### Amendment -III

Dated 27.02.2018

Tender Enquiry No: HSCC/SJH/Medical Equipment/37 Dated 10.01.2018

The bid submission date may be extended for Item No. 1,2,3,4,5,7,8,9, 10, 11,13,14 as per table -I

| Sr. No. | Description                             | Detail of Items  | Previous Date          | Revised Date        |
|---------|---|--|------------------------|---------------------|
| i.      | Sale Date of the tender                 | Item No.1, Video Bronchoscope<br>Item No .2, Rigid Bronchoscope,   | 27.02.2018, 2.30<br>PM | 05.03.2018, 2.30 PM |
| ii.     | Closing Date & Time for receipt of Bids | Item No.3.Syringe Infusion Pump ,<br>Item No 4. Hemodialysis Machine with  | 27.02.2018, 2.30<br>PM | 05.03.2018, 2.30 PM |
| iii.    | Time and date of<br>Opening of Tender   | SLED and Portable RO Item No 5. Sternal Saw Item No 7. Pulse Oximeter cum capnograph, Item No 8. ACT Machine, Item No 9. Cell Saver, Item No. 10 Neurosurgery OT Table Item No 11. Ultrasound Cum Echo Colour Doppler, Item No 13. Intra Operative Colour Doppler Item No 14. ESWL | 27.02.2018,3.00<br>PM  | 05.03.2018, 3.00 PM |

Item No.12 Robotic Surgical System (item has been scrapped)

For Item No. 1,2,3,4,5,7,8,9,11,13 the amendment have been received amendments are as under:-

### Item No.1, Video Bronchoscope

| Sr. No.   | Existing As  | <u>Amended As</u>                            |
|-----------|--|--|
| <u>1.</u> | Color Video Monitor:   | Color Video Monitor:                         |
|           | To support endoscopic application with high resolution clarity of image perfect observation (Approx: 600 TV Lines) | 26" High definition Medical Grade Monitor    |
| <u>2.</u> | <u>Video Processor :Provision for still images /video</u>  | Video Processor : Provision for still images |
|           | capturing and digital recording images resolution  | /video capturing and digital recording       |
|           | atleast 1.2 megapixel  | images resolution.                           |
| <u>3.</u> | Recorder: Biopsy forceps   | Recorder: Biopsy forceps 3 rat tooth, 3      |
|           | (reusable)=10(including rat tooth, alligator, and  | alligator, 3 cusp.                           |
|           | cusp types.  |  |
|           |  |  |

New Points Added: 1. NBI/OE/I-Scan/BLI

## 2. Trolley: Should be provided From Original Manufacturer)

## 3.UPS for Power Backup

4.Computer System with recording facility and Printer.

## **Item No .2, Rigid Bronchoscope:**

| Sr. No.   | Existing As               | <u>Amended As</u>          |
|-----------|---------------------------|----------------------------|
| <u>1.</u> | Bronchoscope Tube :       | Bronchoscope Tube :        |
|           |                           |                            |
|           | <u>i.4mm wl 215 mm</u>    | i.Size 4 wl 215 mm         |
|           | <u>ii. 5mmwl 245mm</u>    | <u>ii. Size 5 wl 245mm</u> |
|           | <u>iii.5.5 mm wl265mm</u> | iii.5.5 mm wl265mm-Deleted |
|           | <u>iv.6.0mmwl265mm</u>    | <u>iv. Size 6.0wl265mm</u> |
|           | <u>V.7.0mmwl365mm</u>     | <u>V.Size7.0wl365mm</u>    |
|           |                           |                            |
|           | <u>WL.350mm</u>           | WL.350mm or more           |
|           |                           |                            |
|           | <u>WL450mm</u>            | WL450mmor more             |
|           |                           |                            |

## **Item No.3.Syringe Infusion Pump**

| Sr. No.   | <u>Existing As</u>   | <u>Amended As</u>                                       |
|-----------|--|---|
| <u>3</u>  | US-FDA approved Product                                    | US-FDA/European CE with four digit notified             |
|           |  | <u>number</u>   |
| <u>5</u>  | Flow rate programmable from 40 to 1000 ml/hr or more       | Flow rate programmable from 40 to 1000 ml/hr or         |
|           | with infused volume display and key press bolus.           | more with infused volume display and key press          |
|           | Reminder autdio after every 1 ml delivered                 | bolus.  |
| <u>6</u>  | Display of drug directory of more than 50 drug,            | Display of drug directory of more than 100 drug,        |
|           | customized and adjustable                                  | customized and adjustable.                              |
| <u>9</u>  | Selectable occlusion pressure triggered levels selectable  | Selectable occlusion pressure triggered levels          |
|           | from 300/500/900 mm Hg. At least 3 selectable levels.      | selectable for. at least 3 levels.                      |
| <u>14</u> | Rechargeable battery having at least 1 hours backup for    | Rechargeable battery having more than 3 hour's          |
|           | about 5 ml/hr flow rate with 50 ml syringe .larger battery | backup for about 5 ml/hr flow rate with 50 ml           |
|           | life and indication of residual life will be preferred.    | syringe .larger battery life and indication of residual |
|           |  | life will be preferred.                                 |
| <u>15</u> | Mounting Device /Docking station for at least four pumps   | Docking station for at least four pumps as per          |
|           | as per requirement so as to enable to power up to 4        | requirement so as to enable to power up to 4 pumps      |
|           | pumps with one power cord when mounted on IV Pole.         | with one power cord when mounted Pole.                  |

# Item No 4. Hemodialysis Machine with SLED and Portable RO

## **Amended Specification For Portable RO**

|    | Pre-treatment 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  | Should have sand/multimedia filter with polyglass vessel and high TDS control, with            |  |  |
|    | automatic backwash and sample valve.   |  |  |
|    | Treatment - main RO  |  |  |
| 4  | Should be able to provide water quality as per both ISO-13959/23500 and AAMI standards for     |  |  |
|    | dialysis   |  |  |
| 5  | Should have compact design & portable type (easy to move on wheels) in a stainless             |  |  |
|    | steel/powder coated chassis  |  |  |
| 6  | Should be able to produce 125lt/hr of permeate at 1.5 bar, able to support upto 5HD machines   |  |  |
|    | respectively   |  |  |
| 7  | Should be microprocessor based and capable to display parameters such as permeate              |  |  |
|    | conductivity/ temperature/flow, feed flow, concentrate flow, yield'.                           |  |  |
| 8  | In build capabilities to show on display for Permeate (supply in Litre/min. temperature) & for |  |  |
|    | Raw water (Consumption in Ltr./min & pressure)   |  |  |
| 9  | 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                                |  |  |
| 10 | Should have built in cartridge type charcoal filter  |  |  |
| 11 | Should have semi-automatic decalcification system in place                                     |  |  |
| 12 | Should have fully automatic disinfection system in place.                                      |  |  |
| 13 | Should have built in cartridge filter of 05 & 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 between 50 to 70%  |  |  |
| 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   |  |  |
| 23 | Should not have noise level more than 65 db.   |  |  |
|    | POST TREATMENT   |  |  |
| 24 | Should have permeate RO o/p Storage tank of 750 ltr with food grade quality or equivalent      |  |  |
| 25 | Should have transfer/Booster pump S/S 316 grade for permeate supply to HD Machines             |  |  |
| 26 | Should have sub-micron bacterial filter of 0.2 micron manually backwashable.                   |  |  |
| 27 | Should be installed with PEX Piping including push-pull type 316 grade S/S connectors to       |  |  |
|    | supply to 5HD machines.  |  |  |

# <u>Item No 5. Sternal Saw</u>

| 1. | The Sternal Saw should be light weight and provide clear line of sight              |
|----|---|
| 2. | The Sternal Saw should operate through a flexible drive cable by an electric motor. |

| 3.     | It should be able to ETO Sterlized/autoclaved.   |  |  |
|--------|--|--|--|
| 4.     | The blade holding mechanism should be chuck type assembly for quickly replacing the blades.  |  |  |
| 5.     | The reciprocating blade should have a 5-7 mm stroke length.  |  |  |
| 6.     | The saw should have a blade protector on it and blade protector should be easily replaceable.  |  |  |
| 7.     | Foot switch should permit variable saw speeds/ Trigger controlled saw speed.   |  |  |
| 8.     | Environmental factors  |  |  |
| 8.1.   | Shall meet IEC-606001-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. Or should comply with 89/366/EEC; EMC directive. |  |  |
| 8.2.   | The unit shall be capable of being stored continuously in ambient temperature of 0-40 deg C and relative Humidity  |  |  |
| 8.3.   | The unit shall be capable of operating continuously in ambient temperature of 10-40 deg C and relative humidity of 1-90%   |  |  |
| 9.     | Power Supply   |  |  |
| 9.1.1. | Power input to be 220-250 V AC,50Hz fitted with Indian plug  |  |  |
| 10.1   | If Battery Operated  |  |  |
|        | -220-240 volts charger and should have the features to count the charging cycle for a particular battery.  |  |  |
|        | -Should have capability to identify the worn out battery.  |  |  |
|        | -Should have to charge four batteries at a time without any module or modification need.   |  |  |
|        | -Should have an indicator to provide battery status for charging.  |  |  |
|        | -Should be able to check over autoclaved battery cycles (Number of time and Total Time )   |  |  |
|        | -Should have reconditioning futures for battery for NI cd Battery.   |  |  |
|        | -Should be able to charge different batteries with same charger.   |  |  |
| 10.2   | Battery Kit:   |  |  |
|        | -Li-ion cell chemistry and also compatible with Ni Mh& Ni Cd batteries with low internal impedance to deliver higher current than other battery types.               |  |  |
|        | -Should be 9.9 volts with capacity of 2.2 Ah.  |  |  |

| -Current should be minimum 60 A and capacity should be minimum 2700 mAh.  |  |
|---|--|
| -Weight should be not more than 0.9 lbs.  |  |
| -li-ion Cell with capacity to produce more torque and non autoclavable with life of 300 approximate and average charging cycles.  |  |
| -should have a rub time of minimum 30 minutes.  |  |
| -Should be autoclaved batteries.  |  |
| -No need of reconditioned with no memory effect.  |  |
| -should have indicator light to inform user of low battery life.  |  |
| -should have capability to regulate voltage prevents battery energy levels from being drained below a safety threshold where cell could potentially be damaged.   |  |
| -Should have capability to measures and stores Autoclave abuse.   |  |
| -Should have capability to safety features like shuts off current to battery terminal when  |  |
| hand piece is not connected.  |  |
| Standards, Safety and Training  |  |
| Should be FDAand CE/UL or BIS approved product  |  |
| Manufacturer/Supplier should have ISO certification for quality standards.  |  |
| Documentation   |  |
| User/Technical/Maintenance manuals to be supplied in English  |  |
| Certificate of inspection   |  |
| List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service/technical manual  |  |
| List of important spare parts and accessories with their part number and costing.   |  |
| Should have 5 years guarantee + 5 years comprehensive warranty.   |  |
| Model should have be latest generation  |  |
| Should have local service facility.   |  |
| Company should make sure that after getting the complaint that instrument is non functional/malfunctional (telephonically or else) instrument must be functional within 24 hours and this period should be deducted from the warranty period or the company will provide the replacement of same or higher configuration equipment. |  |
|   |  |

| 15. | Demonstration is a must. |
|-----|--------------------------|
|     |                          |

#### Item No 7. Pulse Oximeter cum capnograph

- 1. Should be dual parameter portable monitor that provides EtC02 &Sp02 measurement simultaneously.
- 2. Should be based on Microstream technology for Etco2 measurement And Nellcor oximax technology for Sp02 measurement.
- 3. Should have IPI (Integrated Pulmonary Index) that represents an inclusive profile of adequacy of ventilation.
- 4. Should have alarm management feature that reduces clinical insignificant alarms.
- 5. Should have 0-150 mmHg measurement range for EtCo2 parameter and 0-100% measurement range for Sp02 parameter.
- 6. Should have SpO2 accuracy of +\_ 2 digits for Adult patient & +\_ 3 digits for Neonates &Etco2 accuracy of 0-70 bpm: ±1 bpm ,71-120 bpm: ±2 bpm, 121-150 bpm: ±3 bpm
- 7. Should be light weight (less than 1.5 kg).
- 8. Should have fast response time (less than 3sec).
- 9. Should have large screen display (more than 4 inch) for better visibility.
- 10. Should have USB port for data transfer.
- 11. Should have 2 batteries with external backup of at least 3 hour 7 internal battery of 20 mins
- 12. It can be used in intubated & non intubated patient.
- 13. Calibration time 1200 hours operating time
- 14. Should have trend storage of 48 hours with one second resolution.
- 15. Should also have a facility for analog output.

**Item No 8. ACT Machine:** Technical Specification remains Unchanged.

**Item No 9. Cell Saver:** Technical Specification remains Unchanged.

### Item No 11. Ultrasound Cum Echo Colour Doppler:

| Sr. No.   | Existing As  | <u>Amended As</u>  |
|-----------|--|--|
| <u>1.</u> | The Unit must be compact ,portable and Light weighting   | The Unit must be compact ,portable and Light   |
|           | less than 10 kg Appox.   | weighting less than 5 kg Appox.  |
| <u>9.</u> | System should support transducer technologies like   | System should support transducer technologies like   |
|           | phased array , convex linear TEE Etc.  | phased array , convex linear   |
| <u>11</u> | The system shall process dynamic range that is at least 150 db. The System must be capable of display at a maximum depth of 35 cm. | The system shall process dynamic range that is at least 200 db. The System must be capable of display at a maximum depth of 30 cm. |

| 14         | Flat LCD /TFT Monitor of at least of at least 10 inches with flicker free image.  | Flat LCD /TFT Monitor of at least of at least 15 inches with flicker free image.  |
|------------|---|---|
| 16         | The system must have the ability to function on AC/DC or battery power with the same degree of functionality the battery life (run time) shall be at least one hour which needs to be demonstrated. | The system must have the ability to function on AC/DC or battery power with the same degree of functionality the battery life (run time) shall be at least 2 hour which needs to be demonstrated. |
| <u>24b</u> | Transduers-2.: 2-5 Mhz multi-frequency, broadband<br>Phased array transducers for cardiac abdominal FAST<br>imaging.  | Transduers-2: 2-5 Mhz (-+0.5) multi-frequency, broadband Phased array transducers for cardiac abdominal FAST imaging.   |

#### Item No 13. Intra Operative Colour Doppler

- 1. Should be of latest generation quad beam digital technology.
- 2. Should have speckle reduction technology for better organ definition.
- 3. Should be able to perform Angular compound imaging to have high resolution images.
- 4. System should be mobile and compact.
- 5. Should have height adjustable control panel
- 6. Should have a 19" flat panel monitor
- 7. Ergonomic key board should be part of the system
- 8. Control panel should be sealed for easy cleaning and disinfection
- 9. Should have simultaneous Triplex imaging with high PRF
- 10. Should be able to supply 3D facility.
- 11. System should be compatible to DICOM networks
- 12. Should support 360 degree scanning transducers
- 13. Should have at least two slots for electronic transducers and one for mechanical
- 14. Should support high frequency probes up to 20MH.
- 15. Control panel should be illuminated for easy access
- 16. Transducers should have start stop buttons and should be able to support user defined functions as well.
- 17. Should have an internal hard drive to store images.
- 18. CD writer and USB Flash memory drive should integral part of the system
- 19. A compatible B&W printer should be supplied
- 20. System should have the capability to support transfer of images to a USB flash memory drive
- 21. Transducers should be compatible to sterilization by immersion.
- 22. Should supply autoclavable biopsy attachments to the convex and linear transducers.
- 23. Should comply with IEC standards
- 24. Should have the following modes: B, M, C, Power Doppler, D mode and Tissue harmonic imaging
- 25. Should have the following combination modes: B+M, B+C, B+Doppler, B+C+D (Triplex)
- 26. Transducers:
  - 1. 2-6MHz multi frequency Convex transducer with small foot print suitable renal scans and renal interventions with autoclavable biopsy attachment.
  - 6-12 MHz endo cavity curvilinear array transducer with facility of simultaneous biplane imaging, sagittal and transverse image planes as well as Endfire array for apical and anterior biopsies of prostate with autoclavable biopsy attachment. Should be compatible to disinfection by Sterrad, ETO and immersion.
  - 3. Should supply a four deflectible laparoscopy transducer with a biopsy facility. Should be compatible with trocars of 12mm size for biopsy and RF ablations. Should be compatible for disinfection by Plasma and Immersion.
- 27. System should have the Urology, Abdominal, Prostate and Vascular packages.
- 28. Should support transfer of new calculations via Flash memory drives.

- 29. System should be USFDA approved and CE certified.
- 30. The system should be supplied with 5 years comprehensive warranty including all accessories and CMC rates quote for 5 years after warranty period.

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

Prospective bidders are advised to regularly visit HSCC website /CPP 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 regards.

Medical Superintendent

Safdarjung Hospital New Delhi