N.S. Co-operative Hospital

(A Unit of Kollam District Co-operative Hospital Society)

Palathara, Kollam - 20, Phone : 0474-2723199, 9895 893578

www.nshospital.org | Email: nsmimskollam@gmail.com

QUOTATION NOTICE

Quotations are invited for the following listed Medical Equipments for NS Memorial Institute of Medical Sciences, a unit of Kollam District Co-op Hospital Society Ltd. Q 952, as per the given terms & conditions and detailed Technical Specifications.

Date of release of quotation notice : 14/07/2024

Last date for submission of quotation : 24/07/2024

No.	NAME	QTY
1	INFANT T PIECE RESUSCITATOR	1
2	RADIANT HEAT WARMER	4
3	PHOTOTHERAPY UNIT-SINGLE SURFACE	4
4	NEONATAL WARMPACK/PORTABLE WARMER	1
5	SYRINGE PUMP	4
6	INFUSION PUMP	4
7	FOT	1
8	MINI-BOX/BODYBOX SYSTEM.	1
9	ENDOSCOPIC ULTRASOUND SYSTEM WITH EUS AND EBUS PROBES	1
10	FETAL MONITOR	2
11	MULTIPARA MONITOR	6
12	PHACO MACHINE WITH ANTERIOR VETRECTOMY	1
13	ARTHROSCOPIC RADIOFREQUENCY ABLATION SYSTEM	1

For Terms & Conditions, List of attachments and Technical Specifications visit **www.nshospital.org**

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Tender & Applications

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Quotation for Medical Equipments

You may submit quotation as per the term and conditions with necessary documents as asked so as to reach us before the cutoff date. Quotations not meeting the Terms & Conditions/Technical Specification/without necessary documents are liable to be rejected. Please note that Management has the right to cancel/ postpone the quotation proceedings without prior notice.

Kollam
14.07.2024

sd/-
Secretary

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DETAILS OF EQUIPMENTS

INSTRUCTIONS, TERMS AND CONDITIONS

1. The Quotation (Single Bid) should be submitted in a sealed cover addressed to the undersigned. The cover should bear the address of Quotationer. Quotation Name should be written on the cover and Submission Date & Time should be mentioned at the time of Quotation submission to Society Administrative Office (2nd Floor Administrative Building)
2. The Quotationer should sign and affix his/his firm's stamp at each page of the quotation and all its Annexures as the acceptance of the offer by the Quotationer will be deemed as a contract and no separate formal contract will be drawn.
3. TOTAL PRICE SHOULD BE QUOTED AS THE SUM OF BASE VALUE AND APPLICABLE GST (GST SHOULD BE MENTIONED IN PERCENTAGE TOO).
4. The Model quoted must be latest & most advanced and spares & service support must be available for at least 10 years after installation.
5. All Equipment must have at least US- FDA/ European CE/ EN (IND) ISO 9001 & ISO 13485 unless otherwise specially mentioned in Technical specifications sheet.
6. If CDSCO (Central Drugs Standard Control Organization) certification is required for the import and marketing of the equipment, then the same shall be submitted along with the technical bid
7. **Demonstration of equipment to be arranged at site for 1 week at least for evaluation of performance and cross checking of Technical specifications. Application specialist & Service Engineer should be present**
8. There will be 98% uptime warranty during any contract on 24 (hrs) X 7 (days) X 365 (days) basis. In case of more failure days, will invite a penalty of 2000/-day.
9. All complaints during any contract period should be attended within 24 hours and should be rectified within 48 hours from the time of reporting. In case of failure of Equipment/Accessories/ Instruments standby arrangements must be provided within 48 Hours. Any spares parts during AMC period should be quoted and approval should be acquired from Hospital Management within this 48 hours. Any failure to this will invite a penalty of 2000/-day.
10. Warranty: Comprehensive Warranty of 3 years from mutually agreed Installation date. Warranty covers entire system in the P.O which includes all kinds of machine parts, accessories, software, services like maintenance, calibration and all software updates etc.
11. AMC & CMC Rate in percentage (of Total purchase value without Tax) should be quoted. Annual escalation if applicable should be mentioned. AMC & CMC rates should be quoted in a Table for remaining 7 years after expiry of 3 year warranty (Year after Year)
12. Delivery Time should not be exceeded than agreed time in P.O. Any failure to this will invite a penalty of 1000/-day.
13. Payment as per Hospital policy (70% on delivery, 20% after installation and 10% after successful 1 month usage)
14. Training: On Site training to Doctors/ Technicians/ staff is to be provided by Principal/ Indian Agents (if they have the requisite know-how) for operation and maintenance of the equipment to the satisfaction of the Institution. Individual training certificates should be provided as hardcopy & softcopy.

15. Comprehensive Maintenance Contract (CMC) includes unlimited breakdown maintenance preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labour, spares, all software updates etc. The supplier shall visit each consignee site as recommended in the manufacturer‘s technical/ service /operational manual, but at least once in six months during the CMC period
16. Annual Maintenance Contract (AMC) includes unlimited breakdown maintenance, preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labor, all software updates etc. The supplier shall visit each consignee site as recommended in the manufacturer‘s technical/ service /operational manual, but at least once in six months during the AMC period
17. Cost of extended and Free Warranty/CMC/AMC will be added while Ranking/Evaluation.
18. Care & Maintenance Plan with Instructions for daily, weekly, monthly and quarterly maintenance checklist should be given at the time of installation.
19. In Technical specification sheet, all Technical specifications are mandatory to comply with. However some specifications marked as “Optional” while others are mentioned as “Desirable”. Companies are recommended to comply with both cases if available, otherwise will be considered as non-compliance. Non-compliance to optional and desirable items not necessarily subject to disqualification. But if optional and desirable items might get included in the final package, preference will be higher for those who comply with.
20. It is not mandatory that one should quote all equipments in the list. Adhering to other Terms and conditions one may quote only 1 equipment or some of them or all equipments in the list. However higher preference at the time of negotiations will normally be given to those who quote all equipments or most quotations to have maximum financial benefit to the Hospital.

MANDATORY ATTACHMENTS WITH THE BID
(ALL DOCUMENTS TO BE SUBMITTED WITH SIGN & SEAL)

1. INSTRUCTIONS, TERMS AND CONDITIONS Page.
2. MANDATORY ATTACHMENTS WITH THE BID Page.
3. Demo Request Letter Format for particular model with “addressed to whom” details.
4. The attested copy of the certificate of registration of firm.
5. CDSCO License should be submitted if applicable. Failure to this may be considered as lack of license.
6. European CE, US- FDA ,STQC CB certificate/ STQC S certificates.
7. Compliance statement with technical specification – Document to state the compliance to Published Technical specifications. Each spec to be addressed and ‘Yes’ or ‘No’ to be marked. If any deviations are there, may be stated on the right side as Remarks.
8. Original Product Technical datasheet – All technical details of the machine (Not sales brochure)
9. Details of service division in Kerala – This should contain addresses of Service centers in Kerala, Total number of service engineers etc. Please also do mention whether the service engineers are of Manufacturer or Dealer.
10. Sales authorization letter from Manufacturer – If the bidder is a Dealer and not Manufacturer then they must submit letter from Manufacturer to prove they are authorized to sell the equipment in our Area.(Manufacturing Company representative should attend negotiation meetings and to acknowledge purchase order later)
11. Details of installations in Kerala with Reference number- Please note that only installation list of same model quoted at NS Hospital to be submitted (Not total installations of all models of company)

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME - INFANT T PIECE RESUSCITATOR			
MANUFACTURER:……..		MODEL NAME…….	
Sl No	Specification	Yes/No	Remarks
1	1. The device should be ideal for use in Labour room, NICU and during transportation. 2. It should be powered by gas flow with no electrical or battery operation. 3. It should be light weight and easy to handle. 4. In-built Pressure Gauge (manometer) to set &indicate delivery of PIP &PEEP 5. Manometer range -10 to 80cmH20 (mbar) 6. Manometer accuracy: +-2.0 % full scale deflection. 7. Peak Inspiratory Pressure (PIP) at 8 lpm : 3 to 72 cmH20 8. Positive End Expiratory Pressure (PEEP) at 8 lpm : 0 cmH2O to 9 cmH2O 9. Safety provision with adjustable Pressure Relief Valve for maximum limiting 10. Maximum pressure relief at 8LPM : 5 to 70cm H2O 11. Delivered oxygen up to 100% depending on gas supply. 12. Unit should be compatible with neonatal mask & endotracheal tube 13. The patient T –Piece should have port for surfactant delivery 14. Should be compatible for use with heated humidifier. 15. Resuscitator, Humidifier with Spiral Heated wire circuit with integrated T-Piece should be quoted as package (1 each) 16. To be quoted separately. 16.1. Reusable circuit 16.2. Disposable circuit 16.3. Humidifier		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME - RADIANT HEAT WARMER			
MANUFACTURER:……..		MODEL NAME……..	
Sl No	Specification	Yes/No	Remarks
2	1. Advance, Precise, Reliable, High-speed microcontroller helps to preserve a stable temperature environment for a newborn infant. 2. Temperature is set at the desired level and the system efficiently delivers a constant heat output 3. Complete structure is enclosed with epoxy coated MS Grade material 4. Should have at least 3 controlled modes such as Skin Servo Mode, Manual Mode & Pre-Warm Mode. 5. Ergonomic &Intuitive User Interface with Audio and Visual Alarm along with message on LCD/LED Screen. 6. Thermistor based temperature probes with an accuracy of ±0.2°C from 0°C to 50°C 7. Pre-loaded software on the device eliminates the process re-calibration of the temperature controller. 8. Heater source placed in stainless steel reflector ensures even heat distribution on baby bed 9. Patient Safety Alarms at least includes Skin high temperature, Skin low temperature, 10. Overheating, sensor failure, heater failure, power failure and check sensor position 11. Baby bassinet have trendelenburg and reverse trendelenburg facility of at least 10˚ on both sides. 12. The facility of off positioning heater source box of ± 90°, allows X- Ray procedures while the baby is placed on the cradle. 13. Adjustable observation light for doing procedures. 14. Type of Heater Source is …… 15. Electrical power consumption in Watts for Heater source is ……. 16. To be quoted separately		

	16.1. Heating Element		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME - PHOTOTHERAPY UNIT-SINGLE SURFACE			
MANUFACTURER:……..		MODEL NAME…….	
Sl No	Specification	Yes/No	Remarks
3	1. Single surface-over surface source box type. 2. Should have latest LED Light sources 3. Over surface source box consist of high intensity blue LED's 16 nos. used for therapeutic dose having a wavelength ranging between 455 nm to 465 nm. 4. Over surface source box also consists of high intensity white LED's 4 nos. used for observation purpose 5. Over surface light source box has height adjustment facility approx. 0.95 m to 1.5 m from the floor. 6. Light dimming facility for blue LED's Low power consumption 7. Over surface light source box swiveling facility continuous up to 90˚ on both sides 8. Over surface phototherapy have an effective surface area 9. 40 cm x 30 cm at a distance of 35 to 45 cm from light source with uniformity ratio >0.40. 10. Irradiance at skin level measures up to 67.5 µW/cm2/nm. In warranty period if irradiance become less than initial level, LEDs should be replaced Free of cost. 11. Dual digital cumulative hour timer for total LED usage and patient exposure. 12. LED lamps rated to last up to 50,000 hrs. Free replacement will be given if any LEDs fail to cross 50,000 Hours. 13. Electrical power consumption in Watts for over surface phototherapy unit is ……..		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME – NEONATAL WARMPACK/PORTABLE WARMER			
MANUFACTURER:……..		MODEL NAME…….	
Sl No	Specification	Yes/No	Remarks
4	1. Made of special material for maintaining baby temperature 2. Constant (37°C) or at least 4 hours 3. Compact and light weight 4. Easily portable 5. Low power consumption 6. Easy to sanitize		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME - SYRINGE PUMP			
MANUFACTURER……..		MODEL NAME……..	
Sl No	Specification	Yes/No	Remarks
5	1. Should have modes at least Rate mode, Time mode, weight mode, intermittent mode, drug library mode and Total intravenous anesthesia (TIVA) mode 2. Applicable Syringe Size 5 ml, 10 ml, 20 ml, 30 ml, 50/60 ml 3. Accuracy 2% 4. Infusion Rate 0.1 To 1500 ml/h 5. KVO Rate 0.1- 2 ml/h adjustable 6. History Record 1600 records 7. Computer Interface Rs232 Interface 8. Should have alarms such as Syringe disengaged, almost done, infusion completion, empty, occlusion, low battery, ac fail, etc 9. Occlusion Pressure 3 Adjustable Occlusion Pressure- Low Medium, High 10. Waterproof Level IPX3 11. Classification Class 1, Type CF 12. Battery Charging Time……..hours With Power On & ……hours With Power Off 13. Battery backup ……hours at 25 ml/h (minimum 2 hours) 14. To be quoted separately 14.1. Battery Pack		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME - INFUSION PUMP			
MANUFACTURER……..		MODEL NAME……..	
Sl No	Specification	Yes/No	Remarks
6	1. MODES Rate mode, Time mode, weight mode, intermittent mode, drug library mode, drip mode, dose mode, micro mode, sequencial mode, programmable mode and Total parenteral nutrition (TPN) 2. Air Bubble Detection Ultra Sound Sensor Detection With 6 Levels Of Air In Line 3. Accuracy 5% 4. Infusion Rate 0.10 To 1200 ml/h 5. KVO Rate 0-10 ml/h 6. History Record 2000 Records 7. Anitbolus Function 8. Can change Flow Rate And VTBi Without Stopping The Infusion 9. Adjustable Buzzer Volume 10. ALARM Use Battery, Door Open, Occlusion, Almost Done, No operation, infuion completion etc.. 11. Occlusion Pressure 13 Adjustable Occlusion Pressure 12. Waterproof Level IPX3 13. Classification Class 1, Type CF, Defibrillation Proof 14. Battery Charging Time……..hours With Power On & ……hours With Power Off 15. Battery backup ……hours at 25 ml/h (minimum 2 hours) 16. To be quoted separately 16.1. Battery Pack		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME - FOT			
MANUFACTURER:……..		MODEL NAME…….	
Sl No	Specification	Yes/No	Remarks
7	1. Measurement of respiratory impedance by Forced Oscillations Technique (FOT) or Impulse Oscilometry Method (IOS) 2. It should be based on Signal Optimized Pseudorandom Noise (PRN)/ Single Frequency Mode/ Multiple Frequency mode between 5Hz and 30 Hz. 3. It should able to measure Respiratory System Impedance (Both Resistance and Reactance) Resonance frequency, and frequency dependency (Z5, Z19, R5, R5Insp, R5Exp, R19, R5-R19, X5, X5Insp, X5Exp, AX, Fres) 4. It must be suitable for use in both adult and paediatric patients. 5. It must report coefficient of variations (CoV) at each frequency for quality assurance as per latest guidelines. 6. The measurement should be fast and the processing time should be less than 30 seconds. 7. The equipment must be portable for carrying out test in field conditions or bedside. Should not weight more than 3 Kg. 8. Environmental conditions: Temperature 12-40 °C; Humidity 30-100%. 9. Software should be supplied with the equipment for reporting, data storing, and retrieving for research purpose and should provide software which enables to connect to hospital information system and workflow both online and offline 10. Should have all latest predictions equations for both adult and paediatrics, preferably should have		

	between 2013 references (adult) and calogero 2013 (pediatric) population. 11. Unit should be CE / USFDA / Indian Regulatory CDSCO License 12. Unit should have cut off values based on Indian Population 13. The system should be supplied with all essential accessories. 14. Reference impedance for calibration: 1 No 15. Antibacterial Filters: 100 Nos. 16. Compatible Laptop PC with > 15.6" LED Color monitor, licensed windows 10 with 64 Bit, 8GB RAM, Intel i5 processor or above, 500GB SSD or above. 17. High quality ink tank printer: 1 No 18. Equipment Warranty is for 3 Years & CMC 4 Years, Life of product is 7 years. 19. To be quoted separately 19.1. Mouth piece/Filter		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME – MINI-BOX/BODYBOX SYSTEM For Pulmonary Lab/ PFT System with Spirometry, Diffusion and Lung Volume Measurement.			
MANUFACTURER:……..		MODEL NAME……..	
Sl No	Specification	Yes/No	Remarks
8	1. Integrated system For Pulmonary Lab/ PFT System with Spirometry, Diffusion and Lung Volume Measurement. 2. The unit should be exclusively designed to carry out examination of pulmonary system and to measure & display lung function parameters, operable on 220 Volts A.C. mains, not requiring large installation space (compact and preferably table mounted). It should be built on an expandable plat form for future up-gradation. 3. It should be PC based having software programs for Spirometery, MVV, Flow/ Volume, pre-post comparisons, volume sub divisions FRC and RV with single breath CO diffusion using latest CO-CH4 gas analyzer to determine distribution abnormalities. 4. It should also have facility of measuring Lung Volumes using a body cabin or without, for measuring FRC, RV & TLC. The TLC which should be measured using Plethysmography without using any gas and preferably cabinless or with Body Box technology. No other method would be acceptable. 5. It should have an open breathing system to prevent cross contamination for spirometery. 6. The system should incorporate a light weight, precision Pneumotach sensor or any other reputed sensor free from any kind of frictional inefficiencies with the following measurement ranges: -. Flow Measurement 7. Range : 0 to +/- 14 l/sec with accuracy better than +/- 2.5% subject to a min of 50 ml/sec and resolution as low as 10 ml/sec. Volume measurement		

	8. Range : 0 to 20 liters with resolution of 10 ml Corrections 9. Flow Volume : ERS or ATS 10. Inspiratory Gas qty : BTPS (automatic breath by breath) 11. It should be able to measure the following parameters Static Lung Volumes, Dynamic Lung Volumes i.e TLC, FRC, RV, RV/TLC, FRC/TLC, IRV, VC, VC in, VC ex, ERV, IC, TLCO & Hb corrected DLCO, KCO, AV, Flow Volume loops and basic spirometric parameters including MVV and SVC. Airway Resistance, Respiratory Mechanics preferable. 12. The Analyser should be one of the most linear one over the full range of measurement 13. Infrared CO, CH4 multi-gas with 0-0.35% range having automatic calibration/ quality control. 14. It should be supplied complete with hardware, instruction manual and other standard accessories including 2 Gas cylinders (10Ltr.WC) for minimum 300 diffusion tests 15. The system should come with a touch screen Tablet with WINDOWS 10 OS and suitable printer from a respected brand from a respected and established international brand. 16. The system should be supplied with 500 PFT Filters and 10 nose clips. 17. The system should conform to ATS and ERS standards. 18. The manufacturer should be an EN ISO 9000 and ISO 13485 accredited company and the product should be duly US FDA certified and CE marked to MDD for medical devices from a notified body. 19. To be quoted separately 19.1. Mouth piece/Filter		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME – Endoscopic Ultrasound Colour Doppler Function (EUS)			
MANUFACTURER:……..		MODEL NAME…….	
Sl No	Specification	Yes/No	Remarks
9	Endoscopic Ultrasound Colour Doppler Function (EUS) Ultrasonic Gastro Videoscope (Radial) 1. Should have 360 degree electronic radial scanning and image rotation 2. Should have EUS images with four or more selectable frequencies 3. Should have Color and Power Doppler, Contrast imaging for effective confirmation blood flow. 4. Should have lens cleaning function for keeping the endoscopic field of view clear at all times 5. The field of view should be around 100- 140 degree 6. The direction of the field should be forward-viewing or 50 – 60 degree forward-oblique viewing 7. Depth of view/Observation Range should be 3 to 100 mm or less 8. Insertion tube outer diameter should be around 11-12 mm 9. The distal end should have a shorter rigid portion for less trauma to the patient 10. Instrument channel diameter should be around 2-3 mm 11. EUS scope should be fully immersed for thorough cleaning 12. Should supply 100 nos of balloons. 13. Should have detachable EUS cable for better handling of scope, effective reprocessing & storage. (Preferable) 14. Should have compatibility with SWQ (Shear wave		

	Quantification) to quantify the fibrosis. (Preferable) 15. Should be capable of performing image enhanced endoscopy such as NBI/BLI/i-scan OE. Ultrasound Gastro Videoscope (Linear) 16. Should have 140 to 180 degree electrical curved linear scanning 17. Should have EUS images with four or more selectable frequencies 18. Should have Color and Power Doppler for effective confirmation of blood flow, Tissue Harmonics to remove external artifacts and for improved resolution 19. Should have lens cleaning function for keeping the endoscopic field of view clear at all times 20. The field of view should be around 100-120 degree 21. The direction of view should be 45- 60 degree forward-oblique or forward-viewing 22. Depth of view/Observation Range should be 3 to 100 mm or less 23. Insertion tube outer diameter should be around 11-13 mm 24. Distal and should have a short rigid portion for less trauma to the patient. 25. Instrument channel diameter should be around 3-4 mm 26. Video scope should have FNA (therapeutic) capability. 27. EUS Scope should be fully immersible for thorough cleaning 28. Should supply 100 nos of balloons 29. Should have the facility to view complete endoscopy during interventional cases without image masking. 30. Should have detachable EUS cable for better handling of scope, effective reprocessing & storage. (Preferable) 31. Should have compatibility with SWQ (Shear wave Quantification) to quantify the fibrosis. (Preferable) 32. Should be capable of performing image enhanced endoscopy such as NBI/BLI/i-scan OE. Ultrasound Processor With Colour Doppler Function		

	33. Should have Color and Power Doppler for effective confirmation blood flow, Tissue Harmonics to remove external artifacts and for improved resolution 34. Compatible with electronic radial scan and electronic curved linear array scan and upgradable for mechanical scanning probes (Preferable) 35. Preferable generated frequency range : 5 to 20 MHz or better (Preferable) 36. The touch screen should be a dedicated and user friendly keyboard 37. Should have SWQ for absolute value of tissue stiffness within a region of interest. (Preferable) 38. SWQ (Software Options) Calculates and displays transmission speed and elasticity of shear wave in ROI. (Preferable) 39. Should have capacity to record up to 3min video with its retrieval. (Preferable) 40. Should have Elastography with i-ELST function strain ratio & strain histogram. (Preferable) 41. Should have Elastography function with strain ratio, strain histogram for confirmation of relative stiffness of the tissue. (Preferable) 42. Should have combined contrast harmonic & tissue harmonics mode (C-THE) (Preferable) 43. Quoted processor should be upgradable for any future updates. (Preferable) 44. Should have persistence function for 3D smoothening of the image. (Preferable) 45. Should have low echo reduction function to improve the visibility of needle and stones etc. (Preferable) 46. Cine memory: 120 frames or more 47. Possibility to retrieve images thru USB port to record 48. AGC/Enhance, Gain, STC functions Video Processor Module 49. Portable and lightweight. 50. Capable of storing up to 35 to 45 patient data. 51. Capable of special light functions such as NBI/ BLI/ LCI/ OE i-scan 52. Capable of registering and recalling scope information such as white balance and scope switch function 53. Digital Zoom capability for images and sharp control		

	54. Edge and structure enhancement facility. 55. Should be separate unit / Integrated unit from light source 56. Should be equipped with HDTV imaging capability for observing capillaries, mucosal structures and other patterns 57. Should have high definition input & outputs like DVI/ HD-SDI output for high-quality image transfer 58. Should have convenient digital-to-digital recording facility for both still and moving images 59. Should have PIP (picture-in-picture) display for any combination of endoscopic images, fluoroscopic images, ultrasound images etc. 60. It should be compatible to all the lower-end series endoscopes with CCD and ULTRASOUND endoscopes. 61. The processor should be able to provide HD Video & Image recording facility through USB/ external devices. 300 Watt xenon Light Source Or Multi LED 62. Lamp-Xenon short should be lamp zone free 300 W or more. 63. Emergency halogen/ LED lamp as backup, which should automatically ignite, in case the main lamp gets defective 64. Capable of special light functions such as NBI/ BLI/ LCI/ OE i-scan 65. Should have the function of Automatic/Manual switch off when unit has been used for an extended period of time 66. It should have automatic or manual brightness control mode 67. Separate/ Integrated unit from video processor 68. Backlit front panel indicators 69. Compact and lightweight design 70. Emergency halogen/ LED lamp In the Case of multi-LED 71. Compact and light weight integrated design 72. Emergency Halogen/ LED Lamp 73. Multi LED processor (3 or more LED lamp) with minimum lifetime of 4000 hours or more		

	HIGH DEFINITION MEDICAL GRADE MONITOR 74. 26” or more High definition medical grade monitor. HD Compatible. Accessories To Be Supplied 75. Indigenous trolley for placing all the components with provision for hanging the scope. 76. Leakage Tester 77. 10 FNAC needles (five 22 gauge and five 25 gauge needles) 78. 5 core biopsy needle 79. Should provide an HD recording software, image capturing, storing, retrieving, and reporting system for both endoscopy and EUS images in a portable system with adequate storage capacity (both PC and software) PC Specification: 80. Processor: Intel core i5 or better 81. Display 14” or better 82. Hard disk: 1 TB or more 83. RAM: 8GB or more 84. Should be supplied with wireless mouse 85. Licensed windows. 86. Color laser printer A4 size OPTIONAL ITEMS (to be Quoted separately as Option) **Endo bronchial Ultrasound Scope – Linear** 87. It should be a HD/ hybrid EBUS scope for bronchoscopy with attached ultrasound transducer 88. It should offer detachable/ integrated ultrasound cable & should be fully immersible in disinfection solution for easy handling, cleaning, disinfection & to reduce accidental damage to scopeIt should have a minimum upward angulation range of 130 – 160 degree for improved accessibility to lymph nodes		

	89. It should have a minimum upward angulation range of 130 or more degree for improved accessibility to lymph nodes 90. It should offer a thin diameter- transducer for ease of insertion, length of transducer tip should also be short 91. It should have a working length of 600 mm approx. 92. It should have insertion tube diameter of 6.2 mm-6.5mm 93. It should have distal diameter of 6.5- 6.9 mm and preferably smaller 94. The minimal instrument channel should be 2 mm or more offering better suction 95. It Should have a scanning Range of 65 Degree or more and Forward oblique angle of 10 Degree or more 96. It should have acoustic frequency of 5-12 MHz 97. It should offer electronic curved linear array scanning method with a viewing direction less than 25 degree forward oblique It should be designed for balloon method and direct contact method 98. It should have field of view 80 degree or more and offer a depth of field of 3 - 50mm **Ultra Slim Video Bronchoscope for Radial EBUS** 99. The scope should be slim diameter scope with 2mm instrument channel 100. It should have CCD with real time optical image enhancement technology that improves th visualization of vessels on the mucosal surface (time Opto Digital technologywith NBI / BLI / ISCAN OE) In case LED 4 or more LEDs. (Preferable) 101. The insertion tube can be rotated left or right up to 120 degrees for ease of use, handling, and placement of Endo Therapy accessories 102. Should offer electronic magnification of 1.2x and 1.5x 103. It Should have 110° Field of View 104. It should have Depth of Field 3-50 mm for better close vision diagnosis 105. It should offer a Tip Deflection bending of Up 180° or above & down 130° 106. Distal Diameter should be in the range of 4 – 4.9mm		

	107. Insertion Tube Diameter should be in the range of 3.8- 4.8mm 108. Minimum Instrument channel should be in the range of 1.7mm - 2.0mm 109. It should have minimum working length of 600mm 110. It should offer Four or more no. of remote-control functions on control body. 111. It Compatible with leakage testing device with its air flow and pressure regulation through light source's air pump. 112. It should be compatible with Laser and Electrocautery 113. It should offer 210 degree up angulation to access upper lobe bronchi to access difficult areas such as B1, B2, B6 and reach target in lung periphery 114. It should be easy to connect and dismantle the scope with one touch connection Also allowing easy CDS Cleaning by fully submerging in detergent 115. Special Detection mode for observation of mucosal surface: Opto-digital real time scanning Real time NBI/BLI/ISCAN OE should be available In case LED 4 or more LEDs. (Preferable) 116. Should provide reusable biopsy forceps preferably from the same company or from a reputed manufacturer		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME – FETAL MONITOR			
MANUFACTURER:……..		MODEL NAME……..	
Sl No	Specification	Yes/No	Remarks
10	1. Should have 8.4" or more high-resolution color TFT/LCD Display with Tiltable Screen for better viewing 2. Should have the facility for dynamic data save. 3. Should display the monitoring information of the last 24 hours is essential. 4. Should have special high sensitive watertight probe for better durability. 5. Should have data storage with playback & print facility. 6. Should have the low ultrasound power for the safety of the foetus. 7. Should have automatic foetal movement detection with the event marker. 8. Thermal printer with minimum 152MM paper width is essential for broader printouts. 9. Should have facility to show real time graph before printing to ensure good report. 10. Standard configuration should be FHR, TOCO, Foetal Movement. 11. Twin FHR monitoring is essential. 12. Should be portable. 13. Built-in rechargeable Li-on battery with back up of at least one hour 14. Stabilizer free operation with input 200 to 240Vac 50 Hz supply. 15. Central monitoring system software upgradability should be possible (optional). 16. Should provide belt for both Ultrasound and toco transducer. 17. Should be supplied with dedicated trolley. 18. To be Quoted seperately i. FHR Probe ii. TOCO Probe iii. Paper		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME – MULTIPARA MONITOR FOR ICU			
MANUFACTURER:……..		MODEL NAME…….	
Sl No	Specification	Yes/No	Remarks
11	1. Should have TFT display with at least 12 inches or higher with at least 8 waveforms and numeric display simultaneously. 2. Basic 5 para monitor with 6 channel ECG from 5 lead ECG, Masimo SPO2, NIBP, Respiration Rate and temperature, suitable to use in an ICU. 3. Should be portable with carrying handle. 4. Should have battery backup of minimum 2 hours 5. Should have knobs and keys for quick access to main functions. 6. Should have adult, pediatric and neonatal modes. 7. Should provide prominent prioritized audio, visual alarms for high, low heart rate, SpO2, RR, low battery and lethal arrhythmia 8. NIBP can be taken on manual/auto/stat modes. 9. Should work on 200-240V AC/50Hz with inbuilt rechargeable battery. 10. Should have display perfusion index 11. Monitor should have networking facility with bidirectional & bed to bed communication. 12. Monitor stand should be supplied along with the machine as per the following specification i. Monitor stand -extruded Aluminum, powder coated with rail for height adjustment. ii. Monitor should be able to be fixed/removed easily by lacth/pressing/rotating a knob (Not using screws) iii. Load bearing capacity 20 kgs approximately.		

	iv. Should supply, install with necessary anchor fasteners at the site. 13. Equipment performance should not be affected by electromagnetic interferences radiated or conducted through power lines from another device 14. Standard Configuration Monitor with standard accessories & Monitor Stand. 15. To be quoted separately a. Battery Pack b. All accessories c. Monitor stand		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME – PHACO MACHINE WITH ANTERIOR VETRECTOMY			
MANUFACTURER:……..	MODEL NAME…….		
Sl No	Specification	Yes/No	Remarks
12	1. Should have 10.4 inch clear interactive Touchscreen Display. **2.** Should have min 6 crystal Hand piece which is slim, light weight and autoclavable. 3. Piezoelectric handpiece with orbital motion. 4. Should have the facility to drive Torsional ultrasound handpiece or any other equivalent advanced technology 5. All handpieces should be compatible with tips like standard. microtip and Curved / Bent tip. Flared and aspiration bypass tips 6. Phacomodes such as Continuous, Pulse, Micro Pulse, burst, Occlusion pulse, Occlusion Micro pulse 7. Should have facility of ultrasound power control (1-100%) in various sub modes like continuous, pulsed, burst and bi-modal application 8. Should have a modality of hyper pulses from 1 to 70 pulses/sec or more with selectable variable on and off time 9. Should have micro burst setting range from 5 ms or better 10. Should have micro burst setting range from 5 ms to 300ms or better 11. Should have the facility to use vacuum level of upto 500+mmhg or better and aspiration flow rate upto 50 cc/min or better. 12. Should have facility of dynamic rise time 13. Should have the facility of Custom Pulse where in on time and off time can be varied simultaneously with the foot switch depression, with decreasing and increasing on time setting and decreasing off time settings variables. 14. Voice confirmation during mode changes		

	15. Automated IV pole controlled via footswitch/front panel 16. Should have an ability to drive pneumatic Guillotine cutter for anterior Vitrectomy with cut rates up to 60-2500 cuts per minutes or more 17. Should have a programmable footswitch 18. Should have an adjustments for footswitch to accommodate for varying lengths of the foot 19. Should have Video overlay system to overlay parameters with live microscope video 20. Bipolar coagulation capability 21. Accessories to be provided in addition to the Standard accessories 21.1. Phaco handpieces confirming to the specs mentioned earlier -1 Nos 21.2. Phaco tips, Curved or bent tip and other tips - 10nos 21.3. Anterior Vitrectomy packs including cutters and other disposable – 3 nos 21.4. Cassettes and other disposables needed – 30 Nos 21.5. Trolley with wheels for the Machine on which it can be kept and moved around 21.6. Phaco sleeves Pack(2.8mm)- 10 nos 21.7. BI Manual I/A set – 1No 21.8. Cautery table – 1 No 21.9. Cautery forceps – 1No 22. The cost of the equipment shall be quoted inclusive of standard accessories and additional accessories as mentioned in appendix I. 23. The unit rate of the accessories mentioned below shall be quoted separately in the BOQ and shall be freezed for two years. This rate will not be taken for evaluation. 23.1. Phaco handpiece 23.2. Phaco tips 23.3. Anterior Vitrectomy packs including cutters and other disposable 23.4. Cassettes and other disposables 23.5. Phaco sleeves Pack 23.6. BI Manual I/A set		

TECHNICAL SPECIFICATION & COMPLIANCE SHEET			
EQUIPMENT NAME – ARTHROSCOPIC RADIOFREQUENCY ABLATION SYSTEM			
MANUFACTURER:……..		MODEL NAME…….	
Sl No	Specification	Yes/No	Remarks
13	1. Bipolar ablation system (RF with Shaver model can be quoted if there's no dedicated model for Ablation alone) 2. Should accommodate both suction and non suction probes 3. Should have wave form- frequency in between 300-500 KHZ or better 4. Maximum cut output 225 watts or better 5. Maximum coagulation output 40 watts, power of 400 watts for aggressive tissue ablation and coagulation with various power levels 6. Should have metal proximity detection (Desirable) 7. Operating range 200-240 VAC @ 50 HZ 8. Low impedance detection technology 9. Programmable foot switch 10. Touchscreen control with automatic detection of connected probe (Desirable) 11. System should conform to IEC requirements of medical safety 12. Should be supplied with radiofrequency energy probes which work both with hand control button and foot switch. 13. All energy probes are designed with a rigid shaft in order to prevent unwanted bending during aggressive use. Non suction probes can be bent up to 45 degrees with the probe bender. Probe should include ranges from 2.5 mm micro brush for small joints. 14. Functions for hand control to allow operating cut and coagulation as well as changing the power settings on the system. 15. Suitable Trolley to be supplied. 16. Rate for below mentioned probes shall be quoted separately. Any other probes available should also be quoted.		

	16.1. RF Probe 50 degree with suction 16.2. RF Probe 90 degree with suction 16.3. RF Probe 30 degree with suction 16.4. RF Probe 90 degree with suction , Extended length		