JKMSCL

JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.

(Public Sector Undertaking of Govt of Jammu & Kashmir)

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CORRIGENDUM:

Sub: E-bid for the finalization of rate contract for the procurement of "Machinery and Equipments "uploaded vide No. NIT/JKMSCL/Mach/2018/296 dated 14-07-2018.

In light of the decision taken during the pre bid meeting held on 02 August 2018 & recommendation/suggestion made by the technical experts from the ***Cardiology,Biochemistry,Radiology,Chest-Medicine,ENT,Orthopadics,Radiotherapy*** departments from (GMC,DGHS and DHS) J&K, on the basis of representation made by the firms/bidders, the amendments/incorporations have been made for the following items in the tender documents for the finalization of rate contract for the procurement of "Machinery & Equipments was uploaded vide no. NIT/JKMSCL/MACH/2018/296. Dated 14-07-2018.

1. Technical Specification of State of The Art Cardiac Intervention Lab(Single Plane):

Sr No	*ITEM CODE*	*TENDER specifications AS PER TENDER DOCUMENT*	*MODIFICATION/ADDENDUM/CLARIFICATION DURING PRE BID MEETING (READ AS)*
29	MC 1704	**2. Main Features:** Add Point No.(i)at page no.75	i) **The equipment should be US FDA Certified/Approved.**
		Page No. 75 point no. 3 Technical Specification a Gantry: I) The system should have ceiling suspended Gantry	I) The system should have ceiling/**Floor** suspended Gantry. **Note: All companies quoting a floor version will produce an affidavit that they don't have a ceiling version in cardiac segment.**
		vi) The gantry should have rotation speed of at least 20-degree/sec .	The gantry should have rotation speed of at least **18degree/sec for cran /caud and at least 20 deg/sec for LAO/RAO.**

			x) Gantry should be move (+/-90deg.) around the table and it should be all 3 working position to access the patient.	X) Gantry should be move (+/-90deg **in case of ceiling)** around the table and it should be all 3 working position to access the patient.
			E) **Flate panal detection:** III) Pixel size not more than 190 microns. Matrix at least 1024x1024 in 12/14 bit depth	III) Pixel size not more than **200** microns. Matrix at least 1024x1024 in 12/14 bit depth
			G) **LCD/TFT image monitor:** I) Examination room: four 19" monochrome LCD/TFT or more. For Live and roadmap. Monitor for Physiology Display III) Control room: One /Two LCD/TFT monitors of 19" or more for data and image viewing Brightness should be at least 500 Cd/m^2. These monitors should have the facility for all review post processing and quantification of coronary and ventricular function for training and teaching.	I) Examination room: **single 55"** or more LCD/TFT or more .For live & Roadmap. Monitor for physiology display. III) Control room: **Two LCD/TFT** monitors of 19" or more for data and image viewing Brightness should be at least 500 Cd/m^2. These monitors should have the facility for all review post processing and quantification of coronary and ventricular function for training and teaching.
			H) **Digital imaging system with digital angiography and pulse fluoroscopic acquisition capabilities.** V) Disc storage capacity of at least 1,00,000 uncompressed images of 1024x1024 matrix at a minimum of 10 bit/pixel. VII) Rotational angiography facility at a speed of at least 50 degrees per second with acquisition frame rate of at least 25 frames per second in 1 k matrix with facility for display of subtracted and un subtracted images in the examination room. IX)	V) Disc storage capacity of at least **90,000** uncompressed images of 1024x1024 matrix at a minimum of 10 bit/pixel. VII) Rotational angiography facility at a speed of at least **40 degrees** per second with acquisition frame rate of at least 25 frames per second in 1 k matrix with facility for display of subtracted and un subtracted images in the examination room.

		The possibility of acquiring 3D Coronary Arteriography package along with the stent enhancement package. Stent enhancement with lumen subtraction facility will be preferred. The system should quote with intuitive navigation technology for EP studies and the system should quote with Cross sectional 3 D images using 3 D reconstruction algorithms for 3D reconstruction of left atrium chamber and pulmonary veins from the projection images of rotational angiography with speed of 50 deg/sec).	IX) The possibility of acquiring 3D Coronary Arteriography package along with the stent enhancement package. Stent enhancement with lumen subtraction facility will be preferred. The system should quote with intuitive navigation technology for EP studies and the system should quote with Cross sectional 3 D images using 3 D reconstruction algorithms for 3D reconstruction of left atrium chamber and pulmonary veins from the projection images of rotational angiography with speed of **40 deg/sec**).
		4. Essential accessories. L) Electrophysiology system: Should be minimum 100 intrcardiac channel EP recording system with stimulator and Radiofrequency Ablator & Simulator- EP system should be manufactured from one Company with stimulator and ablator P) Lead Glass: 100x150 cm or bigger with lead equivalent as prescribed by ICRP or BARC/AERB recommendations to be fixed between console room and gantry room for radiation protection. R) The system should quote with an portable Echocardiography Adult/Paeditric transducer. System Ultrasound system with TEE Probe.	L) Electrophysiology system: Should be minimum **96** intrcardiac channel EP recording system with stimulator and Radiofrequency Ablator & Simulator- EP system should be manufactured from one Company with stimulator and ablator P) Lead Glass: 100x150 cm or bigger with lead equivalent as prescribed by ICRP or BARC/AERB recommendations to be fixed between console room and gantry room for radiation protection.**(READ AS DELETED)** R) **The system should quote with a portable /movable Echocardiography Adult and**

					Pediatric transducer. System Ultrasound system with Adult TEE Probe.		
		S No.	BOM	QTY	S No.	BOM	QTY
		12	Anaesthesia work station Europe CE / USFDA	01.no	Read As Deleted.		
		FURNITURES 1. Revolving Chairs Height adjustable: 04.no 2. Tables for console and workstation – As required LS 3. Modular design walls cabinets: 04.no 4. Cupboard with laminate door shutters: 03.no 5. Instrument trolleys: 02.no 6. Patient foot step: 01.no 7. Drug trolley: 01.no 8. Chairs for patient waiting area – Three seater (chrome plated): 10.no 9. Patient trolley with rubber foam mattress: 01.no 10. Changing rooms should have change lockers and dressing table: 02.no 11. Dustbins (plastic with lid): 04.no			**(Read As Deleted.)**		
					Additional Point to be Added : **Optical coherence Tomography system with fiber optic Technology.**		

Addendum:

Integrated Optical Coherence Tomography (OCT) and Fractional Flow Reserve (FFR) System with real time online 3D and Angio Co-registration (ACR) imaging features. **[Mentioned against the Indian items in BOQ]**

- The system should have an imaging engine that is based on the fiber optic technology.
- The system should have wireless FFR measurement capabilities.
- It should utilize catheter that emit near infrared light to produce high resolution real time images.

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Should be integrated system with Fractional Flow Reserve (FFR) Measurement capability with wireless FFR setup.

- Should have Angio Co-registration to visualize the linkage between OCT image and angiography.
- Should be capable to do Angio Co-Registration (ACR) in multiple labs.
- The System should have feature of MSO (Metallic Stent Optimization) Software.
- FFR and OCT should be immediately available during percutaneous coronary intervention (PCI)
- Should have Real-time, automated image analysis for PCI planning and evaluation.
- Should have Automatic lumen boundary detection on every frame.
- Should have Lumen Profile Display with immediate identification of MLA, lumen diameter, percentage area or diameter stenosis and user selected proximal and distal reference frames.
- Should have Real-time 3D image reconstruction of lumen and vessel.
- Should have two monitors(17" and 19") plus remote video output feature for multiple sightlines.
- The system should have an integrated Drive-motor and Optical Controller (DOC).
- Should have FD-OCT Imaging engine.
- Should have a computer, a keyboard, and a mouse.
- Should have CPU with high end DAS card for faster 3-D data acquisition speed
- Should have Large hard drive for ample data storage.
- CD/DVD RWdual player DVD RAM drive for faster image management.
- Should have Cardiology Application Software Package.
- DICOM compatibility.
- Should have PER MDS2 security feature.
- Should have Tableside controller to give better control to the operator.
- Should provide Operator's Manual (English)

The system should allow the user to:

- Acquire, save and subsequently retrieve images for review. Real-time 3D image.
- The system should have feature of Angio Co- registration with workflow that provides guidance on how to co-register an angio image with the OCT pullback.
- The System should have feature of MSO (Metallic Stent Optimization) Software.

Re-construction of lumen and vessel:

- Immediate and accurate lumen boundary detection and Lumen Profile Display.
- Stent planning workflow with automated minimum lumen area and percent stenosis measurements.
- Automatic lumen detection on every frame.
- Profile of mean diameter or lumen area across pullback .
- Automatic marking of MLA frame.
- User-defined proximal and distal reference frames.
- Automated display of reference frame area and diameters, distance between references, %AS and %DS.
- Automated measurements mode for calculations for stent sizing.
- Seamless integration of FFR and OCT with guided workflows for exceptional ease-of-use.
- Should allow user for easy orientation on Angiography.
- Allow to acquire and review images in L-Mode (lateral view).
- Overlay color maps to optimize contrast resolution.
- Enlarge a defined area of interest (zoom).
- Make measurement and calculations of % Diameter stenosis.
- Add text annotations.
- Play back and edit images with a full range of playback and editing capabilities.
- Export still images and movies in raw OCT format or in standard AVI, TIFF, JPEG,BMP, or DICOM formats.
- Import OCT format images and review and edit them with full OCT.

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- Review and edit capability.
- Perform basic file management functions.

The imaging Parameters of the system should be:

- Pullback length: 54mm & 75mm
- Frame rate: at least 180 frames/sec
- Frame density: 5- and 10-frames/mm
- Nominal pullback speed: 18mm/sec – 36mm/sec
- Number of lines per frame: 500 or more
- Scan diameter: 10 mm
- Axial resolution: 15 µm or less

1. Specifications for Polysomnography System (Sleep Lab)

Specifications for Advanced Video Polysomnography

1) Should have complete modular system with facility to record **minimum 55 channels.**
2) **The unit should be portable and should give full mobility to the patient during sleep study. The complete weight of the system (excluding PC) should not be more than 500 gms**
3) Should have inbuilt capability to record, abdominal and chest effort, Nasal/Oral Airflow (both Thermistor and Nasal Canula), PLMs, Snoring (Microphone), Motor activity, body position, Spo2, pulse rate, moment , ambient light , Cpap/Bipap pressure and event marker ,6 EMG referential , IInd lead ECG and 25 EEG/EOG plus reference channel for complete staging .
4) Should have sampling rate of 4 to 512 samples/sec.
5) **The unit should have facility to store data on Flash card and simultaneously transmit the data tothe Base station/PC**. Data Storage on high speed compact flash card with up to 2 GB capacity or up to minimum of 50 hours of PSG recording time.
6) Should have continuous signal check on display or at the patient bedside.
7) **The system should have the ability to work on battery so that there is no electrical interference coming to EEG signals.**
8) **Should have the ability to transfer data wirelessly/ Bluetooth/LAN from the patient side to the PC such that there are no wires connected from patient to acquisition PC also means full mobility to the patient.**
9) Should have automatic analysis , detection of Apneas/Hypopneas, Bradycardia/Tachycardia's, O2 desaturations, Sleep Staging (Alpha ,Beta & Delta freq analysis)calculation of Average Freq Analysis , Body Position , Pulse Transition Time , Snoring and PLM analysis .
10) **Should have FFT Analysis of all EEG waveforms and capability to record Heart Rate Variability.**
11) Should have adjustable low and high pass filters to have clear view of EEG.
12) Should have ability for re-referencing, re-montaging and re-filtering at any time or even after the study has been recorded.
13) Should have an ECG Elimination filter for EEG. Also should have facility of Brain mapping.
14) Should have scoring comparison (quality control) feature which will allow comparison between scoring by different users, including sleep stages, respiratory events and AHI, arousal's and limb movements, with provision for calculation of percentage agreement between different users.
15) Should have Sleep staging options for both Adult and Paediatrics.
16) The software should have ability to record and analyse raw data and generate the report according to recent AASM guidelines.
17) Should have capability to export and import the complete study in EDF Format, exe format, and reports can be exported to Excel and PDF format.

18) **Video Camera HD* High Resolution** ,Integrated IR illumination, Microphone, Line out for Speakers, HD resolution Video stream, Wall or ceiling mount, Power supply, Software for synchronized recording, editing and archiving

19) Camera should be controlled directly via Software.
20) Treatment facility: The system should be provided with Multimodality titration function (CPAP, Bilevel and Adaptive Servo Ventilation) and titration equipment should be controlled remotely by the software to change pressure and settings without entering the patient cubical.
21) Review Station: Highest configuration Mac / Windows based 'all-in-one' desktop computers with at least 3rd Generation Intel Core™ I3/I5/I7 Processor, 8 GB RAM or highest available, 18-20 inch LED monitors, DVD R/W, Mouse, and Higher end Laser Printer.
22) Both Full mask and Nasal mask for titration device to be provided.
23) The suitable rating UPS to be provided for uninterrupted recording for both raw data and video.
24) The system quoted should be warranted for five years and CE Marked/FDA approved.

Optional:-

Optional (25) the system should be able to record Systolic and Diastolic BP either from PTT signal or from 3rd party standalone system through non-inflating soft finger cuffs that can directly be interfaced with the machine

2. **FULLY AUTOMATED BLOOD GAS ANALYZER WITH ELECTROLYTES and METABOLITES**

Sr No	ITEM CODE	TENDER specifications AS PER TENDER DOCUMENT	MODIFICATION/ADDENDUM/CLARIFICATION DURING PRE BID MEETING (Read As)
30	MC1774	The analyzer should be able to measure blood gas (pH, pO2, pCO2) electrolytes (Na+,K+,Ca++,Cl-),Metabolites-Glucose ,Lactate, Urea/BUN/Creatinine, Saturation Oxygen ,Hemoglobin and more than 45 derived parameters	The analyzer should be able to measure blood gas (pH, pO2, pCO2) electrolytes (Na+,K+,Ca++,Cl-),Metabolites-Glucose ,Lactate, Urea/BUN **and** Creatinine, Saturation Oxygen ,Hemoglobin and more than 45 derived parameters

3. **Specifications for Advanced Video Polysomnography:**

Sr No	ITEM CODE	TENDER specifications AS PER TENDER DOCUMENT**(Previous Specification read as Deleted)**	MODIFICATION/ADDENDUM/CLARIFICATION DURING PRE BID MEETING (Read As) **READ AS**
32.	MC1705	**A. General Specifications**Polysomnography system should have 68 or more channels. ➢ Polysomnography system must have integrated ZRIP driver allows to setup the patient faster and easier by reducing the no. Of connection during hook-up. ➢ Polysomnography system suitable for both adult and pediatric patients. ➢ Polysomnography system must have automatic chn re-referencing ➢ Polysomnography System must have continuous impedence monitored and	1) Should have complete modular system with facility to record **minimum 55 channels.** 2) **The unit should be portable and should give full mobility to the patient during sleep study. The complete weight of the system (excluding PC) should not be more than 500 gms** 3) Should have inbuilt capability to record, abdominal and chest effort, Nasal/Oral

reported for ECG, EMG and ECG during sleep study.
- Comprehencive training for lab staff and support services till familiarity with the system to be provided.
- The system should be US FDA
- The system should be CE approved
- Manufacturer to have ISO-13485 certification for quality standards.
- Manufacturer to have IEC 60601 part 1&2 CERTIFICATION.
- Should follow latest AASM quidelines.
- All essential accessories compatible with the system to be provided.

B. Technical Specifications: -

1. Polysomonography system single head box having total no of channel 50 or more EEG with 32 inputs or more.

- Dedicated EMG channels- 5 channels
- Chin EMG-3
- Automatic Chin EMG referencing
- EOG channels-2
- ECG-7(3 physical and 4 derived)
- Pressure transducer-Dedicated differential w/snore
- Flow (thermal)-(Adult and Pediatric)
- Snore reading by microphone-
- Body Position-1
- Actimeter inputs-2
- Effort (chest & abdominal)-ZRIP DuraBelt Integrated RIP driver
- AUX inputs/DC inputs-8
- Min sampling rate 2000Hz
- Min storage rate; 500 Hz
- PSG lab should have Pulse transit time-
- Electrode interface-Intuitive image
- Pulse oximetry Should be connected to head box
- Internal Memory of base station should be equal or more than 60GB
- Lab must be supplied with fully synchronize Audio & video recording
- Must be supplied with light sensor-1 no
- VOIP intercom system for 2 way communication

2. Software Specification: -

- Should have a software for both automatic and manual analysis and scoring of recorded data.
- Real-Time access to data while the study is in progress should be possible
- Should permit storage of uncompressed raw data for further review and re-analysis
- On screen Permit writing of data on storage media such as CD/DVD for review on any computer
- On screen impedance check of values.
- Adjustable gain and notch filter.

Airflow (both Thermistor and Nasal Canula), PLMs, Snoring (Microphone), Motor activity, body position, Spo2, pulse rate, moment , ambient light , Cpap/Bipap pressure and event marker ,6 EMG referential , IInd lead ECG and 25 EEG/EOG plus reference channel for complete staging .

4) Should have sampling rate of 4 to 512 samples/sec.
5) **The unit should have facility to store data on Flash card and simultaneously transmit the data tothe Base station/PC.** Data Storage on high speed compact flash card with up to 2 GB capacity or up to minimum of 50 hours of PSG recording time.
6) Should have continuous signal check on display or at the patient bedside.
7) **The system should have the ability to work on battery so that there is no electrical interference coming to EEG signals.**
8) **Should have the ability to transfer data wirelessly/ Bluetooth/LAN from the patient side to the PC such that there are no wires connected from patient to acquisition PC also means full mobility to the patient.**
9) Should have automatic analysis , detection of Apneas/Hypopneas, Bradycardia/Tachycardia's, O2 desaturations, Sleep Staging (Alpha ,Beta & Delta freq analysis)calculation of Average Freq Analysis , Body Position , Pulse Transition Time , Snoring and PLM analysis .
10) **Should have FFT Analysis of all EEG waveforms and capability to record Heart Rate Variability.**
11) Should have adjustable low and high pass filters to have clear view of EEG.
12) Should have ability for re-referencing, re-montaging and re-filtering at any time or even after the study has been recorded.
13) Should have an ECG Elimination filter for EEG. Also should have facility of Brain mapping.
14) Should have scoring comparison (quality control) feature which will allow comparison between scoring by different users, including sleep stages, respiratory events and AHI, arousal's and limb movements, with provision for calculation of percentage agreement between different users.
15) Should have Sleep staging options for both

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		➢ User defined montages ➢ Automated user configurable reports. ➢ Signal resolution/bit; should be at least 16 ➢ Should have capability to define a dynamic and time synchronized workship ➢ Should have capability to check inter scorer reliability ➢ Should be upgraded to advance scoring-optional ➢ Must have licence free software and free up-gradation of software. ➢ 3 or more software CD's to be provided **3. Networking and Hardware: -** ➢ Compatible with high end processing with LAN ➢ Weight of head box/junction box: should not be more than 550gm. ➢ Titration Machine-With modes; CPAP,Auto,BIPAP,Automatic Epap, automatic respiratory rate, Voloume assured pressure support, Adptive ventilator. ➢ Computer: System should include 1 latest Pentium processor-based computer 8GB RAM. 1024 GB Hard disk memory with a 17 inch flat screen monitor and a laser printer. Should also include preloaded genuine Microsoft Windows XP software with UPS with Mouse. Should have Screen resolution from 800 x 600 to 1200 x 1600. **4. Additional Accessories:** ➢ Titration Machine-Optional ➢ Oximeter probe- Optional ➢ Sensor ZRIP belt kit-Optional ➢ Thermistor airflow sensor-Optional ➢ Pediatric thermistor, saturation probe with pediatric strap-Optional ➢ LoFlo9Etco20 starter Kit-Optional ➢ Link Module **C. Terms and Conditions:** ➢ 2 years comprehensive warranty after installation ➢ CAMC for 5 Years after completion of 2 years warranty of the equipment, spare parts/ accessories used. ➢ The company should give the certificate that the model quoted is the latest and not obsolete; and spares will be easily available for next 7 years. Price of all accessories for the next 5 years to be quoted separately**(Read As Deleted)**	Adult and Paediatrics. 16) The software should have ability to record and analyse raw data and generate the report according to recent AASM guidelines. 17) Should have capability to export and import the complete study in EDF Format, exe format, and reports can be exported to Excel and PDF format. 18) **Video Camera HD* High Resolution** ,Integrated IR illumination, Microphone, Line out for Speakers, HD resolution Video stream, Wall or ceiling mount, Power supply, Software for synchronized recording, editing and archiving 19) Camera should be controlled directly via Software. 20) Treatment facility: The system should be provided with Multimodality titration function (CPAP, Bilevel and Adaptive Servo Ventilation) and titration equipment should be controlled remotely by the software to change pressure and settings without entering the patient cubical. 21) Review Station: Highest configuration Mac / Windows based 'all-in-one' desktop computers with at least 3rd Generation Intel Core™ I3/I5/I7 Processor, 8 GB RAM or highest available, 18-20 inch LED monitors, DVD R/W, Mouse, and Higher end Laser Printer. 22) Both Full mask and Nasal mask for titration device to be provided. 23) The suitable rating UPS to be provided for uninterrupted recording for both raw data and video. 24) The system quoted should be warranted for five years and CE Marked/FDA approved. Optional:- **Optional (25) the system should be able to record Systolic and Diastolic BP either from PTT signal or from 3rd party standalone system through non-inflating soft finger cuffs that can directly be interfaced with the machine**

3. High Resolution Video Paediatric Bronchoscopy System

Sr No	ITEM CODE	TENDER specifications AS PER TENDER DOCUMENT	MODIFICATION/ADDENDUM/CLARIFICATION DURING PRE BID MEETING (Read As)
33.	MC1706		**Addendum:**

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			a) 26" or more HD Medical Grade Monitor: 1 No. *b) Trolley: 1 No.* *c) Endo Software for report generation: 1No.* *d) Compatible Biopsy Forceps:5 No.'s* *e) Compatible Baskets : 5 No.'s* *f) Foreign Body Forcep : 5 No.'s*

4. **500 mA X-Ray Machine**

Sr No	ITEM CODE	TENDER specifications AS PER TENDER DOCUMENT	MODIFICATION/ADDENDUM/CLARIFICATION DURING PRE BID MEETING (Read As)
31	**MC1716**	**7. STANDARDS AND SAFETY** ➢ Certified to be compliant with IEC 61010-1-3,IEC 61010-1-2,IEC 61010-2-54,IEC 61010-1-6 and IEC 62304	**7. STANDARDS AND SAFETY** ➢ Certified to be compliant with IEC 60601-1-3, IEC 6060-1-6 AND IEC 60601-2-54.

5. **Color Doppler Machine**

Sr No	ITEM CODE	TENDER specifications AS PER TENDER DOCUMENT	MODIFICATION/ADDENDUM/CLARIFICATION DURING PRE BID MEETING (Read As)
49	MC0017	**1. USE** 1.1 Clinical purpose Doppler ultra-sonography is a non-invasive diagnostic procedure that changes sound waves into an image that can be viewed on a monitor. an ultrasonic technique for detecting anatomic details by color coding of velocity shifts. In cardiography blood flowing in one direction appears red, and blood flowing in the opposite direction appears blue. The technique can also indicate the velocity of red blood corpuscles moving through the circulatory system, which makes it possible to quantify the flow, measure the pressures within the heart chambers, and calculate the stroke volume. In laparoscopy, Doppler color flow allows for rapid identification and differentiation of ducts and valves in the viscera, particularly in detection and diagnosis of pancreatic and liver tumours and colorectal liver metastases. 1.2 Used by clinical department/ward : Radiology diagnostic laboratories.NICAL	**1. USE (Read As)** ***1.1 Color Doppler machine should have following imaging modes:- 2D, M-Mode, color flow imaging. Pulse Doppler. Continuous wave Doppler and power Doppler and 3D/ 4D Imaging.*** **The machine should have the facility for 3D /4D With:** ***• Real time 3D and 4D imaging with Multi planar viewing and rendering capability.*** ***• 3D/4D and Multiplanar Reconstruction (MRP) imaging should be available.*** ***• Volume display with surface rendering (transparence ,brightness and lighting controls) . • MPR view display.*** ***• Fetal STIC Feature must be available as standard.*** ***• Fetal & Adult Echocardiography must be available.*** ***1.2Machine should be capable of real time compound imaging.***

2. TECHNICAL CHARACTERISTICS: ➢ The system should have more than 20000 Digital Channels & on the site to higher number of channels (preferable). ➢ The system should have a very high frame rate of 700 frames per second or more. Please specify frame rate in triplex mode. ➢ System should have disc of at least 500 GB or more. ➢ The system should have high dynamic range of 170 dB with scanning depth of 30 cm or more. ➢ All transducers (minimum 3) should be broadband width, Frequency range 2 to 12 MHz or more with universal ports for transducer interchange. Two active ports and one parking probe is required. ➢ System should have **17" or more HD** display with tilt and swivel Facility along with alphanumeric keyboard with illuminating keys and status function.	**(Read As)** ➢ The system should have more than **50000** Digital Channels & on the site to higher number of channels (preferable). ➢ The system should have a very high frame rate of **1000** frames per second or more. Please specify frame rate in triplex mode. ➢ System should have disc of at least **300** GB or more. ➢ The system should have high dynamic range of **200** dB with scanning depth of 30 cm or more. ➢ All transducers (minimum 3) should be broadband width, Frequency range 2 to 12 MHz or more with universal ports for transducer interchange. **Four** active ports and one parking probe is required. ➢ System should have **19" or more HD** display with tilt and swivel Facility along with alphanumeric keyboard with illuminating keys and status function.
5. ACCESSORIES, SPARE PARTS, CONSUMABLES ➢ Broad band convex array transducer with multi-frequency range of 2 to 5 MHz or wider range-1 No. ➢ Broad band transvaginal/transrectal probe with multi-frequency range between 5 to 8 MHz or wider range-1 No. ➢ Linear probe Transducer 5 to 12 MHz or more.	**(Read As)** ➢ Broad band convex array transducer with multi-frequency range of 2 to 5 MHz or wider range-1 No. ➢ Broad band transvaginal/transrectal probe with multi-frequency range between 5 to 8 MHz or wider range-1 No. ➢ Linear probe Transducer 5 to 12 MHz or more. ➢ **3D/4D transducer 2 to 6 MHz or more** ➢ **Phased Array Transducer 1 to 4 MHz or more**
6. ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATIONS 6.1 Atmosphere/Ambiance (air conditioning, humidity, dust ...) ➢ Operating condition: Capable of operating continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 80% in ideal circumstances.	**6. ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATIONS** 6.1 Atmosphere/Ambiance (air conditioning, humidity, dust ...) ➢ Operating condition: Capable of operating continuously in ambient temperature of **15 to 35 deg C** and relative humidity of 15 to 80% in ideal circumstances.
STANDARD S AND SAFETY 7.1 Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international. ➢ Should be USFDA/European CE/BIS approved product.	**STANDARD S AND SAFETY** 7.1 Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international. ➢ Should be USFDA **and** European CE/BIS approved product.
8. TRAINING AND INSTALLATION 8.3 Training of staff (medical, paramedical, technicians) ➢ Training of users on operation and basic maintenance for 2 weeks;	**8. TRAINING AND INSTALLATION** 8.3 Training of staff (medical, paramedical, technicians) ➢ Training of users on operation and basic maintenance for **1** weeks;

		AS PER NIT	Addendum/Modification/Clarification during Pre-bid meeting(please Read As)
2.7	TERMS OF PAYMENT:-	Page No.36	
2.7.1		Payment for foreign currency portion shall be made in the currency specified in the contract in the following manner : a) On Shipment : 100% payment shall be released against presentation of shipping documents against submission of Performance Bank Guarantee of 10% order value valid for a period of 68 months from the date of supply order and the same should be essentially submitted within 15 days of issue of supply order. Or 90% payment will be released against presentation of shipping documents & balance 10% payment will be released after satisfactory installation certificate issued by the user department and against submission of Performance Bank Gaurantee of 10% order value valid for a period of 62 months from the date of satisfactory installation certificate issued by the user department.	Payment for foreign currency portion ***through LC mode*** shall be made in the currency specified in the contract in the following manner: 90% payment will be released against presentation of shipping documents & balance 10% payment will be released after satisfactory installation certificate issued by the user department and against submission of Performance Bank Gaurantee of 10% order value valid for a period of 62 months from the date of satisfactory installation certificate issued by the user department.
5	**WARRANTY CLAUSE:-**	Page No.42-43	
	(iii)	In case of the machinery or equipment, the successful bidder shall be responsible for carrying out annual maintenance and repairs on the terms & conditions, as agreed. The bidder shall have to ensure that consumables required for the maintenance of machine/equipment are being supplied free of cost during warranty period. The adequate regular supply of spare parts and consumables per incident for the machinery or equipment, whether under their annual maintenance and repairs contract or otherwise shall be ensured. In case of change of model the bidder shall notify the procuring entity sufficiently in advance, to facilitate procurement of sufficient quantity of consumables/ spare parts from the bidder to maintain the machinery or equipment. In case, any item supplied by the successful bidder does not conform to the required specifications, the payment thereof, if received by the supplier, shall have to be refunded to the Jammu and Kashmir Medical Supplies Corporation, J&K along with interest to the tune of 1.5% per month from the date of release of payment. The supplier will not have any rightful claim to the payment of cost for substandard supplies, which	In case of the machinery or equipment, the successful bidder shall be responsible for carrying out annual maintenance and repairs on the terms & conditions, as agreed. **The bidder shall have to ensure that consumables required for the maintenance of machine/equipment are being supplied free of cost during warranty period(Free of cost as mentioned Against each item)** . The adequate regular supply of spare parts and consumables per incident for the machinery or equipment, whether under their annual maintenance and repairs contract or otherwise shall be ensured. In case of change of model the bidder shall notify the procuring entity sufficiently in advance, to facilitate procurement of sufficient quantity of consumables/ spare parts from the bidder to maintain the machinery or equipment. In case, any item supplied by the successful bidder does not conform to the required

		may have been consumed, either in part or whole, pending receipt of laboratory test / inspection report, wherever required. Supply of goods less in weight and volume than those mentioned on the label of the container, the same will be dealt with in the manner prescribed under rules.	specifications, the payment thereof, if received by the supplier, shall have to be refunded to the Jammu and Kashmir Medical Supplies Corporation, J&K along with interest to the tune of 1.5% per month from the date of release of payment. The supplier will not have any rightful claim to the payment of cost for substandard supplies, which may have been consumed, either in part or whole, pending receipt of laboratory test / inspection report, wherever required. Supply of goods less in weight and volume than those mentioned on the label of the container, the same will be dealt with in the manner prescribed under rules.
10	**PERFORMANCE SECURITY (P.S.) AND AGREEMENT:**	PAGE NO.44-45	
		The period of rate contract shall be **12 months** from the date of issuance of rate contract. The Managing Director, JKMSCL can extend the original rate contract subject to original terms and conditions for a period deemed fit by them, but not exceeding three months, for which the bidder shall abide.	The period of rate contract shall be **24 months** from the date of issuance of rate contract. The Managing Director, JKMSCL can extend the original rate contract subject to original terms and conditions for a period deemed fit by them, but not exceeding three months for which the bidder shall abide.

Please Note:

1. Those firms/bidders who have already uploaded his/her bid are required to re-uploaded their bids as per the amended specification and corrigendum issued thereof.
2. Only technical/financial bids uploaded as per revised corrigendum shall be considered for evaluation.

All the bidders are requested to keep themselves updated and submit their e- bids through e-portal www.jktenders.gov.in as per specifications & BOQs.The amendments /modifications shall be available on www.jktenders.gov.in, and www.jkmsclbusiness.com

Sd:\
INDER JEET (KAS)
Managing Director, JKMSCL
Tender inviting Authority.

Copy for information to the-.

1 Financial Advisor / Chief Accounts Officer, JKMSCL
2 P.A to Managing Director,JKMSCL
3 I/C ,EPM,JKMSCL

4 Nodal Officer, JKMSCL for info to uploaded on www.jkmsclbusiness.com.
5 Office Record

No.: JKMSCL/PS/GM/Corg/2018/ 2374-78 Dated: 12.08.2018

Dr Mohammad Iqbal
Gerneral Manager(P&S/IT)/Adm
JKMSCL