



**Bihar Medical Services & Infrastructure Corporation Limited 4<sup>th</sup> floor State Building Construction Corporation Limited. Hospital Road, Shastri Nagar, Patna 800023, Phone/Fax: +91612 2283287,+ 91612 2283288**

### **Corrigendum-I**

Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) had invited E-Bids from the interested parties for Supply, Installation, Testing & Commissioning of Medical Equipment on Turnkey Basis for Jannayak Karpuri Thakur Medical College and Hospital, Madhepura, Bihar vide Notice Inviting Tender No.-BMSICL/2018-19/ME-105. A Pre-bid meeting was held on 26.10.2018 during and after which various suggestions were received from prospective bidders and accordingly some amendments have been made which is annexed as Annexure-I (Amendment in clauses ), Annexure-II (Amendment in technical specification of certain equipment) and Annexure- III (Deletion of certain equipment from the schedule of requirement) of this corrigendum. In order to facilitate maximum participation of bidders the tender schedule is being revised as follows:-

Tender Reference No.	<b>BMSICL/2018-19/ME-105</b>
Date and time for downloading of bid document	<b>Up to 19<sup>th</sup> November 2018 till 17:00 Hrs.</b>
Last date and time of submission of online bids	<b>21<sup>th</sup> November 2018 till 17:00 Hrs.</b>
Last date and time of submission of original documents of EMD, Tender Fee and Document.	<b>23<sup>rd</sup> November 2018 till 14:00 Hrs.</b>
Date, Time and Place of opening of Technical Bid	<b>23<sup>rd</sup> November 2018 (at 15:00 Hrs.) on the website of <a href="http://www.eproc.bihar.gov.in">www.eproc.bihar.gov.in</a> in the office of BMSICL</b>
Date and time of opening of financial Bids	<b>To be announced later on <a href="http://www.eproc.bihar.gov.in">www.eproc.bihar.gov.in</a></b>

Sd/-  
**GM (Procurement)**  
**BMSICL**

**Annexure-1**  
**Amendment in Tender clauses**

Clause of Bidding Document	Before Amendment	After Amendment
<b>GCC Clause 15.5 (b)</b>	90% payment will be made against supply item at the respective sites against certification from the consignee in the format provided in schedule VI and after verification of installation / supply by purchaser (BMSICL, Patna.) or its nominated agency/person	50% payment will be made against supply of items at the respective sites and after submission of satisfactory inspection report from the consignee and 40 % payment will be made against certification from the consignee in the format provided in schedule VI and after verification of installation / supply by purchaser (BMSICL, Patna.) or its nominated agency/person
<b>GCC Clause 19.1</b>	If at any time during the performance of the contract, the supplier encounters condition impending timely delivery of the goods and performance of service, the Supplier shall promptly notify to the Purchaser in writing the fact of the delay, it's likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the period for performance of the contract (by not more than 20 weeks) subject to furnishing of additional performance security by the supplier @ 5% of the total value of the Purchase Order.	If at any time during the performance of the contract, the supplier encounters condition impending timely delivery of certain goods (except low cost equipment) and performance of service, the Supplier shall promptly notify to the Purchaser in writing the fact of the delay, it's likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the period for performance of the contract (by not more than 20 weeks) subject to furnishing of additional performance security by the supplier @ 5% of the total value of the Purchase Order.
<b>GCC Clause 20.1</b>	Should the supplier fails to deliver the store or any consignment thereof within the period prescribed for delivery, the purchaser shall be entitled to recover 0.5 % of the value of the delayed supply for each week of delay or part thereof for a period up to 20 (Twenty) weeks	Should the supplier fails to deliver the store or any consignment thereof within the period prescribed for delivery, the purchaser shall be entitled to recover 0.5 % of the value of the delayed supply for each week of delay or part thereof.
<b>ITB Clause 13</b>	The bidder shall give the total composite price along with price of each equipment inclusive of all Levies & Taxes i.e. Sales / Trade	The bidder shall give the total composite price along with price of each equipment exclusive of GST but inclusive of Customs duty, packing,

	Tax & Excise, packing, forwarding, freight, octroi/entry tax and insurance etc. Price should be as per the price schedule given in Section VI. No Foreign exchange will be made available by the purchaser	forwarding, freight, octroi/entry tax and insurance etc. Price should be as per the price schedule given in Section VI. No Foreign exchange will be made available by the purchaser
<b>ITB Clause A-3.1 (Instruction to bidder)</b>	The eligible bidder should be a legal entity and have satisfactorily completed works of similar nature in the last Five years till the date of bid opening according to any one of the following requirements.	The eligible bidder should be a legal entity and have satisfactorily completed works of similar nature in the last 07 (Seven) years till the date of bid opening according to any one of the following requirements.
	Similar Works” shall mean supply , installation and commissioning of medical equipment on turn key basis in Government, Semi-Government, PSU or reputed Private hospitals/firms / Organizations /Cancer institute/Life Science Research/Biotech Laboratory or similar R & D facilities (for Hospitals).	Similar Works” shall mean supply, installation and commissioning of medical equipment’ like CT, MRI, various laboratory equipment’s for various department for a Medical college like Anatomy, Physiology, biochemistry, Pathology, microbiology, pharmacology, Ophthalmogy, Medicine etc. on turnkey basis in Government, Semi-Government, PSU or reputed Private hospitals/firms / Organizations /Cancer institute/Life Science Research/Biotech Laboratory or similar R & D facilities (for Hospitals).
<b>ITB Clause A-4 (One Bid Per Bid)</b>	A firm shall submit only one bid. A firm that submits more than one bid will cause all the proposals with the firm’s participation to be disqualified.	A firm shall submit only one bid. The firm to quote for all equipment as listed in the schedule of requirement as amended. Part Bids will not be considered. Joint ventures will not be considered.
<b>ITB Clause A-6 (ALTERNATIVE TENDER )</b>	Alternative Tenders are not permitted. However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD. Only one tenderer is permitted to quote for the same manufacturer irrespective of models	Alternative Tenders are not permitted. However the Tenderers can quote alternate models/make meeting the tender specifications with single EMD.
<b>ITB Clause B-15.3</b>	If an agent submits bid in behalf of more than one manufacturer unless each such bid is accompanied by a separate bid form for each bid and bid securities, when required for	Submission of Manufacturer’s authorization for the equipment manufactured by other than the bidder in Annexure-V is mandatory at the time of supply. However this may not be

	each bid and authorization from the respective Manufacturer, all such bids will be rejected as non-responsive.	compulsory in case of low cost equipment.
<b>ITB Clause 27.3 (d)</b>	The supplier shall be required to provide a list and rates of spare parts recommended for maintenance for three years after the end of Guarantee period of three years. The purchaser may elect to purchase the recommended spares from the supplier at any time including at the end of warranty/ AMC, provided that such purchase shall not relieve the supplier from any warranty/ AMC obligations under the contract.	The supplier shall be required to provide a list and rates of consumables required for an equipment which is a closed system.
<b>Section II GCC Clause 8.1 (i)</b>	Three originals and two copies of the Supplier's invoice, showing Purchaser, the Contract number, Goods' description, quantity, unit price, and total amount. Invoices must be signed in original and stamped or sealed with the company stamp/seal;	One originals and three copies of the contractor's invoice, showing Purchaser, the Contract number, Goods' description, quantity, unit price, and total amount. Invoices must be signed in original and stamped or sealed with the company stamp/seal;
<b>Section II GCC Clause 8.1 (v)</b>	One original of the manufacturer's or Supplier's Warranty certificate covering all items supplied;	One original of the manufacturer's or Supplier's Warranty certificate covering all items supplied should be submitted along with the installation certificate. Warranty starts from the date it is successfully installed and warranty certificates should mention clearly date of installation and from that date warranty is for a period of 3 years.
<b>Section II GCC Clause 8.1 (vi)</b>	Original copy of the Certificate of Inspection furnished to Supplier by the nominated inspection agency;	Original copy of the Certificate of Inspection furnished to Supplier by the nominated inspection agency if any.
<b>Section II GCC Clause 8.1 (vii)</b>	Other procurement-specific documents required for delivery/payment purposes.	It is Deleted.

<b>Section II GCC Clause 8.1</b>	The above documents shall be received by the Purchaser before arrival of the Goods (except where it is handed over to the Consignee with all documents) if not received, the Supplier will be responsible for any consequent expenses.	The above certificate shall be received by the Purchaser upon arrival Warranty and installation certificate alone upon installation.
<b>Section II GCC Clause 14.5 (B)</b>	UPS including the replacement of batteries.	It is deleted
<b>Section II GCC Clause 15.4 (i)</b>	Form C and also a certificate stating that the tendered item (stores) are meant for the use of Govt. Hospital shall be provided by the purchaser on the request of the bidder as and when asked for. (if applicable)	It is deleted
<b>Section II GCC Clause 15 (b)</b>	Any increase in taxes and other statutory duties/levies after the expiry of the delivery date shall be to the supplier's account. However benefit of any decrease in the taxes/duties shall be passed on to the purchaser by the supplier.	Any increase in taxes and other statutory duties/levies from the date of submission of bid till the end of the delivery period will be paid extra however. Any increase in the taxes and other statutory duties / levies after the expiry of the delivery date shall be to the supplier's account. However benefit or any decrease in the taxes/duties shall be passed on to the purchaser by the supplier, after the expiry of the delivery date shall be to the suppliers's account. However benefit or any decrease in the taxes/duties shall be passed on to the purchaser by the supplier.
<b>Checklist (Point no-B-10)</b>	Manufacturer's Authorization (if quoted by bidder other than manufacturer) as per Annexure 5	Submission of Manufacturer's Authorization (if quoted by bidder other than manufacturer) as per Annexure 5 at the time of supply is mandatory.
<b>Checklist (Point no-B-1 )</b>	Make & Model Quoted items in the project	Bidder can offer alternate makes & Models.
<b>Checklist (Point no-B-1 )</b>	Quality Standard Certification (USFDA/CE issued by notified body/BIS) as per detail in the	Equipment supplied should be USFDA, if USFDA not available then CE certified by notified body and if not

	technical specification for specification for each schedule of requirement if any.	available for that category of equipment in either of the two then at least of BIS certification.
<b>Price Schedule</b>	<b>GST/Sales &amp; Other taxes payable if contract is awarded</b>	<b>GST payable if contract is awarded</b>

**Schedule of Requirement (page-47 of Bidding Document) Department-RADIO-DIAGNOSIS**

Brief Description of Goods and Services	Qty.	Delivery Schedule (in days)	Specification
<b>Added</b> - Schedule no-8 MRI (1.5 T)	1	45 days	As mentioned in Section V of this bid document

**Annexure -II**

<b>Name of the Equipment - ULTRASOUND MACHINE</b>		
<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 132 clause k	Frame rate minimum 50 FPS, hard disk capacity of 200 GB or more	Frame Rate should be 1000 frames / sec or more
Page 132 clause s	Channels: 1000 or more	Channels: 100000 or more
Page 132 clause s	Patient reports for Obs/Gynae including fetal growth trend, including Histogram facility for Tissue texture & Trend graph for IUGR cases, Urology and orthopaedics	Patient reports for Obs/Gynae including fetal growth trend for Tissue texture & Trend graph for IUGR cases, Urology and orthopaedics
<b>Name of the Equipment - USG MACHINE</b>		
<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 159 clause 11	Frame rate minimum 50 FPS, hard disk capacity of 500 GB or ITB	Frame Rate should be 1000 or more & HDD 500 GB or external HDD will be 1 TB
Page 159 clause 14	Patient reports for Obs/Gynae including fetal growth trend, including Histogram facility for Tissue texture & Trend graph for IUGR cases, Urology and orthopaedics	Patient reports for Obs/Gynae including fetal growth trend for Tissue texture & Trend graph for IUGR cases, Urology and orthopaedics
Page 159 clause 19	Channels: 1000 or more.	Channels : 100000 or more
Page 159 clause 23	At least 3 or more active ports should be there including Cardiac & Elastogram port	Should have port for Cardiac & Elastogram port
<b>Name of the Equipment- USG MACHINE</b>		
<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 164 clause 37	Frame rate minimum 50 FPS, hard disk capacity of 200 GB or more	Frame Rate should be 1000 or more & HDD 500 GB or external HDD will be 1 TB
Page 164 clause 40	Patient reports for Obs/Gynae including fetal growth trend, including Histogram facility for Tissue texture & Trend graph for IUGR cases, Urology and orthopaedics	Patient reports for Obs/Gynae including fetal growth trend for Tissue texture & Trend graph for IUGR cases, Urology and orthopaedics
Page 164 clause 45	Channels: 1000 or more.	Channels: 100000 or more
<b>Name of the Equipment - TREAD MILL TEST (TMT) MACHINE</b>		

Page No. of bid document	Technical Specification before amendment	Technical specification after amendment
Page 182 clause 1	Should be PC based cardiac workstation simultaneously 12 lead acquisition combines resting & exercise ECG in one unit	System should be Dedicated microprocessor console based cardiac workstation simultaneously 12 lead acquisition combines resting & exercise ECG in one unit
Page 182 clause 2	Should have radio frequency based wireless connectivity with Acquisition module to acquire diagnostic quality ECG data.	Should have digital Acquisition module to acquire diagnostic quality ECG data.
Page 182 clause 5	System should have 24" display for easy access	System should have 22" display for easy access. Monitor should adjust to any angle for better visualization.
Page 183 clause 26	The display screen must be 24" or more and it should support. 1900x1200 or 1900 x1080 resolution and it should display following parameters.	The display screen must be 22" or more and it should support. 1900x1200 or 1900 x1080 resolution and it should display following parameters
		<b>Point Added-</b> The system must support DICOM formatted report export
<b>Name of the Equipment- Multi Para Monitors</b>		
Page No. of bid document	Technical Specification before amendment	Technical specification after amendment
Page 142 clause 4	Should have Lithium ion battery with 4 hours battery backup	Should have Lithium ion battery with 3 hours battery backup
Page 142 clause 7	Should provide prominent prioritized audio, visual alarms for high, low heart rate, Spo2, RR, low battery, lethal arrhythmia recognition and ST Analysis.	Should provide prominent prioritized audio, visual alarms for high, low heart rate, Spo2, RR, low battery, full arrhythmia recognition and ST Analysis.
Page 142 clause 11	Model Should be by US FDA / CE (issued by notified body only) approve product.	Model Should be by US FDA & CE (issued by notified body only) approve product.
		<b>Point Added-</b> Monitor should have touchscreen & trim knob
		<b>Point Added-</b> Monitor be completely modular and should have facility to upgrade on field to IBP & EtCO2
		<b>Point Added-</b> Should have Snapshots facility upto 200 - Manual or alarm triggered
		<b>Point Added-</b> Connectivity to Central stations should be standard
		<b>Point Added-</b> Web browsing facility to review each networked monitors data transfer through hospital LAN via office PC in Hospital LAN



		Network and/or through dial up facility from remote location
		<b>Point Added-</b> Should be HL7 Compliant
		<b>Point Added-</b> Monitor should have modular recorder

**Name of the Equipment- Multipara monitor**

<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 154 clause 15	Should have Lithium ion battery with 4 hours battery backup.	Should have Lithium ion battery with 3 hours battery backup.
Page 154 clause 18	Should provide prominent prioritized audio, visual alarms for high, low heart rate, Spo2, RR, low battery, lethal arrhythmia recognition and ST Analysis.	Should provide prominent prioritized audio, visual alarms for high, low heart rate, Spo2, RR, low battery, full arrhythmia recognition and ST Analysis.
Page 154 clause 22	Model Should by US FDA / CE (issued by notified body only) approve product.	Model Should by US FDA & CE (issued by notified body only) approve product.
		<b>Point Added-</b> Monitor should have touchscreen & trim knob
		<b>Point Added-</b> Monitor be completely modular and should have facility to upgrade on field to IBP & EtCO2
		<b>Point Added-</b> Should have Snapshots facility upto 200 - Manual or alarm triggered
		<b>Point Added-</b> Connectivity to Central stations should be standard
		<b>Point Added-</b> Web browsing facility to review each networked monitors data transfer through hospital LAN via office PC in Hospital LAN Network and/or through dial up facility from remote location
		<b>Point Added-</b> Should be HL7 Compliant
		<b>Point Added-</b> Monitor should have modular recorder

**Name of the Equipment - ETCO2 monitor**

<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 155 clause 2	Should have touch screen TFT display with at least to 15" & Modular based system.	Monitors should have bright, highly visible minimum 15" touch screen color TFT Display with Trim knob. Modules for ECG, HR, Respiration, NIBP, Pulse Oximetry, Temperature, 2 x IBP and EtCO2
Page 155 clause 13	US FDA / European CE (Issued by notified body) approved model should be offered.	US FDA & European CE (Issued by notified body) approved model should be offered.
		<b>Point Added-</b> Connectivity to Central stations

		should be standard
		<b>Point Added-</b> Web browsing facility to review each networked monitors data transfer through hospital LAN via office PC in Hospital LAN Network and/or through dial up facility from remote location
		<b>Point Added-</b> Should be HL7 Compliant
		<b>Point Added-</b> Cardiac Output (thermodilution), PiCCO, Etco2, Spirometry, EEG, Metabolic Monitoring, Upto 4/6/8 Invasive Pressures, Mixed Venous Oxygen Saturation (SvO2), BIS/Entropy, NMT, AGM
		<b>Point Added-</b> Shall be able to perform/ review continuous on-line ST analysis upto 12 leads
		<b>Point Added-</b> Should have capability to perform realtime QT Analysis at the bedside
		<b>Point Added-</b> Should be able to store 400 snapshots at bedside - upto 6 waveforms
		<b>Point Added-</b> Should have systolic Pressure Variation (SPV) and Pulse Pressure Variation (PPV) monitoring capability which helps clinician in guiding fluid management

**Name of the Equipment - VENTILATOR (NEONATAL)**

Page No. of bid document	Technical Specification before amendment	Technical specification after amendment
Page 208 clause 4	Display screen of minimum 8-10" Color-TFT	12 inch size full colour, total touch screen operation for big Display to access from long distance
Page 208 clause 5	Machine should be Compressed air (medical oil free air compressor of the same brand as ventilator) or Turbine Base	Machine should be Compressed air (medical oil free air compressor of the same brand as ventilator)
Page 208 clause 5.h	Noninvasive ventilation-BIPAP, CPAP	Noninvasive ventilation-BIPAP, CPAP and NIPPV
Page 208 clause 5.J	HFOV	HFOV & Non Invasive HFOV
Page 208 clause 11.i	I: E Ratio: 1:1, 1:2, 1:3	I: E Ratio: 1:1, 1:2, 1:3 MAP-0-45mBar Delta P – 4-180mBar Sigh RR - 1 to 150 bpm Sigh Ti - 0.1-3 sec Sigh P – 0-45 mBar

**Name of Equipment RADIANT WARMER**

Page No. of bid document	Technical Specification before amendment	Technical specification after amendment
Page 209 clause 3	Should have Quartz Infrared Heater/ Calrod Heater with parabolic reflector / J shaped reflector for uniform heat radiation	The CALROD / Quartz Heating element should have 3 years warranty / Life and should not be made of breakable materials.

Page 209 clause 11	Should have a monitor stand and IV drip pole	Monitor Shelf to be kept at a distance from Bed or below the bed for safety measures
<b>Name of the Equipment PHOTOTHERAPY UNIT</b>		
<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 210 clause 1	Blue light LED which should last for at least 30,000 hours	Source should have a high life preferably minimum of 50,000 hours
Page 210 clause 4	Effective surface area should be at least 20 x 40 cm	Minimum have an effective surface area of 1500 cm <sup>2</sup> to adequately cover the babies
Page 210 clause 17	Should be USFDA / European CE approved product.	The manufacturer should be ISO 13485 certified and product should be European CE and US FDA approved.

<b>Name of the Equipment ANAESTHESIA MACHINE</b>		
<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 153	Anesthesia machine	Anesthesia machine with integrated ventilator as well as three gas system
Page 153 clause 2	Anti Hypoxic pneumatic device- to ensure no nitrous flow Oxygen is lower than 0.5 Ltr/Min	Anti-hypoxic pneumatic device to ensure no N <sub>2</sub> O flow with loss of O <sub>2</sub> pressure
Page 153 clause 3	Ratio Control – 1:3 mixed ratio between O <sub>2</sub> & N <sub>2</sub> O Gas Flow	Ratio Control – 1:4 or 25% mixed ratio between O <sub>2</sub> & N <sub>2</sub> O Gas Flow
Page 153 clause 4	9" Rotameter	0-10L/min flow meter for O <sub>2</sub> , N <sub>2</sub> O & Air
Page 153 clause 8	Inner connection of tubing's are made of Copper	Inner connection of tubing's are made of Copper or high grade plastic
Page 153 clause 15	Gas Inlet Part – Oxygen & Nitrous – 3 Nos. each.	Gas inlet port for O <sub>2</sub> & N <sub>2</sub> O, pin-index type 1 each & O <sub>2</sub> , N <sub>2</sub> O & Air non-interchangeable type Hose 1 each
Page 154 clause 26	Closed circuit system, Sodalime canister, Double Chamber	Closed circuit system, Soda-lime canister, Single/Double Chamber
Page 154 clause 31	All size laryngoscope, endotracheal tubes, nasal and oral airways, Magill's forceps should be supplied	Deleted
<b>MECHANICAL VENTILATOR SEPARATE OR WITH ANESTHESIA MACHINE</b>		
<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 156 clause 2	The Machine should have a built-in anesthesia ventilator with Pressure, volume-controlled modes with PEEP. The machine and ventilator	The Machine should have a built-in anesthesia ventilator with Pressure, volume controlled as well as spontaneous modes like SIMV &

	should be from the same manufacturer	Pressure support modes with spirometry loops with electronic PEEP. The machine and ventilator should be from the same manufacturer.
Page 156 clause 7	Should be able to deliver a tidal volume from 50ml to 1500ml	Should be able to deliver a tidal volume from 20 ml to 1500 ml
Page 156 clause 9	Should have monitoring facility of continuous airway pressure, tidal volume, frequency, oxygen concentration and oxygen supply pressure	Should have monitoring facility of continuous airway pressure & flow as waveforms, tidal volume, frequency, oxygen concentration and oxygen supply pressure
Page 157 clause 20	Should have dual cascade type flow meter for at least O2 and N2O calibrated in multiple scale	Should have dual cascade type flow meter for at least O2 and N2O calibrated in multiple scale and Air in single flow meter
Page 157 clause 27	Circle absorber with corrugated reusable breathing circuit for closed circuit system with each unit. It should be autoclavable	Circle absorber with corrugated reusable breathing circuit for closed circuit system with each unit. It should be autoclavable except the O2 Sensor
		<b>Point Added-</b> Should have flow triggered assist modes with trigger sensitivity of less than 0.2L/min
		<b>Point Added-</b> Should have dual flow sensing at both inspiratory & expiratory port for better leak compensation and trigger sensitivity.
		<b>Point Added-</b> Should have auxiliary O2 connection
<b>1.5 T SUPER CONDUCTING MAGNETIC RESONANCE IMAGING SYSTEM (MR)</b>		
<b>Page No. of bid document</b>	<b>Technical Specification before amendment</b>	<b>Technical specification after amendment</b>
Page 137 Clause 2.1 Magnet System. E;	The homogeneity of the magnet should be mentioned in relation to 10.20.30 cm DSV. Give details of the number of planes, plots and number of measurement per planes, to measure the homogeneity	The homogeneity of the magnet should be mentioned in relation to 10, 20, 30, 40, and 50cm DSV, and Homogeneity at 45cm must be less than 2.00PPM. Give details of the number of planes, plots and number of measurement per planes, to measure the homogeneity
Page 137 Clause 2.3 RF SYSTEM	RF system should have at least minimum of 16 independent RF receiving	Fully Digital RF system should have at least minimum of 8 independent RF receiving
Page 137 Clause 2.4 RF COIL	Flexible Coil – Large FOV – Specify	High Resolution 4 channel Flexible Coil – Large FOV
	Flexible Coil – Small FOV – Specify	High Resolution 4 channel Flexible Coil – Small FOV
Page 139 Clause 3.1	Online UPS of 100 KVA rating along-with Voltage regulation should be supplied for complete system (including Chiller) with minimum 15 minute backup	Online UPS of Appropriate rating along-with Voltage regulation should be supplied for complete system (including Chiller) with minimum 15 minute backup
<b>16 SLICE C. T. SCANNER</b>		

Page No. of bid document	Technical Specification before amendment	Technical specification after amendment
Page 135 Clause 2.b	KV range should be 90 to 130 KVP	KV range should be 80 to 140 KVP
Page 135 Clause 2.c	mA should be 180 mA or more	mA should be 200 mA or more
Page 135 Clause 3.b	Peak anode heat dissipation rate of at least 300KHU/minute.	Peak anode heat dissipation rate of at least 500 KHU/minute.
Page 135 Clause 6	High Contrast Resolution of at least 13 Lp/cm or more for axial and helical scanning	High Contrast Resolution of at least 15 Lp/cm or more for axial and helical scanning
		<b>Point Added-</b> Should have pressure injectors
		<b>Point Added-</b> On line UPS of 15 min. backup
<b><u>C- ARM</u></b>		
Page 146 Clause 4.b	The monitor trolley should be provided for mounting 2 monitors and should have 2 shelf for keeping memory and stabilizer	The monitor trolley should be provided for mounting 2 monitors and should have 2 shelf for keeping memory and stabilizer or single large monitor also applicable.
Page 146 Clause 5.f	The radiographic mAs range should be from 20 to 100 mAs or more	The radiographic mAs range should be from 20 to 80 mAs or more

Page 147 Clause 6.a	The unit should be capable of digital subtraction angiography (DSA) with Road map facility	Deleted
Page 147 Clause 5.f	The Generator, Tube, Image Intensifier of the equipment should have US FDA / CE (issued by notified body only) certification	The Generator, Tube, Image Intensifier of the equipment should have US FDA and CE (issued by notified body only) certification

**MOBILE X-RAY MACHINE 100 MA**

Page No. of bid document	Technical Specification before amendment	Technical specification after amendment
Page 130 Clause 1	High Frequency generator of 40KHz or more compatible with conventional and computerized radiography	High Frequency generator of 50KHz or more compatible with conventional and computerized radiography
Page 130 Clause 5	kV range at least 40kV to 125kV, digitally displayed mAs range at least 0.5 to 200 mAs or more	kV range at least 40kV to 100kV, digitally displayed mAs range at least 0.5 to 250 mAs or more
Page 130 Clause 6	Exposure time range at least 1 ms to 5s	Exposure time range at least 10 ms to 5s
Page 131 Clause 2 of Dimensions	Weight -Maximum 500 Kg	Weight -Maximum 120 Kg
Page 131 Clause 3 of Safety / Certificate & Electrical configuration	US FDA / European CE (issued by notified body only)	US FDA / European CE (issued by notified body only/ BIS/ISO

**Name of the Equipment- DIGITAL RADIOGRAPHY**

Page No. of	Technical Specification before amendment	Technical specification after amendment
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<b>bid document</b>		
Page 133	The detector should be fixed type	The detector should be wireless type
Page 133 Clause 2 of Generator	Should have at least 80 KW power	Should have at least 65 KW power
Page 133 Clause 2 of X- RAY TUBE AND COLLIMATOR UBE AND COLLIMATOR	Should have focal spot sizes of 0.6mm and 1.2mm or less	Should have focal spot sizes of 0.6mm and 1.3 mm or less
Page 134 Clause 4 of Digital Detector	Detector Quantum Efficiency (D.Q.E) should be more 55% @ Zero Line Pairs	Detector Quantum Efficiency (D.Q.E) should be more 65% or more @ Zero Line Pairs
Page 135	US FDA / European CE (issued by notified body only) & AERB Approved model should be offered	US FDA and European CE (issued by notified body only) & AERB Approved model should be offered

### Annexure-III

The following equipment will be deleted from the list of Schedule of Requirement.

#### **Department- PSYCHIATRY**

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1	EEG Machine (may be shared with medicine department)	1	45 days	As mentioned in Section V of this bid document
2	EEG machine (may be shared with medicine/neurology department)	1	45 days	As mentioned in Section V of this bid document

#### **Department- RADIO-DIAGNOSIS**

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1	Ultrasonography equipment and color Doppler (Additional unit independently for OBGY).	1	45 days	As mentioned in Section V of this bid document

#### **Department- SURGERY**

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1	Operation Theatre Ceiling light	2	45 days	As mentioned in Section V of this bid document
2	Non invasive Multi Para Monitors	4	45 days	As mentioned in Section V of this bid document
3	Operation Theatre Ceiling light	7	45 days	As mentioned in Section V of this bid document

#### **Department- TUBERCULOSIS & CHEST DISEASES**

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1	Pulmonary function Test machine with facility for spirometry, lung volume and diffusion capacity	1	45 days	Item to be supplied as per MCI Guideline/ Norms

### Department- ANAESTHESIOLOGY

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1.	Multipara monitor- with P, NIBP, ECG facility, SpO2	One set for EACH operation table	45 days	As mentioned in Section V of this bid document
2	EtCO2 monitor	One for 5 operation tables	45 days	As mentioned in Section V of this bid document
4	E.C.G. Monitor	5	45 days	Equipment to be supply As per MCI Requirement/ Guideline
5	Monitors for vital signs (NIBP, P.R, ECG, SPO2, Temperature, R.R)	1	45 days	As mentioned in Section V of this bid document

### Department- Central Casualty Department

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
2	Operation Theatre Ceiling light	1	45 days	Equipment to be supplied As per MCI Requirement/ Norms

### Department - FORENSIC MEDICINE

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1	OT light Shadowless adjustable	1	45 days	As mentioned in Section V of this bid document



### Department- OBSTETRICS & GYNAECOLOGY

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1	Ultrasound machine	1	45 days	As mentioned in Section V of this bid document

### Department- OPHTHALMOLOGY

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1	Slit lamp	3	45 days	As mentioned in Section V of this bid document
2	Operating microscope with TV Unit with camera	1	45 days	Equipment to be supplied as per MCI Guideline/ Norms
3	Operation Theatre Light	2	45 days	As mentioned in Section V of this bid document
4	Slit lamp	1	45 days	As mentioned in Section V of this bid document

### Department- ORTHOPEDICS

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
1	Cautery machines	1	45 days	Equipment to be supplied as per MCI Guideline/ Norms

### Department- Pathology

Schedule No.	Brief Description of Goods and Services	Qty	Delivery Schedule (in days)	Specification
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1	Three Part Fully Automated Cell Counter	1	45 days	As mentioned in Section V of this bid document
2	Three Part Hematology Analyzer	2	45 days	As mentioned in Section V of this bid document