer controlled X-ray Beam filtering with at least 3/4 programmable copper filters of various sizes from 0.2 mm to 0.9 mm.
- 2 The system should have positioning of collimator blades without radiation.
- 3 The system should have monitoring and display of X-ray dose during the patient examination. It should be possible to create a DICOM based dose report of the patient.
- 4 System should meet all National & International safety standers, US FDA , European CE & comply with BARC & AERB guidelines.
- 5 System should have latest low dose radiation safety features of operator and patient (care & clear /clarity IQ or equivalent)

F) DIGITAL IMAGING SYSTEM:

- 1 A flat detector with a diagonal size of least 46 cm with 16 bit digitalization depth.
- 2 Digital system with acquisition and processing in 1024 x 1024 matrix at 25/30 fps with 8/10/12 bit digitization.
- 3 Image storage capacity of at least 1,00,000 images in 1024 x 1024 matrix at 10/12 bits on the main system disk and upgradeable further.
- 4 System should have capability of ECG display on the live image monitor during the cina acquisition and perferably archive along with angio images on CD, during the acquisition.
- 5 System should have on-line & off-line validated vascular analysis. The software should have Auto calibration facility for Stenosis measurement with geometrical and densitometry calculations. The analysis should be possible from table side in the examination room and from the control room.
- 6 The full system should have table side control operation with touch screen / knobs for complete acquisition and post processing capabilities.
- 7 The system should have on-line DSA capabilities with acquisition frame rate of 1 frame/sec to 6 frames /sec or more.

- 8 Rotational angiography facility with and without subtraction should be available. It should be possible to generate 3D and CT like images from rotational angiography data.
- 9 The system should have facility for storage of fluoro loop scene of at least 10 seconds.
- 10 System should be provided with all advanced 2D and 3D road mapping.
- 11 The latest complete software and hardware for visualizing stent with extra high- resolution from table side control & preferably stent enhancement with relation to lumen (fade in and fade out).
- 12 Separate work station should be provided with at least 3 GB main memory for 3D reconstruction to free the main system for continuation of procedure immediately after displayed both in the control room as well as the examination room. It should be possible to recall & view images acquired in the rotational mode (subtracted & un subtracted) alongside the 3D images. Review of all images should be fast interactive & user friendly in both the rooms. Table side controls for 3D reconstruction and C-Arm positioning with respect to 3D image & selection of 3D image with respect to C-Arm positioning should be provided. The 3D reconstruction should be in true 512 matrix. All options related to 3D (MIP, SSD, VRT, slicing, measurement tool, volume try etc.) should be available. Software to fuse CT, angio & MR images of the same patient at the independent workstation is desirable.
- The 3D workstation should be capable of the following functions
- i) 3D reconstruction using SSD, VRT, MIP in true 512 matrix with color display in the control & examination room.
 - ii) All post-processing functions for images including fusion of CT, MR and angio images with 3D display & 3D volume measurement.
 - iii) Immediate background transfer of all images as soon as they are acquired, to CD/DVD recording station.
 - iv) It should be possible to view dual density objects in one view to differentiate blood vessels from coils.
 - v) It should be possible to have 3D of aortic root from the rotational angio data/ pre acquired CT data and auto marking of anatomical landmarks like coronary ostium. It should be possible to have overlay of live fluoro on this 3D image or valve marking lines with landmarks for guidance in TAVI procedures. C Arm should position itself automatically depending upon the 3D image.

G) MONITORS/DISPLAY:

- 1 The monitor display system in examination room should be ceiling suspended and it should be possible to position it on the left or right side of patient table. The monitor should be single high resolution monitor of at least 55" and 8 megapixel resolution with luminance of 700 CD / M. sq and 1000:1 contrast or more to display live,reference,3D image ,hemodynamic data . Two additional monitors of at least 19" to be provided. One for live image and another for waveform display.

2 Console room should have monitors to display patient demographics, fluoroscopy images and 3D images. All monitors at least 19 " or more

3 **Hemodynamic specification:**

- a. dedicated hemodynamic system for cardiac catheterization for adult and pediatric patient
- b. Hemodynamic system should have four invasive pressures & ECG.
- c. Should have all Hemodynamic analysis tools to calculate cardiac output, shunt area and Gradient measurements
- d. Should be able to store and print one week angio-studies.
- e. 12 lead ECG and 4 lead Invasive pressure transducer and domes should be supplied with the system.
- f. Should be connected with cath lab network printer.
- g. 20 personal dosimeters should be provided which will give real time reading of the radiation dose.
- h. There should be a provision for display of time taken for interventional procedures in the operating room the dosimeter should have wireless connectivity to the dose monitoring system for recording the doseages and archiving

H) CONTROL CONSOLE:

- 1) All system movements of C-Arm, table, image display, image review, image post processing and quantification shall be controlled both by the operator at the table in the exam room and in console room.
- 2) The system should have facility for edge enhancement, Positive/negative image display, windowing, contrast/brightness, electronic shuttering, image/pixel shifting, vertical and horizontal image reversal, zoom functions. System should have facility to allow overlying of fluoroscopy and reference image with fade-in and fade-out of these images possible.
- 3) The system should have fast and direct access to all series, single images, in both examination and control room.
- 4) System should have angle/distance measurement, Image labeling and patient positioning facilities.

I) DIGITAL ARCHIVING:-

- 1 System should be DICOM 3.0 ready.
- 2 Image transfer from digital system in background mode without affecting the system operation.
- 3 USB interface to copy images to memory disk/external hard disk.

J) IVUS

1. Latest Generation Intra Vascular Ultrasound System 2.7 version.

2. Monitor-SVGA LCD Monitor-Minimum 19".
3. Colour map (iMap) overlay to visualize tissue type (Fibrotic, Lipidic, Necrotic, and Calcified) as well as an improved workflow design.
4. Area & length measurements graphics in the cross-sectional and long view images.
5. ECG and Audio signals capturing enabled.
6. Ease to eyes by colouring IVUS images.
7. Sterile field control option.
8. Compatibility with Coronary, **Peripheral** and optional intra cardiac echo catheters (**ICE**).
9. Automated lumen and vessel measurement to aid in diagnosis and planning.
10. Dynamic review feature (blood flow, plaque morphology, dissections and stent apposition)
11. Long view and cross sectional imaging.
12. Coronary IVUS catheter with single Rotating/Mechanical transducer driven by a flexible drive cable with minimum 20 MHz frequency.
13. High storage capacity with removable hard disk and minimum of 25 cases storage.
14. Archiving options: CD ROM, 16X DVD, Removable Hard Disk and Network.
15. Maximum number of area measurements per cross section image for better imaging, Minimum-3d
16. Maximum number of distance measurements per cross section images for better imaging, Minimum-9
17. Minimum 30 GB hard disk with an option of removable storage with minimum storage of 20 cases or more.
18. DICOM storage & image formatting.
19. Digital Frame Grabber.
20. Data Entry: Touch Screen, Mouse
21. Multiple image screen format.
22. Automatic & manual pull back options.
23. Automated vessel and lumen measurements/detection with manual correction option.
24. Printer to print IVUS images.
25. Approval-International standards agency US FDA or Equivalent.
26. Clinical support for training of staff.
27. Technical back up for maintenance of machine

K) FFR (Fractional Flow Reserve) Measurement System for Physiological Lesion Assessment

1. Should be able to assess Arterial Pressure through Cath Lab transducer system wirelessly/ with wire.
2. Should be able to assess distal Pressure through device, both wired and wirelessly.
3. Should have the option to be wall mounted, table mounted or desktop as per the need.
4. Should be able to transmit and display recordings on the existing cath lab monitors
5. Display both real time pressure and mean pressure values.
6. Screen window displays real time FFR in both numerical and graphical form.
7. Should have optional upgraded software to calculate CFR (Coronary Flow Reserve) this is real time. Both FFR and CFR simultaneously. IMR to be calculated using desktop software or should have optional upgraded software for instantaneous flow reserve (IFR) & IFR scout calculating software.
8. Should be capable of reading temperature (thermodilution)
9. Temperature readings in the range of 15-42 C
10. Should be able to do Pressure Reference equalization
11. Should measure pressure in a range of -30 to 300 mm Hg
12. Touch screen capabilities to be operator friendly, guide steps to follow for procedure.
13. Displays Calibration steps.

14. Should have a frequency response of 0-25Hz
15. Should give Graphical presentation of pressure waves.
16. Allows different beat settings in accordance with the cath lab system.
17. Should be compatible with different hemodynamic systems
18. Should have memory to save and record the data.
19. Should also enable cath lab to read AO pressure for monitoring.
20. Should communicate with PC.
21. Should be compatible with printer, DICOM and USB interface for transferring FFR recordings

L) **Optical Coherence Tomography (OCT) System with real time online 3D imaging features**

1. The system should have an imaging engine that is based on the fiber optic technology.
2. The system should have wireless FFR measurement capabilities.
3. It should utilize catheter that emit near infra red light to produce high resolution real time images.
4. Should have two monitors plus remote video output for multiple
 - a. sightlines.
5. The system should have an integrated drive-motor and Optical Controller (DOC).
6. Should have an isolation transformer.
7. Should have a computer, a keyboard, and a mouse.
8. CPU with high end DAS card for faster 3-D data acquisition speed
9. 22*CD/DVD RW dual player DVD RAM drive for faster image management.
10. DICOM compatibility

The system should allow the user to :

1. Acquire, save and subsequently retrieve images for review. **Real-time 3D image**
 - a. **Re-construction of lumen and vessel**
2. Immediate and accurate lumen boundary detection and Lumen Profile Display
3. Stent planning workflow with automated minimum lumen area and percent stenosis measurements
4. Automatic lumen detection on every frame
5. Profile of mean diameter or lumen area across pullback
6. Automatic marking of MLA frame
7. User-defined proximal and distal reference frames
8. Automated display of reference frame area and diameters, distance between references, %AS and %DS
9. Automated measurements mode for calculations for stent sizing
10. Seamless integration of FFR and OCT with guided workflows for exceptional ease-of-use
11. Should allow user for easy orientation on Angiography
12. Allow to acquire and review images in L-Mode (lateral view).
13. Overlay color maps to optimize contrast resolution.
14. Enlarge a defined area of interest (zoom).
15. Make measurement and calculations of % Diameter stenosis
16. Add text annotations.
17. Play back and edit images with a full range of playback and editing capabilities.
18. Export still images and movies in raw OCT format or in standard AVI, TIFF, JPEG,BMP, or DICOM formats.
19. Import OCT format images and review and edit them with full OCT
 - a. review and edit capability.
20. Perform basic file management functions.

The imaging Parameters of the system should be:

1. Maximum frame rate: Up to 180 fps
2. Longer pullback of up to 75 mm and up to 540 frames
3. Faster pullback speed up to 36 mm/sec
4. Allows user to do high resolution imaging for online real time 3-D re-construction
5. # of lines per frame: 500
6. Scan diameter:10 mm
7. Axial Resolution: 15 microns

M) Training

Training to be provided to six doctors/staff of the department for operation & maintenance of the equipment for two weeks at an International centre of repute abroad with similar equipment installed.

N) UPS:-

Suitable online UPS of at least 120 KVA capacities with 30 min. battery backup for complete Cath Lab including cine and fluoroscopy. Emergency lighting should also be on UPS

O) ESSENTIAL ACCESSORIES TO BE SUPPLIED:

- 1 Lead glass 150 x 120 cm.(as per international radiation protection standard)
- 2 Good quality, wrap around light weight Lead Aprons with hangers-20 nos. (as per FDA standard)
- 3 Thyroid Guard-20 nos. (as per international radiation protection system)
- 4 Ceiling suspended radiation protection-1 no. (as per international radiation protection system)
- 5 Table mounted radiation protection -1 no. (as per international radiation protection system)
- 6 Integrated two way communication system between control room and examination room.
- 7 One laser Network Printer of high resolution (at least 1200 dots per inch) with minimum 128 MB memory and 1200 dpi
- 8 High –pressure injection system, having features of programmed flow rate, volume. Vendor should supply 200 syringes

Site Modification:

1. Area under the scope of the site modification is :-
 - o Examination Room
 - o Console Room
 - o UPS cum Cabinet room
2. Examination room should be in line with AERB requirements

3. Lead Glass window and lead door to be provided on console and examination room common wall. Second lead lined door to be provided in the examination room for patient entrance
4. PVC Flooring, trenches and cable trays to be provided.
5. Air-conditioning of 2 x 2 TR(Split AC) to be provided in the UPS cum cabinet room
6. Total load of the equipment along with the accessories to be mentioned by the vendor
7. Hospital authorities to provide electrical cable upto electrical panel in the UPS room
8. LT panel should be Supplied & installed by the vendor

9. All general lighting, electrical fittings and fixtures to be provided by hospital authorities
10. Adequate fire detection system to be provided by the vendor, inside the area under the scope mentioned above
11. Partition to be provided between UPS and Batteries in the UPS room
12. All civil works related to successful installation of the machine as per the layout attached should be carried out by the vendor
13. Wall finishes in console and UPS room - upto fall ceiling skirting along with POP and plastic emulsion paint upto the false ceiling.

Furniture:

1. Workstation table – 1 no.
2. Computer chairs on castors – 2 nos.
3. Cupboard with laminated door shutters (1200 mm x 600 mm x 2100 mm) – 2 nos.

Medical Superintendent
Safdarjung Hospital VMMC,
New Delhi

SECTION - XI PRICE SCHEDULE

A) PRICE SCHEDULE FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA

1 Schedule	2 Brief Description of Goods	3 Country of Origin	4 Quantity (Nos.)	5 Price per unit (Rs.)						6 Total Price (at Consignee Site) basis (Rs.) 4 x 5(f)
				Ex - factory/ Ex - warehouse /Ex-showroom /Off - the shelf (a)	GST (b)	Packing and Forwarding charges (c)	Inland Transportation, Insurance for a period including 3 months beyond date of delivery, loading/unloading and Incidental costs till consignee's site (d)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site (e)	Unit Price (at Consignee Site) basis (Rs.) (f) =a+b+c+d +e	

Total Tender price in Rupees: _____

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section - XI - Price Schedule C
3. Specify HSN Codes: (_____)

Name _____

Business Address _____

Place: _____

Signature of Tenderer _____

Date: _____

Seal of the Tenderer _____

Indian Agency Commission - __% of FOB/FCA.

Place: _____

Date: _____

Name _____
Business Address _____

Signature of Tenderer _____

Seal of the Tenderer _____

For price bid evaluation bidder must quote actual custom duty and IGST as applicable on the imported equipment offered.

Note : Reimbursement of Custom Duty & IGST: The Custom Duty & IGST amount as mentioned in the price schedule in INR will be compared with the actual total Custom Duty amount paid to custom department & actual IGST paid and the same will be reimbursed to the supplier as per the following:

- a). If the custom duty & IGST amount as mentioned in the price schedule is **equal** to the actual total custom duty amount levied by the custom department & actual IGST paid, the actual total custom duty amount levied by custom department & actual IGST paid shall prevail and reimbursed to the supplier in INR accordingly on submission of original documentary evidence.
- b). If the custom duty & IGST amount as mentioned in the price schedule is **more** than the actual total custom duty amount levied by the custom department, the actual total custom duty amount levied by custom department & actual IGST paid shall prevail and reimbursed to the supplier in INR accordingly on submission of original documentary evidence.
- c). If the custom duty & IGST amount as mentioned in the price schedule is **less** than the actual total custom duty amount levied by the custom department and the actual IGST paid, the custom duty amount and IGST as mentioned in the price schedule shall prevail only and reimbursed to the supplier in INR accordingly.