



Bihar Medical Services & Infrastructure Corporation Limited, 2nd & 3rd Floor, Swasthya Bhawan, Behind IGIMS, Sheikhpura, Adjacent to State Health Society, 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 & commissioning of medical equipment on turnkey basis for 100 bedded Gangwara Hospital, Darbhanga, Bihar vide Notice Inviting Tender No.- BMSICL/2024-25/ME-373. During and after Pre-bid meeting various suggestions were received from different prospective bidders regarding amendment in technical specification of equipment which were discussed and deliberated on by the experts, who after due deliberation recommended certain amendments in the technical specification of the equipment, which are annexed as Annexure-I of this corrigendum. In order to facilitate maximum participation of bidders the tender schedule is being revised as follows:-

Tender Reference No.	BMSICL/2024-25/ME-373
Last date and time of submission of online bids	17th October 2024 till 17:00 Hrs.
Last date and time of submission of original documents of EMD, Tender Fee and Document	18th October 2024 till 14:00 Hrs.
Date, Time and Place of opening of Technical Bid	18th October 2024 (at 15:00 Hrs.) on the website of https://eproc2.bihar.gov.in in the office of BMSICL
Date and time of opening of financial Bids	To be announced later on https://eproc2.bihar.gov.in

Note:-

- 1. Bidders are advised to refer to the Annexure-I of this corrigendum before submission of bid.**
- 2. Those who have submitted their bids are requested to re-submit their bids in accordance with this corrigendum.**

Annexed:- as above

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

Annexure-I				
Department wise equipment list for 100 bed				
Sl. No.	Name of equipment	Qty.	Technical Specifications	Final Amendment
I	Surgical Instruments			
1	Small General set	3	The surgical instruments should be made using top quality medical grade hardened stainless steel with defined specifications like AISI-410, AISI-420, AISI-304, AISI-303, AISI- 440 etc. using guidelines of ASTM standard F899-94 and ISO 7153 and with a dull finish.	No Change
2	Breast set	4		
3	Hemimandible set	4		
4	Tracheostomy set	5		
5	Gynac set	2		
6	Dressing Tray	12		
7	Suture Tray	12		
8	Biopsy Tray	12		
A	Sub total			
II	Laboratories (Composite Lab)			
9	CBC analyzer 5 part	1	Should be fully automated hematology analyser based on impedance and flow cytometry technology or equivalent. It should be capable of handling at least 200 CBC samples per day.	No Change
			Should give at least the following parameters:	No Change
			WBC count, RBC count, Hemoglobin,Hematocrit, MCV, MCH, MCHC, RDW, PLT,MPV,PDW, NRBC percentage and absolute counts, NEUTROPHIL percentage & absolute counts, EOSINOPHIL percentage & absolute count, BASOPHIL percentage & absolute count, MONOCYTE percentage & absolute count, LYMPHOCYTE percentage & absolute count with direct measurement of each leukocyte population.	No Change
			Should be capable of performing automated Reticulocyte analysis and enumerate immature	No Change

			reticulocyte fraction as well as mean reticulocyte volume.	
			Should offer automated body fluid analysis for: CSF, Serous fluids and Synovial fluids	No Change
			Should have Automation System with Auto loader and be able to perform analysis in different modes such as CBC, CBC/Diff, CBC/Diff/Retic, CBC/Retic or Retic Only.	No Change
			Auto loader should have ability to load atleast 100 tubes at a time with automatic mixing and cap-piercing.	No Change
			Should have a positive tube identification with bar code be integrated at time of aspiration.	No Change
			Should have the following minimum linearity range:	No Change
			WBC: 0.02 to 300.00 $\times 10^3 \text{ CELLS}/\mu\text{L}$	No Change
			RBC: 0.00 to 7.00 $\times 10^6 \text{ CELLS}/\mu\text{L}$	No Change
			HGB: 0.00 to 22.0 g/dl	No Change
			PLT: 5 to 3000.0 $\times 10^3 \text{ CELLS}/\mu\text{L}$	No Change
			RET: 0.20 to 24.0 % (Please mention in % only).	No Change
			Should have a throughput of not less than 100 samples per hour in the CBC/Diffmode and should require not more than 200 μL .	No Change
			Should have system to avoid short sampling.	No Change
			Should have minimum routine maintenance with automatic Electronic Aperture Cleaning after every cycle.	No Change
			Must have bi-directional communication capability with laboratory information system.	No Change
			Should have storage of atleast 10000 numeric patient results, 5000 including graphics, unlimited number of user-definable and patient control files.	No Change
			The unit should be CE certified(notified body) USFDA Approved.	No Change

		Should meet ISO 13485 certification for quality standards	Deleted
		All reagents and quality control materials as per instrument manual and manufacturer policy should be quoted.	No Change
		Latest PC Configuration - Processor : One Intel Xeon or equivalent Processor. Memory of 16 GB RAM, Hard Drive - 500GB	No Change
		Interface Software corresponding with the equipment with accessories.	No Change
		HP Printer to be provided along with the unit.	No Change
		Power supply- 100-240VAC, 50-60Hz.	No Change
		Please submit price list of all consumables and QC materials.	No Change
		Should perform yearly calibration/Validation and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable to SI units through National/international standards(As per NABL norms). To submit SOPs for PMS at the time of installation/commissioning.	Deleted
		Performance certificates of IQ,OQ,PQ tests to be submitted at the time of installation/commissioning.	No Change
		Should be supplied with standard make UPS	No Change
		Please submit the technical data sheet along with the brochure as a tender document with reference to the quoted make & model.	Deleted
		Please specify list & cost of consumables/consumable Spares(i.e.spares need to be replaced at regular intervals, maybe	Deleted

			quarterly/half yearly/yearly such as annual maintenance kit etc.) if any.(Quote Rate)	
			Please specify pre installation requirements [electrical, HVAC, Compressed air (please specify required air pressure), water requirement (RO/DI/Distilled water with its pressure, flow rate per hour) ; if any of the above is essential]	No Change
			Please specify footprint size & weight.	Deleted
			Demo of the quoted model , will be required if so desired by the user, after the opening of the technical bid and prior to opening of financial bid. This is for technical evaluation.	Deleted
			Predispatch inspection at factory will be required if desired by authorities.	Deleted
			Equipment maintenance(inclusive of spares replacement,calibration, validation,consumable spares,preventive maintenance,breakdown calls) to be carried out by vendor at their own cost during the period of RR contract	Deleted
			Please visit the site to check whether quoted model can be accomodated in the available space.	Deleted
			Please specify power consumption.	Deleted
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty- 2 year	Warranty 3 year
			Response Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted

10	Centrifuge	2	Max. Achievable Speed: Not Less Than 20000 Rpm And 32000 X G	Maximum speed should be 6000(RPM) or More
			Noise Level: <60Db	No Change
			It Should Be With Brushless, Maintenance Free Drive Motor.	No Change
			Microprocessor Controlled Operation With Digital/Lcd Display For Speed, Temperature And Time.	No Change
			Should Have Ability To Spin For A Time Of 1Min To 99 Min.	No Change
			Should Have Viewing Port In The Lid.	No Change
			Should Have Powered Lid Locking.	No Change
			Should Have Quick And Easy Operation With The Keypad	No Change
			Should Be Able To Store 4 Or More Programs.	No Change
			Rotors And Lids Should Be Autocleavable At 121°C For 20 Mins.	No Change
			Should Have Emergency Lid Lock Release Function.	No Change
			Should Provide Lid Dropping Protection.	No Change
			"Door Interlock" Safety Feature Is Essential.	No Change
			It Should Be Possible To Set Rpm As Well As Rcf.	No Change
			Should Have Imbalance Switch-Off Function.	No Change
			Automatic Rotor Recognition	No Change
			Parameters/ Programs To Be Changed With The Help Of Keypad.	No Change
			Easy Entry Of Parameters	No Change
			Rotor Should Be Aerosol Tight.	No Change
			Complete Rotor Package Should Be Supplied, Inclusive Of Rotor, Lid, Rotor Fixing Key, Grease For Threads, Etc. should be provide angular rotor for 2ml tube swing out rotor for 5,10,15,50 ml tube	Need rotor head of 24*15ml(with RPM of 4000 or More)
			Power Supply- 100-240Vac, 50-60Hz.	No Change

			Should meet ISO 13485 certification for quality standards	Deleted
			The Unit Should Comply With International Standard Like CE or USFDA	Model should be USFDA/European-CE (Issued by notified body)
			Should Be Able To Withstand Temperature And Humidity Fluctuations In Case Of Failure Of Air.	No Change
			Should Perform Calibration, Validation(Once) & Preventive Maintenance (Twice) Of The Equipment Yearly During Warranty/ Service Period. Testing & Measuring Equipment Used Should Be Traceable To SI Units Through National /International Standards (As Per NABL Norms).	Deleted
			Performance Certificates Of IQ, OQ, PQ Tests To Be Submitted At The Time Of Installation/Commissioning.	No Change
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Max. Achievable Speed: Not Less Than 20000 Rpm And 32000 X G	Deleted
			warranty- 2 year	warranty- 3 year
			Noise Level: <60Db	Deleted
11	Semi Auto analyzer	1	The equipment; Semi-automatic bio chemistry analyser is used for measurements of bio-chemistry tests, using wet chemistry reagent(s) and have ability to use external cuvettes and integrated flow cell. Semi-automated Bio Chemistry Analyser is with built in software for the calculation and curve plotting. Light source is LED or Halogen Bulb. It must be an open system capable using all brand reagents and all the test programs should be in open mode.	No Change
			should be LCD display with Touch Key board.	No Change
			should be Permanent flow cell	No Change

			Light source should be Halogen Lamp (or) LED	No Change
			should be Photometer with 8 wavelength filters in the range of 340-700 nm (340,405,505,546,578,600,630,670)	No Change
			Bandwidth 10 nm+or -	No Change
			absorbance range should be 0 to 3.0 unit. or better	No Change
			analyzer resolution should be 0.0001 absorbance unit or better	No Change
			Measurement range should be 25, 30, 37 degree Celsius with 1 degree increment, Peltier	No Change
			Memory should be storage test results should be ≥ 500 tests	No Change
			Analyser shall maintain nominal temperature, with suitable heat dissipation/ cooling mechanism.	No Change
			number of programm should be ≥ 100	No Change
			should be maintain End point with factor or standard, fixed time with factor or standard, Kinetic; Enzyme kinetics with factor or standard, Absorbance, Sample blanking, Differential mode with factor or standard, Bichromatic, calculated test.	No Change
			Linear factor, Multi point, Point to point, Log-Logit, Spline,1- point calibration,2-point calibration, Polygonal multi standard (Calibration Curve), Rate linear and non Linear, Absorbance and delta OD limit, Bichromatic, Kinetic with calibrator,1-point sample Blank linear and nonlinear	No Change
			flow cell material should be Quartz + Metallic	No Change
			flow cell volume should be 0- 32 microliters.	No Change
			flow cell optical path should be 10 mm.	No Change
			Aspiration volume should be < 400 microliters.	No Change

		should be Peristaltic Pump Aspiration system with calibration facility, Air purge	No Change
		option between two sample	No Change
		should be Compatible with electric power from by 220V-240V 50Hz (+/-10%) AC source	No Change
		Preventive Maintenance kit should be supplied with instrument.PM kit must provide with one Halogen Lamp as an emergency spare (Not applicable for LED Models) and at least	No Change
		One Cuvette (Applicable for All Models) and tubing kit. Please confirm	No Change
		Should be In-built Thermal Printer required.	No Change
		Printer on/off mode should be available Vender to confirm &specify.	No Change
		Graph print on/off mode should be available,	No Change
		By RS232 port/USB/HDMI port facility, Vender to confirm &specify	No Change
		should be Compatible viz analyser equipment preloaded with Software needed for lab interface	No Change
		Collated report by date, ID, and test wise recall results option if any please mention.	No Change
		Test result storage (mention the storage capacity)	No Change
		Should meet ISO 13485 certification for quality standards	Deleted
		Warranty - 2 year	Warranty 3 Years
		Should be approved like CE or USFDA	Model should be USFDA/European-CE (Issued by notified body)
		Equipment is suitable for storage and capable of operating continuously in ambient room temperature of 8-degree C to 37-degree C and relative humidity of 15 to 90% in ideal circumstances	No Change

12	Micropipette (100-1000 micro letter)	3	Should Be Made Of Mechanically Robust And Chemically Resistant Materials	No Change
			Must Be A Durable And Stable Pipette Providing Consistent Performance For Long Time.	No Change
			Should Be A Light Weight Pipette Enabling Smooth Single Handed Pipetting To Improve Efficiency	No Change
			Must Be Fully Autoclavable	No Change
			Should Be Designed To Dispense Accurate Volume Of Liquid With Long Term Precision.	No Change
			Should Be Ergonomically Designed For Ease In Operation And User Tested.	No Change
			The Micropipette Should Possess A Separate Tip Ejection Button, A Volume Changing Knob.	No Change
			There Should Be No Metal Parts To Rust Or Corrode	No Change
			Volume Adjustment: Within Few Turns The Adjustable Volume Should Be Reached.	No Change
			Volume Display In 4 Digits.	No Change
			Volume Must Be Automatically Locked	No Change
			Maintenance Free Nose Cones	No Change
			Two Button Operation	No Change
			Should Be Operable In 5µl Increments With An Accuracy Of ± 1.0 To 0.6%, Precision Of	No Change
			0.6 To 0.2% Or Better.	No Change
			Must Provide Consistent Results Even In Long Pipetting Series (Please Provide The List Of Users)	No Change
			Should Be approved CE or USFDA	Model should be USFDA/European-CE (Issued by notified body)
			Warranty- 2 Year	Warranty 3 year
13	Osmometer	1	Should Have Working Principle Of Freezing Point Depression Method For Determining Osmolality	No Change
			Should Be Able To Process All Body Fluids, Urine, Serum	No Change

			Sample Volume Range Should Be 50µl To 100µl Or Better	No Change
			Osmolality Measurement Range Should Be 0-2000 Mosmol/Kg	No Change
			Desirable Test Time Should Not Exceed 2 Min	No Change
			Should Have Capacity To Process One Sample At A Time	No Change
			Should Offer The Flexibility Of 2 Or 3 Point Calibration To Satisfy Clia Calibration Verification Requirements	No Change
			Should Have Accuracy Of Standard Deviation(Sd)≤ 4 Mosmol/Kg With In Run Of 0-400 Mosmol/Kg H ₂ O And Rsd≤ 1% With In Run Of 400-2000 Mosmol/Kg H ₂ O	No Change
			Should Have An Option For Data Storage Up To 1000 Test Reports	No Change
			Should Have Option For Pc And Printer Connection	No Change
			Should Have Barcode Scanner	No Change
			Essential Accessories Which Are Required For The Equipment Functional Needs But Is Not The Part Of The Standard Equipment Should Be Mention In The Financial Bid With Prices	No Change
			Power Supply- 100-240Vac, 50-60Hz.	No Change
			The Unit Should Comply With International Standard Like European CE Or FDA.	Model should be USFDA/European-CE (Issued by notified body)
			Should Be Able To Withstand Temperature And Humidity Fluctuations In Case Of Failure Of Air.	No Change
			Should Perform Calibration, Validation (Once) & Preventive Maintenance (Twice) Of The Equipment Yearly During Warranty/ Service Period. Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National /International Standards (As Per Nabl Norms).	Deleted

			Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning.	No Change
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty: 2 Years	Warranty 3 year
14	Semi Automated Coagulometer	1	Coagulometer Measures The Blood Clotting Parameters	No Change
			Should Be Microcomputer Controlled	No Change
			Semi Automatic With At Least 4 Channels Optics	No Change
			Based On Optical Principle With Led	No Change
			Should Have Intergrated / External Incubation Block With Pre-Warming Positions.	No Change
			Suitable For Pt, A-Ptt, Fibrinogen, Thrombin Time, Factors: Ii,V, Vii, Viii, Ix, X, Xi, Xii, Fletcher, At-Iii, Protein C, Protein S, Heparin, Stat	No Change
			Results Can Be Represented In Seconds, %Activity, Ratio, Inr G/L And Mg/L	No Change
			Should Be Able To Store Specific Test Paramenters In The System	No Change
			Should Haave Lcd Display	No Change
			Complete System With Printer Or Facility For Priner Connectivity Is Required.	No Change
			Should Generate The Standard Curve For Factor Assays	No Change
			Open System For Reagent And Low Reagent Consumption	No Change
			Reagents For Validation, Training Up To Installation To Be Provided Free Of Cost By Manufacturer.	No Change
			should be USFDA or CE approved product	Model should be USFDA/European-CE (Issued by notified body)

			Manufacturer/Supplier Should Have ISO 13485 Certification For Quality Standards.	No Change
			Should Be Able To Withstand Temperature And Humidity Fluctuations In Case Of Failure Of Air Conditioner.	No Change
			Should Perform Calibration/Validation(Once) & Preventive Maintenance (Twice) Of The Equipment Yearly During Warranty/ Service Period. Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National /International Standards (As Per Nabl Norms).	Deleted
			Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning.	No Change
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty: 2 Years	warranty 3 year
15	PH meter	1	Bench Top Ph Meter With Two Electrode And Buffer.	No Change
			One Electrode For Measuring Ph For Reagents.	No Change
			One Electrode For Measuring Ph For Qc Sample(Min Volume 500 Microlitre To 1000 Microlitre).	No Change
			3 Point Calibration Is Required(Ph 4.0, 7.0 & 10.00)	No Change
			Ph Range From 0-14.	No Change
			Temp. Range 0°C To 100°C	No Change
			Temp. Display On Screen As Well As Ph Reading.	No Change
			Calibration Certificate To Be Provided.	No Change
			Automated Ph Meter Preferable.	No Change

			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards.	Deleted
			Performance Certificate Of Iq, Oq, Pq Tests To Be Sub,Itted At The Time Of Installation/ Comissioning, If Desired By The End User	No Change
			Please Specify Pre Installation Requirements.	Deleted
			Please Specify Footprint Size & Weight.	Deleted
			Predispatch Inspection At Factory Will Be Required If Desire By Authorities.	Deleted
			Should Be CE or USFDA Approved Product.	USFDA/EU-CE (Issued by notified body)
			Please Specify Power Consumption.	Deleted
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty 2 Year	warranty 3 year
16	Incubator	1	Capacity Should Be 150 Litres Approximately.	No Change
			Temperature Display Should Be Intuitive Control Panel With Led/Lcd Display & Should Have Touch Sensitivity Key Pad	No Change
			Should Have Powder Coated Electorgalvanised Steel Exteriors With Antimicrobial Coating	No Change

			Temperature Range Should Be From Ambient +3°C To 60°C	No Change
			Temperature Accuracy Should Be +/- 0.2°C At 37°C	No Change
			Temperature Increment Should Be 1°C	No Change
			Should Have Microprocessor Digital Pid Control	No Change
			Inner Door Should Have Safety Glass Door	No Change
			Airflow Should Be By Means Of Forced Air Convection.	No Change
			Chamber Material Should Be Stainless Steel (304)	No Change
			Should Have Minimum 4 Shelves	No Change
			Should Have Auto Tuning Function & Digital Timer With Delayed On/Off Function	No Change
			Should Have High Temperature Limit Setting And Open Door Alarm	No Change
			Should Have Rs 232/ Rs484 Interface For Data Communication	No Change
			Should Have Access Port For External Temperature Mapping.	No Change
			Should Perform Yearly Calibration/Validation And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabl/Nabh Norms). To Submit Sops For Pms At The Time Of Installation/Commissioning.	Deleted
			Please Specify Pre Installation Requirements.	Deleted
			Please Specify Footprint Size & Weight.	Deleted
			Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	Deleted

			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Please Specify Power Consumption.	Electrical power requirements 220-230 Vac, 50-60Hz
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty : 2 Years	Warranty 3 year
17	Hygrometer	2	Range Should Be -49.9 To 69.9°C	No Change
			Resolution Should Be 0,1°C/°F	No Change
			Accuracy Should Be ±1°C	No Change
			Sensor Type Should Be Thermistor	No Change
			Battery Type Should Be 1.5 Volt Aaa	No Change
			Battery Life Should Be 10000 Hours	No Change
			Should Be Dual Custom Lcd/Display	No Change
			Dimensions Should Be 18X41X76Mm Or More	No Change
			Weight Should 85 Grams Or More	No Change
			Humidity Should Be 20 To 98%Rh	No Change
			Should Be CE certified product	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Warranty 1 Year	Deleted
18	Refrigerator	3	Capacity Of Storage: 300 Litres to 400 Litres	300 ltr
			Temp Range-Should Have Adjustable Temperature Control Range From +1 Degree To +8 Degree C, Factory Preset At 4 Degree C.	No Change
			Refrigerator System-	No Change

		A)The System Should Have High Density CFC –Free Urethane Foam Insulation To Protect Cabinet From Ambient Temperature Fluctuation.	No Change
		B)The System Should Have Positive, Forced, Air Circulation To Maintain Temperature Uniformity At All Shelf Levels, With Quick Recovery +/- 1 Degree C.	No Change
		C)The System Should Have Sensors For Activating Automatic Defrost Cycle To Minimize The Frost Build Up.	No Change
		D)The System Should Have Automatic Condensate Removal With No Requirement For Separate Drainage Lines.	No Change
		Internal Construction Should Be Made Up Of High Grade Stainless Steel (Min 22 G) External Construction Corrosion Resistant Sheet At Least 1 Mm Thickness.	No Change
		Internal Temp Control	No Change
		A)System Should Have Temperature Control Range From +1 Degree C To +8 Degree C.	No Change
		B)Temperature Control Resolution Should Be Better Than 0.1 Degree C.	No Change
		C)Cooling Down Time Of Max Of 150 Min On Half Load	No Change
		External Ambient Temp Should Perform In Ambient Temp Up To +43 Degree C.	No Change
		Door System Should Lockable Double Glass Doors For Better Safety	No Change
		Safety System:	No Change
		A. System Should Have Large And Clear Digital Displays For The Set/Run Parameters.	No Change
		B. The System Should Have Key Operated Set Point For The Added Security	No Change
		Alarms.	No Change
		System Should Have Audible/Visual Warnings For	No Change

			Over-Temperature Under Temperature And Power Failure With Visual Status Reports On Critical Functions.	
			Should Have Adjustments For Uneven Bases. The Adjustments Should Be Easy To Use Like Rotating A Screw At The Legs In The Base.	No Change
			Scratch Resistant Internal Lining Of The Cabinet (Stainless Steel Or Aluminium)	No Change
			The Unit Shall Be Capable Of Being Stored Continuously In Ambient Temperature Of 0 -50 Deg C And Relative Humidity Of 15-90%	No Change
			The Unit Shall Be Capable Of Operating Continuously In Ambient Temperature Of 10 - 40Deg C And Relative Humidity Of 15-90%	No Change
			Power Input To Be 220-240Vac, 50Hz Fitted With Indian Plug	No Change
			Voltage Corrector/Stabilizer Of Appropriate Ratings Meeting Isi Specifications.(Input 160-260 V And Output 220-240 V And 50 Hz)	No Change
			Should Be CE/ USFDA approved product	Deleted
			Manufacturer/Supplier Should Have ISO Certification For Quality Standards.	No Change
			Electrical Safety Conforms To Standards For Electrical Safety IEC standard	No Change
			Certificate Of Calibration And Inspection.	No Change
			Warranty- 2 Years	warranty 3 year
			Additional Point	should be of 4star/5star rating
B	Sub total			
III	Basic Cyto/Histo Path			
19	Manual Microtome	1	Design Should Be Robust, Easy To Clean And Vibration Free	No Change

		Should Have Easily Removable Waste Tray	No Change
		Should Have Smooth And Light To Turn Hand Wheel	No Change
		Should Have Locking System Of Sample Holder At The Uppermost Position	No Change
		Should Have A Locking Lever To Lock The Hand Wheel At Any Position	No Change
		Should Have Easy Design To Reach Coarse Feed Wheel	No Change
		Should Have Slice Thickness Adjustment Knob And Display	No Change
		Section Thickness Feed To The Specimen From 0.5-60µm Of Better.	No Change
		Should Have Provision In Blade Holder For High And Low Profile Disposable Blade	No Change
		Should Have Precise Specimen Orientation Of 8° In X-Y With Anti-Tilt Feature	No Change
		Blade Holder Should Have Finger Safety Guard	No Change
		Specimen Retraction Facility In The Return Stroke And Can Be Turn On And Off.	No Change
		Section Counter Is Required.	No Change
		Should Have Section Thickness Indication By The Visual Display	No Change
		Should Have Hand Rest For Easy Sectioning	No Change
		Should Have User Selectable Coarse Feed Turn Direction Clock Or Counter. Clockwise For Manual Sectioning Only	No Change
		Should Have Supplied With Disposable Blade Holder (Low Profile And High Profile - One), With Finger Guard Protection, Disposable Blades, Quick Release Clamp, Section Waste Tray, Dust Cover Microtome Oil As Standard Scope Of Supply.	No Change
		Should Have Quick Release Cassette Clamp And Universal Specimen Clamp	No Change

			Power Supply- 100-240Vac, 50-60Hz	No Change
			Should Be Able To Withstand Temperature And Humidity Fluctuations In Case Of Failure Of Air.	No Change
			Manufacturer/Supplier Should Have ISO 13485 Certification For Quality Standards.	No Change
			The Unit Should Comply With International Standard Like CE and USFDA approved product	Model should be USFDA/European-CE (Issued by notified body) approved
			Should Perform Calibration & Preventive Maintenance (Twice) Of The Equipment Yearly During Warranty/ Service Period. Testing & Measuring Equipment Used Should Be Traceable To SI Units Through National /International Standards (As Per NABL Norms).	Deleted
			Performance Certificates Of IQ,OQ,PQ Tests To Be Submitted At The Time Of Installation/Commissioning.	No Change
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty: 2 Years	warranty 3 year
20	Embedding Station	1	A State Of The Art Embedding System With Microprocessor Regulated Bench Top Tissue Embedding System With Touch Pad Control To Adjust The Wax-Dispensing Unit, Cooling, Heating And Pre-Warming Unit. Each Module Should Have Display And Independent Control.	No Change
			The Paraffin Melting Reservoir Should Have Temperature Range Between 50 °C To 70 °C, Or Better With ± 1 °C Steps. The	No Change

			Paraffin Reservoir Should Have At Least 3 Liters Or Better Capacity To Hold Melted Wax.	
			Cold Plate Module Should Have Sufficient Space To Accommodate At Least 50-60 Blocks.	No Change
			Refrigerated Spot Should Be Integrated In Cold Plate For Tissue Orientation.	No Change
			Appropriate Cassette Bath Store.	No Change
			Mold Warmer And Work Surface Temperature Should Be Programmable In The Range Of 50 Oc To 70 Oc, Or Better With ± 1 Oc Steps.	No Change
			Modules For Cold Spot Should Have Temperature 4 Oc, While The Cold Plate Should Have -5 Oc Or Better.	No Change
			Each Module (Wax Reservoir, Heating Plate, Cold Spot, Cold Plate Etc.) Should Have Temperature Adjustment Via Touch Display Independently.	No Change
			Flow Of Wax From Reservoir Should Be Adjustable Using Foot Peddle Or By Knob.	No Change
			Embedding System Should Have Programmable Work Flow With Automatic Start Up And Switch Off Time.	No Change
			Forceps Warmer Along With 1Mm, 2Mm And 4Mm Tip.	No Change
			The System Should Be Equipped With All Accessories For Proper & Effective Functioning (Such As Power Supply Cords, Dust Cover, Stabilizer Etc.) Any Up- Gradation Of The System Accessories And Software Within A Year From The Time Of Installation Should Be Provided Free Of Cost.	No Change
			Supply 40 Kg Of Paraplast Tissue Embedding Grade And 40 Liter Of HistoClear/ Xylene Free Clearing Reagent.	No Change

			Vibration Free Table For Accommodating The Embedding System.	No Change
			Staining Racks Ten In Number Lxwxh Mm (85X60X45) Of Glass Or Metal, With Wire Handle.	No Change
			Metal Base Molds At Least 60 In Numbers With Depression Of 7X7X5Mm Size.	No Change
			Embedding Cassettes 2000 Fitting On The Above Metal Base Molds.	No Change
			should be ISO 13485 certified	Deleted
			Should Be CE and USFDA approved product	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Warranty- 2 Years	warranty 3 year
21	Automated Tissue Processor	1	Should Be A Low Throughput Staining Machine For Multiple Staining Operations.	No Change
			Should Have Atleast 30 Or More Nos Of Slides Per Rack.	No Change
			Specimen Slide Throughput Should Be Atleast 150-200 Slides Per Hour.	No Change
			Should Have Load Capacity Of Atleast 60 Slides With Minimum 2 Loading Stations.	No Change
			Should Have Minimum 15 Reagent Stations And 3 Water Stations.	No Change
			Should Have Integrated 1 Drying Stations/ Oven With Temperature Settings From 40°C To 65°C Should Be Available.	No Change
			Minimum 2 Programs Should Be Available.	No Change
			Should Have Simultaneous Staining Of Various Different Staining Protocols.	No Change
			Continuous And Slow Agitation Facility Should Be Available.	No Change
			Gentle Vibration To Slide Rack During Lifting To Teduce Any Carry Over Contamination.	No Change

			Should Have Keypad Control For Programming And Setting The Parameters	No Change
			Should Have Continuous Loading And Unloading Of Slides Via Rack Entry And Exit Door.	No Change
			Programmable Up And Down Movement Of Robotic Arm.	No Change
			Should Have Fume Hood With Filter To Remove Hazardous Fumes.	No Change
			Timer For Adjusting Time For Each Station.	No Change
			Alarm System Should Be Available For Completion Of Each Program.	No Change
			Warning Alarm In Case Of Any Error During Operation.	No Change
			Ups Of Adequate Capacity To Be Provided If Required/ Should Have Inbuilt Battery Backup.	No Change
			Power Supply- 100-240Vac, 50-60Hz	No Change
			should be ISO 13485 certified	Deleted
			Should Be CE and USFDA approved product	Model should be USFDA/European-CE (Issued by notified body) approved
			General Terms:	
			Should Perform Yearly Calibration/Validation And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabl Norms). To Submit Sops For Pms At The Time Of Installation/Commissioning.	Deleted
			Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of	No Change

			Installation/Commissioning ; If Desired By The End User.	
			Please Specify Pre Installation Requirements.	Deleted
			Please Specify Footprint Size & Weight.	Deleted
			Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	Deleted
			Please Specify Power Consumption.	Deleted
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty- 2 Years	warranty 3 year
22	Hot Air oven	1	Specification: Table Top.	No Change
			Volume Capacity: Approximately 170 Litres.	No Change
			Temp: Ambient To More Than 250 Deg C.	No Change
			Display: Led/Lcd/Touchscreen Display With Temperature Monitoring.	No Change
			Inner Chamber: Stainless Steel, Grade 304.	No Change
			Number Of Shelves: 3.	No Change
			Tray: Chromium Plated Steel.	No Change
			Door Seal: Seasoned Silicon Rubber.	No Change
			Display Accuracy: $\leq \pm 5$ Deg C.	No Change
			Main Body: Electrogalvanised Steel With White Oven Baked Epoxy-Polyster Powder Coated Finish.	No Change
			Input Power Requirements: 230 Volts +/- 10% , 50 Hz.	No Change
			Electrical Power Consumption Should Not Exceed 3000 W.	No Change

			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabl Norms). To Submit Sops For Pms At The Time Of Installation/Commissioning.	Deleted
			Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning ; If Desired By The End User.	No Change
			Please Specify Pre Installation Requirements.	Deleted
			Please Specify Footprint Size & Weight.	Deleted
			Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	Deleted
			Please Specify Power Consumption.	Deleted
			Should Be CE/USFDA product	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty : 2 Years	warranty 3 year
23	Centrifuge	1	Max. Achievable Speed: Not Less Than 20000 Rpm And 32000 X G	No Change
			Noise Level: <60Db	No Change
			It Should Be With Brushless, Maintenance Free Drive Motor.	No Change

		Microprocessor Controlled Operation With Digital/Lcd Display For Speed, Temperature And Time.	No Change
		Should Have Ability To Spin For A Time Of 1Min To 99 Min.	No Change
		Should Have Viewing Port In The Lid.	No Change
		Should Have Powered Lid Locking.	No Change
		Should Have Quick And Easy Operation With The Keypad	No Change
		Should Be Able To Store 4 Or More Programs.	No Change
		Rotors And Lids Should Be Autocleavable At 121°C For 20 Mins.	No Change
		Should Have Emergency Lid Lock Release Function.	No Change
		Should Provide Lid Dropping Protection.	No Change
		"Door Interlock" Safety Feature Is Essential.	No Change
		It Should Be Possible To Set Rpm As Well As Rcf.	No Change
		Should Have Imbalance Switch-Off Function.	No Change
		Automatic Rotor Recognition	No Change
		Parameters/ Programs To Be Changed With The Help Of Keypad.	No Change
		Easy Entry Of Parameters	No Change
		Rotor Should Be Aerosol Tight.	No Change
		Complete Rotor Package Should Be Supplied, Inclusive Of Rotor, Lid, Rotor Fixing Key, Grease For Threads, Etc. should be provide angular rotor for 2ml tube swing out rotor for 5,10,15,50 ml tube	Need rotor head of 24*15ml(with RPM of 4000 or More)
		Power Supply- 100-240Vac, 50-60Hz.	No Change
		Should meet ISO 13485 certification for quality standards	No Change
		The Unit Should Comply With International Standard Like CE or USFDA	No Change
		Should Be Able To Withstand Temperature And Humidity	No Change

			Fluctuations In Case Of Failure Of Air.	
			Should Perform Calibration, Validation (Once) & Preventive Maintenance (Twice) Of The Equipment Yearly During Warranty/ Service Period. Testing & Measuring Equipment Used Should Be Traceable To SI Units Through National /International Standards (As Per NABL Norms).	No Change
			Performance Certificates Of IQ, OQ, PQ Tests To Be Submitted At The Time Of Installation/Commissioning.	No Change
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	No Change
			Max. Achievable Speed: Not Less Than 20000 Rpm And 32000 X G	No Change
			warranty- 2 year	No Change
			Noise Level: <60Db	No Change
24	Cytocentrifuge	1	The Equipment Should Be A Bench-Top Centrifuge For Cytology Specimens And Should Be Capable Of Thin-Layer Cell Preparation For Retrieving Cells From Various Body Fluids And Preserving Their Morphology.	No Change
			Should Be Capable Of Processing Up To 12 Specimens At One Time.	No Change
			Should Be Provided With Standard Accessories Such As Cytoclips To Hold Reusable Sample Chamber Against Microscope Slides For Preparation.	No Change
			Clips Should Be Autoclavable And Reusable Of SS.	No Change
			Should Be Resistant To Fluid Spillage On The Electronic Components With Capped Disposable Sample Compartments/ Chambers For Elimination Of Aerosol.	No Change
			Safety Alarms For Any Abnormal Operation Should Be Available.	No Change

			Microprocessor Based Controls And Programming For Time And Speed.	No Change
			Should Be Compliant With International Standards For Electrical Equipment Requirements For Laboratory Use.	No Change
			Power Input: Voltage Requirement: 220 V, 50Hz	No Change
			Rpm Should Be 200 To 2,000 Atleast.	No Change
			Should Perform Yearly Calibration/Validation And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabl Norms). To Submit Sops For Pms At The Time Of Installation/Commissioning.	Deleted
			Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning.	No Change
			Please Specify Pre Installation Requirements.	Deleted
			Please Specify Footprint Size & Weight.	Deleted
			Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	Deleted
			Please Specify Power Consumption.	Deleted
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted

			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty : 2 Years	warranty 3 years
25	Refrigerator 200 to 300 litre (Domestic)	2	Capacity Of Storage: 200 Litres to 300 Litres	400 ltr.
			Temp Range-Should Have Adjustable Temperature Control Range From +1 Degree To +8 Degree C, Factory Preset At 4 Degree C.	No Change
			Refrigerator System-	No Change
			A)The System Should Have High Density CFC –Free Urethane Foam Insulation To Protect Cabinet From Ambient Temperature Fluctuation.	No Change
			B)The System Should Have Positive, Forced, Air Circulation To Maintain Temperature Uniformity At All Shelf Levels, With Quick Recovery +/- 1 Degree C.	No Change
			C)The System Should Have Sensors For Activating Automatic Defrost Cycle To Minimize The Frost Build Up.	No Change
			D)The System Should Have Automatic Condensate Removal With No Requirement For Separate Drainage Lines.	No Change
			Internal Construction Should Be Made Up Of High Grade Stainless Steel (Min 22 G) External Construction Corrosion Resistant Sheet At Least 1 Mm Thickness.	No Change
			Internal Temp Control	No Change
			A)System Should Have Temperature Control Range From +1 Degree C To +8 Degree C.	No Change
			B)Temperature Control Resolution Should Be Better Than 0.1 Degree C.	No Change
			C)Cooling Down Time Of Max Of 150 Min On Half Load	No Change
			External Ambient Temp Should Perform In Ambient Temp Up To +43 Degree C.	No Change

			Door System Should Lockable Double Glass Doors For Better Safety	No Change
			Safety System:	No Change
			A. System Should Have Large And Clear Digital Displays For The Set/Run Parameters.	No Change
			B. The System Should Have Key Operated Set Point For The Added Security	No Change
			Alarms.	No Change
			System Should Have Audible/Visual Warnings For Over-Temperature Under Temperature And Power Failure With Visual Status Reports On Critical Functions.	No Change
			Should Have Adjustments For Uneven Bases. The Adjustments Should Be Easy To Use Like Rotating A Screw At The Legs In The Base.	No Change
			Scratch Resistant Internal Lining Of The Cabinet (Stainless Steel Or Aluminium)	No Change
			The Unit Shall Be Capable Of Being Stored Continuously In Ambient Temperature Of 0 -50 Deg C And Relative Humidity Of 15-90%	No Change
			The Unit Shall Be Capable Of Operating Continuously In Ambient Temperature Of 10 - 40Deg C And Relative Humidity Of 15-90%	No Change
			Power Input To Be 220-240Vac, 50Hz Fitted With Indian Plug	No Change
			Voltage Corrector/Stabilizer Of Appropriate Ratings Meeting Isi Specifications.(Input 160-260 V And Output 220-240 V And 50 Hz)	No Change
			Should Be CE/ USFDA approved product	Equipment should be 4star/5star
			Manufacturer/Supplier Should Have ISO Certification For Quality Standards.	No Change

			Electrical Safety Conforms To Standards For Electrical Safety IEC standard	No Change
			Certificate Of Calibration And Inspection.	Deleted
			Warranty- 2 Years	warranty 3 year
26	Slide fling cabinate	2	Should Have Convenient Storage And Retrieval Of Glass Slides.	No Change
			Should Have Constructed From Steel Material With High Durability.	No Change
			Should Be Stackable.	No Change
			Each Drawer Should Have A Back Stop	No Change
			Capacity Should Be 90,000 Slides In One Cabinet Having Multiple Drawer Filing Section	No Change
			Width Of Each Drawer/ Compartment Should Be 1 Inch(Minimum)	No Change
			Should Have Writable Socket/ Stripes On The Drawer For Labeling	No Change
			Drawers Of The Cabinet Should Be Lockable For Protection And Security With Key.	No Change
			Please Specify Footprint Size & Its Weight	Deleted
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty: 1 Years	warranty 3 year
			Additional Point	Manufacturer should have ISO 13485
27	Block filing cabinate	2	Should Have Convenient Storage And Retrieval Of Paraffin Blocks	No Change
			Should Be Constructed From Stainless Steel With High Durability	No Change
			Should Be Stackable	No Change
			Each Drawer Should Have A Back Stop	No Change

			Each Cabinet Should Have 7 Drawers and Each Drawer Should Have Capacity Of 700 Blocks, Likewise Each Cabinet Should Have 7 Drawers Accomodating 4900 Blocks Of The Block.	No Change
			Width Of Each Drawer/ Compartment Should Be 1 Inch	No Change
			Should Have Writable Socket/Stripes On Drawer For Labelling.	No Change
			Drawers Of The Cabinet Should Be Lockable For Protection and Security With 1	No Change
			Master Key For All 35 Cabinets	No Change
			Please Specify Foot Print And Its Weight.	Deleted
			Multiple Models: If More Than One Model Is Offered, Then They Are To Be	No Change
			Separately Filled And Submitted According To The Given Format.	No Change
			Warranty- 1 Year	warranty 3 year
			Additional Point	Manufacturer should have ISO 13485
28	Firesafetey cabinate	1	technical specifications not required	Deleted
29	PH meter	1	Bench top PH meter with two electrode and buffer.	No Change
			One electrode for measuring pH for reagents.	No Change
			One electrode for measuring PH for QC sample(min volume 500 microlitre to 1000 microlitre).	No Change
			3 point calibration is required(pH 4.0, 7.0 & 10.00)	No Change
			pH range from 0-14.	No Change
			Temp. range 0°C to 100°C	No Change
			Temp. display on screen as well as Ph reading.	No Change
			Calibration certificate to be provided.	No Change
			Automated Ph meter preferable.	No Change

			Should perform yearly calibration and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable to SI units through National/international standards.	Deleted
			Performance certificate of IQ, OQ, PQ tests to be submitted at the time of installation/ commissioning, if desired by the end user	No Change
			Please specify footprint size & weight.	Deleted
			Predispatch inspection at factory will be required if desired by authorities.	Deleted
			Please visit the site to check whether quoted model can be accommodated in the available space.	Deleted
			Should Be CE or USFDA Approved Product.	USFDA/EU-CE (Issued by notified body)
			Please specify power consumption.	Deleted
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			warranty- 2 year	warranty 3 year
30	Tissue floatation bath	1	Should Have A Rectangular Design With Atleast One Side Broad Enough To Keep The Glass Slide.	No Change
			Should Have A Capacity Of Minimum 2 Litres.	No Change
			Jet Black Inner Surface Of The Chamber With Removable Glass Tray And Illumination Light Source Which Provides Better Contrast To Identify Sections And Easy To Clean Surface.	No Change

		Electronic Temperature Control For Exact Temperature Regulation.	No Change
		Temperature Indication By Digital Display.	No Change
		Temperature Range : +30 To +80 Deg C.	No Change
		Temperature Should Be Adjustable By Membrane Keypad Which Should Be Less Sensitive To Water Spillage, Paraffin Contamination.	No Change
		Should Be Supplied With 2 Nos. Of Glass Trays As Standard.	No Change
		Should Have Place For Slide Draining / Drying.	No Change
		Should Have Illumination From The Side And Provide Exceptional Viewing Of The Tissue Sections.	No Change
		Should Perform Yearly Calibration And Preventive Maintenance (2 Nos.) During Warranty & If Entered Into Amc (Includes Unlimited Breakdown Calls) / Cmc (Which Will Include Spares Replacement, Consumable Spares, Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National /International Standards (As Per Nabl Norms). To Submit Sops For Pms At The Time Of Installation / Commissioning.	Deleted
		Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning ; If Desired By The End User	No Change
		Specify Pre Installation Requirements.	Electrical power requirements 220-230 Vac, 50-60Hz
		Specify Footprint Size & Its Weight.	Deleted
		Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	Deleted
		Specify Power Consumption.	Deleted

			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty : 2 Years	warranty 3 year
31	Cooling plate	1	Should Be An Independent Cooling Plate With Temperature Range From Ambient To -10	No Change
			Should Be Able To Use As Independent Or With Tissue Embedding Station	No Change
			Should Have Digital Display Of Temperature	No Change
			Capacity To Keep At Least 100 Blocks At A Time.	No Change
			It Should Have Environment Friendly Refrigerant. Outer Body Must Be Made Up Of Ss304 Or Powder Coated To Prevent Rusting.	No Change
			Please Specify Footprint Size & Its Weight	No Change
			Power Supply- 100-240Vac, 50-60Hz.	No Change
			The Unit Should Comply With International Standard Like CE or USFDA	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Should Be Able To Withstand Temperature And Humidity Fluctuations In Case Of Failure Of Air.	No Change
			Should Perform Calibration, Validation(Once) & Preventive Maintenance (Twice) Of The Equipment Yearly During Warranty/ Service Period. Testing & Measuring Equipment Used	Deleted

			Should Be Traceable To Si Units Through National /International Standards (As Per Nabl Norms).	
			Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning.	No Change
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Please Visit The Site To Check If The Quoted Model Can Be Accomodated In The Available Space.	Deleted
			Warranty - 2 Years	warranty 3 year
32	Magnatic stirrer	1	Table Top Model, Ergonomic, Light Weight.	No Change
			Broad Speed Range.	No Change
			Silent, Durable Motor.	No Change
			Mixing Speed Control Range Rpm 100 To 1250.	No Change
			Maximum Stirring Volume (H ₂ O) In Litres-10.	No Change
			Temperature Setting Range : 30°C To 330°C	No Change
			Temperature Uniformity: ±3°C	No Change
			Working Plate Heating Time Till 11 Mins.	No Change
			Maximum Stirring Liquid Viscosity Mpa.S- Upto 1170	No Change
			Plate Diameter- 160Mm.	No Change
			Plate Material- Aluminium Alloy, Stainless Steel.	No Change
			Retort Stand Height- 320Mm.	No Change
			Length Of Magnetic Stirring Element- 20-70 Mm.	No Change
			Heating Power- 550W.	No Change
			External Power Supply Input- 120-230V Ac, 50-60 Hz.	No Change
			Nominal Operating Voltage- 120-230V, 50-60Hz Heating.	No Change

			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabl Norms). To Submit Sops For Pms At The Time Of Installation/Commissioning.	Deleted
			Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning .	No Change
			Specify Pre Installation Requirements.	Deleted
			Specify Footprint Size & Weight.	Deleted
			Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	Deleted
			Specify Power Consumption.	Electrical power requirements 220-230 Vac, 50-60Hz
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	No Change
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	No Change
			Warranty : 2 Years	warranty 3 year
33	Bone Saw Electrical	1	Should Be Completely Made Up Of Heavy Duty Stainless Steel Of Ss 304	No Change
			Should Be Suitable For Cutting Of All Types Of Bones	No Change

		Cutting Speed Of Minimum 10Mm Per Second Or More	No Change
		Cut Height-250 To 300 Mm Or Better	No Change
		Cut Deepness-Minimum 160Mm Or Better	No Change
		Bone Pusher Portioning Plate And Blade Cover In Stainless Steel	No Change
		Smooth Surfaces Without Dirt Traps	No Change
		Detachable Waste Collecting Pan	No Change
		Removable Top Pulley And Blade Scraper	No Change
		High Speed Self Ventilating Motor Housing Of Ss For Prolonged Operation	No Change
		Safety Device With Start, Emergency Stop And Safety Limit Switch And Low Tension Controls	No Change
		Blade Tensioning Automatic Adjustments	No Change
		Footprint Should Not Be More Than 22" * 23" (W * D)	Deleted
		Should Be Ce/Icmed/Fda/Bis Approved	Deleted
		Should Perform Yearly Calibration/Validation And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabl Norms). To Submit Sops For Pms At The Time Of Installation/Commissioning.	Deleted
		Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning.	No Change
		Please Specify Pre Installation Requirements.	Deleted

			Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	Deleted
			Please Specify Power Consumption.	Electrical power requirements 220-230 Vac, 50-60Hz
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty- 2 Years	Warranty 3 year
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
34	Bone decalcifier	1	Should have body made of Acid resistant material construction.	No Change
			Should have rotor Basket of atleast 20-30 cassettes capacity	No Change
			Should have beaker capacity of minimum 2 litres or more decalcifier solution.	No Change
			Temperature range room temp to 40 deg or more	No Change
			Should have electric motor for agitation by rotational movement.	No Change
			Integrated Digital temperature controller.	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
			Should perform yearly calibration and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable	Deleted

			to SI units through National/international standards(As per NABL norms). To submit SOPs for PMS at the time of installation/commissioning.	
			Performance certificates of IQ,OQ,PQ tests to be submitted at the time of installation/commissioning; if desired by the end user.	No Change
			Please submit the technical data sheet along with the brochure as a tender document with reference to the quoted make & model.	Deleted
			Specify list & cost of consumables/consumable Spares(i.e.spares need to be replaced at regular intervals, maybe quarterly/half yearly/yearly such as annual maintenance kit etc.) if any.	Deleted
			Specify pre installation requirements [electrical, HVAC, Compressed air (please specify required air pressure), water requirement (RO/DI/Distilled water with its pressure, flow rate per hour) ; if any of the above is essential]	No Change
			Specify footprint size & weight.	Deleted
			Demo of the quoted model , will be required if so desired by the user, after the opening of the technical bid and prior to opening of financial bid. This is for technical evaluation.	Deleted
			Predispatch inspection at factory will be required if desired by authorities.	Deleted
			Visit the site to check whether quoted model can be accomodated in the available space.	Deleted
			Specify power consumption.	System should be operative, single phase, 220 Vol AC +/- 10%, 50 Hz
			Local Service Support: Should have local office and service	Deleted

			support/service engineer for attending the breakdown calls.	
			Response Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty : 2 years	warranty 3 year
35	Autostainer	1	Should Be A High Throughput Stainer	No Change
			Slide Rack Capacity Should Be 20 Or More.	No Change
			Should Have Various Staining Protocols.	No Change
			Should Have Minimum 20 Reagent Stations Including Minimum 3 Water Stations.	No Change
			Continuous And Slow Agitation Facility Should Be Available.	No Change
			Gentle Vibration To Slide Rack During Lifting To Reduce Any Carry Over Contamination.	No Change
			Minimum 3 Programs Should Be Available.	No Change
			Should Have Fume Hood With Filter To Remove Hazardous Fumes.	No Change
			Timer For Adjusting Time For Each Station.	No Change
			Alarm System Should Be Available For Completion Of Each Program.	No Change
			Warning Alarm In Case Of Any Error During Operation.	No Change
			Power Supply- 100-240Vac, 50-60Hz	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European CE(Issued by notified body)/ISO 13485 certified
			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing	Deleted

			& Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards (As Per Nabl Norms). To Submit Sops For Pms At The Time Of Installation / Commissioning.	
			Should Be Supplied With Standard Make Ups With Atleast 30 Mins Backup.	No Change
			Performance Certificates Of Iq,Oq,Pq Tests To Be Submitted At The Time Of Installation/Commissioning;If Desired The End User.	No Change
			Specify Pre Installation Requirements.	deleted
			Specify Footprint Size & Weight	deleted
			Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	deleted
			Specify Power Consumption.	Should be operative,single phase,220Vac+-10%,50Hz
			Local Service Support : Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	deleted
			Response Time : Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	deleted
			Warranty : 2 Years	warrenty 3 years
36	Grossing table	1	should have Right and left work stations	No Change
			Grid Plates should be provided	No Change
			working area should have drainage	No Change
			CENTRAL SINK	No Change
			should have Hydro-aspirator with reverse flow	No Change
			should have hot/ cold water fixtures	No Change
			fixtures should have wrist blade handles	No Change
			fixtures should have gooseneck faucet	No Change
			sink rinse with hose fittings and hose hanger should be provided	No Change

			vacuum breaker should be provided	No Change
			INSTRUMENT	No Change
			DRAWER	No Change
			under both workstations	No Change
			FLUORESCENT	No Change
			LIGHT	No Change
			over both workstations	No Change
			ELECTRICAL	No Change
			GFCI type 220/240 Volts AC 50 Hz	No Change
			DISPOSER UNIT	No Change
			should have Solenoid valve, Vacuum breaker, Water tight on/off switch, internal overload protector, motor ½ to ¾ HP	No Change
			FABRICATION	No Change
			Stainless Steel Type 304 with satin finish	No Change
			DIMENSIONS	No Change
			Length – 280-290 cm	No Change
			Width – 65-75 cm	No Change
			Height- 180-190 cm	No Change
			Power input to be 220-240VAC, 50Hz fitted with Indian plug	No Change
			Should be FDA, CE, UL or BIS approved product	No Change
			Comprehensive training for lab staff and support services till familiarity with the system	No Change
			Warranty 2 year	warranty 3 year
			Additional Point	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
C	Sub total			
IV	Image Diagnostics			
37	X-ray 300mA	1	X-Ray Generator :	No Change
			The high power R/F system should have high frequency (50000 pulses or more) inverter type generator.	No Change
				No Change

			32kW High voltage generator with inverter frequency and Maximum output of 32kW.	30kW or more High voltage generator with inverter frequency and Maximum output of 30kW or more.
			Radiographic kV range : 40-125 kV.	No Change
			Maximum mA : 300mA or higher.	No Change
			Radiographic exposure time range : 5msec to 1 Sec.	No Change
			LED readout for exposure parameter display.	No Change
			Microprocessor controlled with automatic exposure control.	No Change
			Two point radiographic technique – Selection of kV and mAs only.	No Change
			Automatic setting of optimal digital radiography parameters from fluoroscopy parameters (kV, mAs).	Deleted
			Last technique parameters re-call.	Anatomical programming up to 216 pre-programmed functions in which automatic selection of Technical Factors is done according to the Body part Selection for healthy and wider participation
			Radiographic table.	No Change
			5 Position manual operation patient table.	No Change
			Table tilt : (+) 90 degree – (-) 12 degree.	No Change
			Cassette / Film size : 8 × 10 inch, 14 × 17 inch, 12 × 15 inch.	No Change
			X-Ray Grid : 8:1, 100 lines/cm.	X-Ray Grid : 8:1, 100 lines/inch
			Should be supplied with Foot switch, foot rest, hand grips, Collimator.	Deleted
			Dual slot collimator.	No Change
			It should have a Bucky system which can accommodate standard radiographic cassettes.	No Change

		X-Ray Tube.	No Change
		Min 115 KHU – BHEL / Toshiba / Varian Tube.	No Change
		High speed rotating anode tube of 2800 rpm or better.	High Speed rotating anode tube of 2700rpm or better for healthy and wider participation.
		Short term rating – 20 kW / 40kW or better.	No Change
		HT Cable pair 10m or more.	HT Cable pair 8m or more.
		Accessories :	No Change
		Lead aprons, thyroid & pelvic guards with each unit.	No Change
		Chest stand should be provided to do radiography without grid.	Both stand required
		The unit should be provided with vertical Bucky.	No Change
		It should be provided with a removable GRID of 8:1 ratio (minimum) & focus distance of 180cm.	No Change
		Each unit to be provided with dark room tanks (4Nos), Safe light (One), Dryer (One), Hangers for X-ray films.	No Change
		Two sets of grid based high speed cassettes of 12" × 15", 10" × 12", 8" × 10" with one set of spare screens of each supplied cassette.	No Change
		Lead alphabets & numbers 3 sets.	No Change
		Lead partition 6" × 3" with lead glass window mounted on wheels.	No Change
		Power Requirements.	No Change
		3 Phase AC Supply, 50 Hz, Line Resistance $\leq 0.3 \Omega$.	No Change
		Power Consumption not more than 25 kVA.	Power Consumption not more than 45 kVA.
		AERB type approval is mandatory.	No Change
		The unit should be CE Certified (Notified Body) or USFDA Approved.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
		Dual focal spot.	No Change

			warranty- 2 year	No Change
			Point to be Added	Deleted
38	Portable USG	1	Types Of Probes & Features	No Change
			Applications-Abdomen,Abdominal Vascular,Cardiac,Vascular Access And Lung	No Change
			High Density More Than 125 Element Probes In Convex,Tv & Linear	No Change
			Flat Linear Array	No Change
			Convex Array	No Change
			Transducer Temp-Detection	No Change
			Biplane Trans Rectal	No Change
			Biopsy Guide	No Change
			Scanning Depth	No Change
			Frame Per Second In B Mode	No Change
			Frame Per Second In Colour Mode	No Change
			Scan Modes	No Change
			Dual Imaging	No Change
			Quad Imaging	No Change
			Steer M Mode	No Change
			M Mode Colour	No Change
			Power Doppler	No Change
			Directional Power Doppler	No Change
			Pw	No Change
			Sample Volume	No Change
			Cw	No Change
			Hprf	No Change
			Tdi-Tissue Doppler Imaging	No Change
			Surface 3D Rendering	No Change
			Digital Beam Forming	No Change
			B-Steer	No Change
			Thi	No Change
			Duplex	No Change
			Triplex	No Change
			Speckle Reduction Imaging	No Change
			Compounding Imaging	No Change
			Imt-Internal Median Thickness Sw	No Change
			Autotrace & Measurement	No Change
			Panoramic Imaging	No Change
			Trapezoidal Imaging	No Change
			Gray Scale	No Change

			Real-Time And Frozen Zoom	No Change
			Dynamic Range	No Change
			Gain	No Change
			Imaging Display And Processing	No Change
			Monitor Type	No Change
			Monitor Size,Inch	No Change
			Backlit Keyboard	No Change
			Discom 3 Compliant	No Change
			Adjustable Transmin Focus	No Change
			Automated B-Mode (2-D) Image	No Change
			Grayscale Levels	No Change
			Image Magnification (Zoom)	No Change
			Real Time Image	No Change
			Frozen Image	No Change
			Transducer Socket	No Change
			Gel Warmer	No Change
			Dvd/Cd Writer	No Change
			Flash Memory	No Change
			Usb Connector	No Change
			"Facility For High Definition Digital Acquisition,Review And Editing Pf Complete Patient Studies.	No Change
			Digital Storage Hard Drive Size	No Change
			Weight ,Kg (Lb) Without Trolley	No Change
			Type Of Processor	No Change
			Discom Interfacebility Dicom To Pacs	No Change
			Interfacebility Dicom To Ris	No Change
			Cart/Trolley From Oem With Gel & Transducer Holder	No Change
			Probe To Be Supplied With Unit As Follows-1 Cardiac Probe (1-5 Mhz With Scan Depth Upto 30 Cm And Capable Of Full Transthoracic Echo Imaging Including Tdi, Color And Spectral Doppler)2.Linear Probe (5-10 Mhz Scan Depth Upto 10 Cm)3.Linear Probe(6-13 Mhz For Vascular Access) With Small Profile And Capable Of Supporting Vascular Access/Lung Application 4.Convex Probe(205 Mhz For Abdominal,Deep Tissue,Biopsy Etc	No Change

			With Scanning Depth Upto 30 Cms)	
			Usg System Supplied Should Be Upgradable To Next Generation System On Site	No Change
			Power Requirments	Electrical power requirements 220-230 Vac, 50-60Hz
			Power Input, Vac	Deleted
			Resettable Over Current Breaker Shall Be Fitted For Protection	Deleted
			Power Backup	Deleted
			Backup Time In Minuites	should have 30 minuites
			Miscellaneous Parameters	No Change
			User/Technical/Maintenance Manuals To Be Supplied In English In Hard And Soft Copy	No Change
			Demonstration Of Equipment And Training To Be Provided After Completing Supplies & Installation Before Acceptance	No Change
			The Principal Manufacturer Must Have Direct Presence/Approved Service Center In India	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
			Copies Of Reports And Certifications To Be Furnished To Buyer On Demand At Time Of Supplies	Deleted
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted

			Warranty - 2 Years	Warranty 3 year
39	Mammaogram	1	Description Of Function	No Change
			Mammography System To Replace Conventional Film/Screen Based Mammography Studies With Digital Images Instant Reviewing And Analysis Capability With Stereotactic Biopsy Facility .	No Change
			Operational Requirements	No Change
			Full Digital Mammography System Consisting Of Exposure Stand With Attached Swivel System, Separate Console With Radiation Shield, Automatic Exposure Control And Mammography X-Ray Tube.	Full Digital Mammography System Consisting Of Exposure Stand With/ Iso centric "c" Attached Swivel System, Separate Console With Radiation Shield, Automatic Exposure Control And Mammography X-Ray Tube.
			An Integrated Direct-To-Digital Flat Detector Based On Amaorphous Silicon Technology.	No Change
			A Separate Workstation For Image Positioning And Patient Demographic Data Is Required.	No Change
			The Workstation Should Be Able To Send,Receive And Print According To Dicom Standards.	No Change
			The Workstation Should Also Be Able To Obtain Dicom Modality, Work List From Connected Information System And Send Information About Performed Procedure To The Connected Information System	No Change
			Read And Write In Cd/Dvd For Data Storage And Review.	No Change
			Technical Specifications	No Change
			Mammography System	No Change
			The System Should Cocnsist Of A Tube Head And Detector Assemblythat Has Isocentric Rotation For Every Positioning.	No Change

			The Iscentric Movements Should Be Motorized.The Patient Compression Deviceshould Have Automatic Multispeed Variable Compression System Which Senses The Breast Density And Adjust The .Compression Force..	The Iscentric Movements Should Be Motorized.The Patient Compression Device should Have Automatic/ Motorized Multispeed / dual speed Variable Compression System Which Senses The Breast Density And Adjust The .Compression Force..
			The Maximum Compression Thickness Should Be 18 Cm Or More. The Patient Table Should Have Motorised Grid Movement.	No Change
			Magnification Devices Of Ratio 1.5 And 1.8 Should Offered.	No Change
			Digital Display Of Compression Force And Compression Thickness Should Be Available.	No Change
			X-Ray Generator And Tube	No Change
			The X-Ray Generator Should Be High Frequency With The Following Parameters:	No Change
			Kv Range: At Least 25-35 Kv In Steps Of 1 Kv	No Change
			Mas Range: 0-750 Mas Or More	No changed
			Exposure Time: 0-700Ms	No changed
			Maximum Ma: 180Ma Or More	No Change
			X-Ray Tube Unit:	No Change
			Dual Focus Rotating Anode Tube With The Following Parameters:	No Change
			Focal Spot Size: 0.1Mm And 0.3Mm	No Change
			Anode Heat Storage: 150 Khu Or More	No Change
			Tube Heat Storage: 1.3Mhu Or More	No Change
			Anode Material: Molybdenum And Tungsten Preferred	No Change
			Please Mention The Filter Material Used In The Tube	No Change
			Flat Panel Detector:	No Change

			Type Of Detector: Amorphour Selenium Preferred	Type Of Detector: Amorphour Selenium / amorphour silicon Preferred
			Detector Size: 24Cmx29Cm Or More With Two Image Formats	No changed
			Pixel Size: 70µ Or Less	No changed
			Image Matrix In Pixels: Large Size- 3Kx 4K Or More Small Size: 2Kx 3K Or More	No changed
			Workstation For Image Acquisition:	No Change
			The Workstation Should Enable Immediate Image Display For General Survey For Patient Positioning. It Should Be Able To Store Around 10000 Images the Networking Should On Tcpip Protocol.	No Change
			The Following Image Processing Should Be Possible On The Workstation:	No Change
			Image Display:	No Change
			Freely Selectable Screen Layout	No Change
			Windows Settings (Contrast And Brightness Setting)	No Change
			Magnification, Stepped And Dynamic Zoom	No changed
			Image Inversion (Black/White)	No Change
			Annotation:	No Change
			Left/Right Marking	No Change
			Text Additions	No Change
			Lines	No Change

			Rectangles And Circles	No Change
			Measurements:	No Change
			Distance	No Change
			Angle	No Change
			Density	No Change
			Image Evaluation:	No Change
			Contrast Enhancement(With Table)	No Change
			Display Of Histogram	No Change
			Length Measurements	No Change
			Before /After Comparison	No Change
			Filter	No Change
			Administration:	No Change
			The Demographic Patient Data Should Be Retrieved Directly From A His/Ris System	No Change
			The Demographic Patient Data Can Be Entered Manually	No Change
			Retrieval Of Images From Cd, Dvd Or Pacs	No Change
			Printing Of Images On Dicom – Compatible Printers	No Change
			The Workstation Should Be Fully Dicom Compatible	No Change
			High Contrast 1Kx 1K Tft Monitor Should Be Provided With Workstation.	No Change
			Biopsy:	No Change
			Please Quote For Stereo Tactic Biopsy System Which Is Fully Compatible With Ffdm.	No Change
			A High Resolution Image Of 20 1P/Mm Should Be Possible With The Stereo Tactic Biopsy System.	No Change
			System Configuration Accessories, Spares And Consumables	No Change
			Mainframe System - 01	No Change
			X-Ray Tube Unit& Tube - 01	No Change
			Flat Panel Detector - 01	No Change
			Image Acquisition Workstation-01	No Change
			Stereotactic Biopsy System - 01	No Change
			Dicom Printer	No Change
			Archiving System - 01	No Change
			Environmental Factors	No Change

			The Unit Shall Be Capable Of Operating Continuously In Ambient Temperature Of 300 C And Relative Humidity Of 80%	The Unit Shall Be Capable Of Operating Continuously In Ambient Temperature Of 10C to 35C And Relative Humidity Of 80%
			Proper X-Ray Shielding Should Be Provided For The Main Equipment.	No Change
			Pre Requisites Should Be Clearly Spelt Out In Terms Of Mammography Room Requirements.	No Change
			Power Supply	No Change
			Suitable Power Input To Be 220-240Vac, 50Hz Or 440 V 3 Phase, Fitted With Indian Plug	No Change
			Resettable Overcurrent Breaker Shall Be Fitted For Protection	No Change
			Spike Protector Of Appropriate Rating Should Be Provided	No Change
			Ups/Cvt Of Suitable Rating Conforming To Is-302 Shall Be Supplied.	Deleted
			Standards And Safety	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			Electrical Safety Conforms To Standards For Electrical Safety Iec-60601 / Is-13450	No Change
			Safety Aspects Of Radiation Dosage Leakage Should Be Spelt Out	No Change
			Phantom For Calibration Should Be Provided.	No Change
			Warranty 3Years	No Change
			Should Comply With Aerb Guidelines For Radiation Leakage	No Change
			Documentation	No Change
			User Manual In English	No Change
			Service Manual In English	No Change

			List Of Important Spare Parts And Accessories With Their Part Number And Costing.	No Change
			Certificate Of Calibration And Inspection From Factory.	Deleted
			Log Book With Instruction For Daily, Weekly, Monthly And Quarterly Maintenance Checklist.	Deleted
			The Job Description Of The Hospital Technician And Company Service Engineer Should Be Clearly Spelt Out	No Change
D	Sub total			No Change
V	Major OT (3)			No Change
40	Aneasthesia workstaion	2	Durable With A Sturdy Kit.	No Change
			Antistatic Wheels With Brakes	No Change
			Shelves For Monitors	No Change
			The Anesthesia Workstation Should Have In Built Ventilator With Min. 6" Tft Display.	The Anesthesia Workstation Should Have In Built Ventilator With Min. 7" Tft Display.
			Gas Delivery System:	No Change
			Gas Specific High Pressure Blocks.	No Change
			Non Interchangeable Gas Supply Inlet For Cylinders With Step Down Regulators	No Change
			Pressure Reducing Valves.	No Change
			Color Coded Indexed Gas Supply Hoses.	No Change
			Provision Of Additional O2 Port For Powering A Ventury Device	No Change
			Provision For Manual As Well As Mechanical Ventilation.	No Change
			Provision For Both Open As Well As Closed Circuit.	No Change
			Provision For Attachement Of 2 Cylinders One Of O2 And N2O Cylinders.	No Change
			Provision To Monitor The Expired Gas Volume, O2 Monitor Sensor Probe Along With All The Tubings And Connections With Alarms.	No Change
			Ability To Monitor The Expired Tv/Minute Volume,Respiratoy Rate And Fio2	No Change

			Quick Change Over Form Open Circuit To Closed Cicuit And Vice Versa.	No Change
			Ability To Bypass The Soda Lime Canister And Convert To An Open Circuit.	No Change
			Provision For Emergency Flow Of 100% O2 Under High Pressure Through Both Circuits.	No Change
			Audible And Visual Alarms For Airway Pressure, Disconnection, Oxygen Failure.	No Change
			Flow Meters:	No Change
			For Oxygen, Nitrous Oxide And Air With Safety Feature	No Change
			Oxygen Failure Alarm, Audible And Visible	No Change
			Anti-Hypoxia Safety Mechanism To Ensure That O2 Concentration Doesn'T Fall Below Minimum 23% At Any Time.	Anti-Hypoxia Safety Mechanism To Ensure That O2 Concentration Doesn'T Fall Below Minimum 25% At Any Time.
			Vaporisers : 2 Nos With Unit	Deleted
			Should Have Provision To Connect Two Selectatec Mount Vaporisers.	No Change
			Vaporiser Safety Lock.	No Change
			Vendor Should Provide Vaporisers- 2Nos (Isoflurane- 1No, Sevoflurane- 1 No)	No Change
			Ventilators:	No Change
			Ventilators For Controlled Ventilation Of Adults As Well As Children	No Change
			Volume Contorlled/Pressure Controlled/ Pressure Support.	No Change
			Inbuilt Peep Administration.	No Change
			Provision For Manual And Mechanical Ventilation	No Change
			Monitoring For Airway Prsasure-Peak And Peep	No Change
			Provision To Monitor Expired Gas Volume, O2 Monitor Sensor Probe Along With All The Tubings And Connections With Alarms.	No Change

			Ability To Monitor The Expired Tv/Minute Volume, Tidal Volume, Respiratory Rate And Fio2	No Change
			Tidal Volume Delivery Should Be In The Range From 30ml(Or Less) To 1400 ml (Or More)	Tidal Volume should range from 20ml to 1500ml
			Respiration Rate: 4-60 Bpm (Or More)	No Change
			Peep Setting: Upto 20 cmh20	No Change
			Peak Pressure Setting Upto 50cmh20	No Change
			Breathing System:	No Change
			Should Have Integrated Co2 Absorber With Easy Removal And Refitting During The Operation.	No Change
			Should Be Autoclavable At 134 Deg C.	No Change
			Should Have Apl Valve, Inspiratory Valve, Expiratory Valve.	No Change
			Should Have Mechanism To Prevent Moisture Condensation (Eg. Heating Circuit Or Equivalent)	No Change
			Should Work On Mains Power And With Battery Backup Of 45 Minutes Minimum With Fully Charged Batteries	No Change
			Accessories	No Change
			Should Provide All Standard Accessories	No Change
			Should Provide Co2 Absorber Canister - 2 Nos.	No Change
			Open And Closed Circuit For Both Adult And Pediatric	No Change
			Adult Breathing Circuit- 1 Nos.	No Change
			Pediatric Breathing Circuit -3 Nos.	No Change
			Face Mask Pediatric Complete Set- 3 Nos.	No Change
			Face Mask Adult Size 3 & 4- One Nos.	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved

			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabl Norms).	Deleted
			Please Specify List Of Consumables/Consumable Spares(I.E.Spares Need To Be Replaced At Regular Intervals, Maybe Quarterly/Half Yearly/Yearly Such As Annual Maintenance Kit Etc.) If Any.	Deleted
			Please Specify Pre Installation Requirements (Electrical, Hvac Etc.)	Deleted
			Please Specify Footprint Size & Weight.	Deleted
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty : 2 Years	warranty 3 year
			Additional Point	Aneasthesia machine should be 3 gas supply system (O2 , N2O and air) with pipe line connection and reserve cylinder yokes
41	Cautery machine	4	Microcontroller Based Isolated Electrosurgical Generator Having Both Monopolar And Bipolar Outputs Designed For All Surgical Procedures.	No Change
			Smart Generator Should Be Able To Monitor Changes In Tissue	No Change

			Impedance Continuously And Adjusts Power.	
			Monopolar Outputs Should Have Three Cutting Modes:	No Change
			Low Cut For Delicate Tissue Or Laproscopic Cases Having Maximum Power Of 300 W	Low Cut For Delicate Tissue Or Laproscopic Cases Having Maximum Power Of 300 W or more
			Pure Cut For Clean, Precise Cut In General Surgery Having Maximum Power Of 200W	No Change
			Blend Mode For Cutting With Homeostasis Having Maximum Power Of 200W	No Change
			All Cut Modes Should Be Able To Adjust Output Power Depending	No Change
			On Tissue Density By Less Than 15% Or 5W, Whichever Is Greater.	No Change
			It Should Have Three Coag Modes With Maximum Power Of 120W	No Change
			A. Desiccate Mode For Low Voltage Contact Coagulation Suitable For Laproscopic And Delicate Tissue Work.	No Change
			B. Fulgurate Mode For Efficient Non-Contact Coagulation In Most Applications.	No Change
			C. Spray Mode Should Have Randomized Spray Effect Of Varying Amplitude And Frequency For Coagulating Large	No Change
			Tissue Areas With Minimum Depth Of Necrosis.	No Change
			It Should Have Three Bipolar Modes With Maximum Power Of 70W	It Should Have Three Bipolar Modes With Maximum Power Of 70W or more
			A.Precise Mode Have Fine Control Of Desiccation In Delicate Tissue.	No Change
			B. Standard Mode For Applications At Low Voltage To Prevent Sparking.	No Change
			C. Macro Mode For Applications On Tissue With High Resistance	No Change

			It Should Have Patient Plate Monitoring Facility And Should Give Audiovisual Alarm And Deactivate Output If Contact Between Patient And Patient Plate Is Not Proper To Eliminate The Risk Of Patient Burns.	No Change
			The Unit Should Have Two Hand Switching And Two Footswitch Monopolar Outputs And One Hand Switching And Footswitching Bipolar Output.	No Change
			It Should Have Membrane Keyboard For Power Settings.	No Change
			The Unit Should Have Individual Digital Display Of Power For Bipolar, Monopolar Cut And Monopolar Coag.	No Change
			The Unit Should Not Have Rf Leakage Current More Than 150Ma	No Change
			Accessories:-	No Change
			A. Monopolar Footswitch:- 02 No.	No Change
			B. Bipolar Footswitch:- 01 No.	No Change
			C. Reusable Hand Switching Pencil: - 02 Nos.	No Change
			D. Reusable Patient Plate : - 02Nos.	No Change
			E. Bipolar Forceps: - 01No.	No Change
			F. Forceps Cord:- 02Nos.	No Change
			G. Universal Adaptor: - 01No.	No Change
			It Should Follow International Safety Standard And Requirement With CE Certification Or USFDA Approval	Should have USFDA/european CE from notified body. Should have IEC 60606-1-1/60606-1-2/60606-2-2
			Demonstration Compulsory.	Deleted
			Operating And Service Manual Should Be Supplied.	No Change
			Operating Temp. Upto 40Deg. C;	No Change
			Warranty 2 Years	warranty 3 year
42	Cardiac monitor with AGM	2	Should Be High End Advanced Modular Hemodynamic Monitor To Measure All Vital Parameters Of Patients In Major And Minor Ots, Where Modules Can Be	No Change

			Separated And Should Be Interchangeable Across Ot, Icu And Recovery Room Monitors.	
			Should Have Non Glaze Display With Wide Viewing Angle And High Resolution (Medical Grade) Touch Screen.	No Change
			Should Have Screen Size Of 12 Inches Or More	No Change
			Should Display Minimum 8 Waveforms Simultaneously	No Change
			Should Be Able To Used For Adult And Pediatric Application.	No Change
			Standard Server Should Include Ecg, Spo2, Nibp, Agm, Temp., Dual Ibp And Any Additional Parameters Pls Specify. Standard Server Should Be Removable From Main Monitor.	No Change
			Ecg: 5 Lead Ecg Should Be Standard. Should Detect Atleast 20 Different Types Of Arrhythmias.	No Change
			Spo2: Adult And Pediatric Mode Should Be Available With Monitor.	No Change
			Respiration: Through Ecg Or Equivalent.	No Change
			Dual Ibp Should Be Standard With Monitor, Compatible Cable To Be Supplied As Standard.	No Change
			Should Measure And Display Pulse Pressure Variation Value (Ppv) As Standard.	No Change
			Should Have Knob Along With Touch Screen Option For Access And Input.	No Change
			Should Have Shelf Mount Facility, Accessories Required Should Be Supplied.	No Change
			Ability To Connect To Clinical Informatics Solutions, Hospital Network, Serial Interface, Printer And Should Be H17 Ready Etc. Vendor/Company Is Responsible For Integration With His.	No Change
			Audio/Visual Alarms With Priority Should Be Available.	No Change

			Equipment Should Be Able To Withstand The Temperature And Humidity Fluctuations In Case Of Failure Of Air Conditioning.	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			Standard Supply:	No Change
			Monitor With Standard Basic Server As Mentioned Above - 01 Nos	No Change
			Anesthesia Gas Module - 1 Nos Should Display O2, N2O, Co2 Parameters And Should Have Auto Detection Of Anesthetic Agents.	No Change
			Accessories Supply:	No Change
			Should Be Supplied With All Standard Accessories For Standard Server And Modules For All Abover Features/Parameters To Be Functional For Both Adult And Pediatric Applications With Standard Accessories With Each Monitor As:	No Change
			Standard Accessories:	No Change
			5 Lead Ecg Cable - One	No Change
			Pediatric Nibp Cuff-One	No Change
			Adult Nibp Cuff - One	No Change
			Adult And Pediatric Spo2 Probe - One	No Change
			Ibp Cable - 2 Nos	No Change
			Nasopharyngeal Temp Probe - One	No Change
			Agm Water Traps - 1 Box Per Module	No Change
			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc (Includes Unlimited Breakdown Calls) / Cmc (Which Will Include Spare Replacement, Consumable Spares, Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To SI Units Through National/International Standards	Deleted

			(As Per Nabh Norms). To Submit Sops For Pms At The Time Of Installation/Commissioning.	
			Please Specify Footpring Size & Weight.	Deleted
			Predispatch Inspection At Factory Will Be Required If Desired By Authorities	Deleted
			Please Specify Power Consumption.	Deleted
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email. Warranty: 2 Years	warranty 3 year
43	Patient warmer	2	Should Have Temperature Settings Range From 35Deg C To 40Deg C Or More That Allows To Select The Temperature Appropriate For Every Patient.	No Change
			Should Have Hose-End Temperature Control And High Air Flow Which Facilitate Consistent And Controlled Temperature Of Air Delivered Regardless Of Ambient Temperature.	No Change
			Should Have Following Alarms: Over Temperature, Under Temperature, And Disconnect/ Occlusion Alarm.	No Change
			Should Be Provided With Standard Accessories Such As Trolley, Adult Blankets ,Etc.	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved

			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabh Norms). To Submit Sops For Pms At The Time Of Installation/Commissioning.	Deleted
			Please Specify Power Consumption.	Deleted
			Local Service Support : Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time : Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty : 2 Years	warranty 3 year
44	Blood fluid warmer	2	The System Should Deliver Normothermic Blood And Fluids At Routine.	No Change
			Should Have Both Audio And Visual Alarms, Actively Alerting The User If Adverse Conditions Occur.	No Change
			System Should Have Temperature Range Between 37°-39°C Or Better.	No Change
			Should Be Able To Withstand Temperature And Humidity Fluctuations In Case Of Failure Of Air Conditioning.	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved

			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabh Norms)	Deleted
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty : 2 Years	warranty 3 year
45	ABG machine	1	Fully Automatic, Upgradeable, Fast Electrolyte & Blood Gas Analyzer.	No Change
			Essential Measured Parameters; Ph, Pco2, Po2, Hematocrit Lactate, Glucose, Na+, K+, Ca++. All These Parameters Should Be Measured Simultaneously	No Change
			Calculated Parameters Should Include Hemoglobin –Chgb, Actual Bicarbonate – Chco2, Total Carbon Dioxide – Ctco3, Base Excess Of Extra Cellular Fluid.- Be(Ecf), Base Excess In Blood -- Be(B), Oxygen Saturation – Cso2.	No Change
			Sample Volume - Less Than 100 Micro Litre.	Fast Analysis Time – Less Than 120 Sec.
			Fast Analysis Time – Less Than 60 Sec.	No Change
			Data Display Should Be On Well-Illuminated, Adequate Size Screen Display.	No Change
			Connectivity – Via Blue Tooth And Wifi For His And Lis .	No Change
			Data Storage For Atleast 1000 Patients.	No Change
			Calibration – Auto Calibration Before Every Sample Is Inserted.	No Change

			Operating The Machine- User Friendly Touch Screen.	No Change
			Ambient Working Temperature – 15 To 30 Degrees.	No Change
			Test Cards Storage – At Room Temperature	No Change
			Upgradeable To Future Parameters Like Cl-, Creatinine On The Same Card.	No Change
			System Should Come Along With A Windows Based Personal Digital Assistant To Control The Entire System & Printer.	No Change
			Stand By Blood Gas Cum Electrolyte Analyzer In Case Of Breakdown.	No Change
			Should Have Local Service Facility	No Change
			warranty- 2 year	warranty 3 year
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
			Demonstration Is Compulsory.	Deleted
			Power 220-230Vac, 50Hz	No Change
			Operating And Detailed Service Manual Should Be Supplied.	Deleted
46	PCA pump	2	The Unit Should Consists Of Ambulatory With A Patient Controlled Analgesia (Pca) Remote Dose Cord And Should Be Powered By Disposable Batteries.	No Change
			It Should Have Various Drug Delivery Modes Like, Continuous, Demand Dose, Clinician Bolus Etc.	No Change
			It Should Be Compatible To Be Used In Intravenous, Intra-Arterial, Subcutaneous, Intraperitoneal, Epidural And Intrathecal Delivery Routes.	No Change
			It Should Have Air In Line Detection Technology, Which Can Be Changed To Off/Low/High Sensitivity Depending On The Need Of The Department.	No Change
			It Should Offer Programmable Demand Dose Volume, Demand Dose Range Of 1-12	No Change

			Demands/Hour Or More, With A Demand Dose Lockout Period Of 5Min-24 Hours Or More.	
			Accuracy Level Should Be + 6% Or Better.	No Change
			50Ml, 100Ml And 250Ml Medication Reservoirs That Should Be Compatible With The Pump.	No Change
			Infusion Pressure Shuld Be Of 40 Psi Or More.	No Change
			It Should Have Safety Alarms –	No Change
			Low Battery	No Change
			Depleted Battery	No Change
			Low Reservoir Volume	No Change
			Remote Dose Cord Removed	No Change
			High Delivery Pressure	No Change
			Medication Cassette Reservoir – 50Ml/100Ml	No Change
			Available In 50Ml And 100Ml Volumes	No Change
			Polypropylene Outer Casing	No Change
			Fluid Path Materials Made Of Medical Grade Pvc Plastic	No Change
			Medication Cassette Reservoir – 250Ml	No Change
			Integrated Free-Flow Protection	No Change
			Polypropylene Outer Casing	No Change
			Fluid Path Materials Made Of Medical Grade Pvc Plastic	No Change
			Administration Set	No Change
			Used With Cadd Medication Cassette Reservoirs	No Change
			Male Luer Connector With Integrated Anti-Syphon Valves	No Change
			Integrated 0.2 µ Filter	No Change
			Fluid Path Materials Made Of Medical Grade Pvc Plastic	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified

			Should Perform Yearly Calibration And Preventive Maintenance (02 Nos) During Warranty & If Entered Into Amc (Includes Unlimited Breakdown Calls)/ Cmc (Which Will Include Spare Replacement, Consumable Spears, Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Inits Through National/ International Standards (As Per Nabh Norms). To Submit Sops For Pms At The Time Of Installation/ Commissioning	Deleted
			Please Spcify Power Consumption.	Deleted
			Local Service Support: Should Have Local Office And Service Support/ Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Loding A Breakdown Complaint On Toll Free Or By Email.	Deleted
			Warranty: 2 Years	warranty 3 year
47	Tourniquet machine	1	Should Be An Electronic Automatic Tourniquet.	No Change
			Should Have Facility To Use Single Cuff Tourniquet.	No Change
			Should Have Display For Actual Cuff Pressure, Set Pressure And Time.	No Change
			Should Be Possible To Increase And Decrease The Set Cuff Pressure Online	No Change
			Should Have Facility To Release Cuff Pressure Without Disconnecting The Cuffs From The Machine	No Change
			Should Have A Cuff Pressure From 100 To 400 Mmhg Or Better	No Change
			Should Have A Timer Setting From 10 Minute To 3 Hours Or Better	No Change
			Should Have Audible And Visual Alarm For Pressure Increase And Decrease From The Set Value.	No Change
			Should Have Audible And Visual Alarm For Reaching The Set Time	No Change

			Should Be Supplied With Two Sets Of Good Quality Cuffs (Upperlimb-2, Lower Limb- 2) For Pediatric And Adult Size	No Change
			Unit Should Function With 200-240Vac, 50/60 Hz Input Power Supply.	No Change
			Should Perform Yearly Calibration And Preventive Maintenance (2Nos) During Warranty & If Entered Into Amc(Includes Unlimited Breakdown Calls) /Cmc (Which Will Include Spare Replacement, Consumable Spares,Breakdown Calls) Testing & Measuring Equipment Used Should Be Traceable To Si Units Through National/International Standards(As Per Nabh Norms)	Deleted
			Please Specify Pre Installation Requirements.	Deleted
			Please Specify Footprint Size & Weight.	Deleted
			Predispatch Inspection At Factory Will Be Required If Desired By Authorities.	Deleted
			Please Specify Power Consumption.	Deleted
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Local Service Support: Should Have Local Office And Service Support/Service Engineer For Attending The Breakdown Calls.	Deleted
			Response Time: Should Not Be More Than 12 Hrs From Lodging A Breakdown Complaint On Toll Free Or By Email.	Deleted
48	Portable suction machine	3	Warranty : 2 Years	warranty 3 year
			Should be fitted with oil immersed noiseless motorized vacuum pump.	No Change
			Cabinet made from stainless steel.	No Change
			Two glass jars on the top of having minimum capacity of 2 Ltrs fitted	No Change

			with rubber air tight lids and overflow safety device.	
			Should be supplied with adequately long pressure tubing providing required pressure.	No Change
			Should have vacuum control by knob.	No Change
			Should be mounted on four caster wheels.	No Change
			Should have motor of 1/4 HP capacity and power consumption not more than 250 Watts.	No Change
			Should have vacuum at least between 100 mm Hg to at least 575 mm Hg (-75 kPa).	No Change
			International standards: the unit should comply with international standards and should have CE or FDA or BIS marking.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Should perform yearly calibration and preventive maintenance (2 nos) during warranty & if entered into AMC (includes unlimited breakdown calls)/CMC (which will include spare replacement, consumable spares, breakdown calls)/Testing & measuring equipment used should be traceable to SI units through National/international standards (As per NABH norms).	Deleted
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Reponse Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty: 2 Years	warranty 3 year
49	Video laryngoscope	2	Should be handheld videolaryngoscope with min 3 inches LCD/ LED monitor attached to handle for visualisation of images in real time.	No Change

		Should have resolution of 640 * 480 or better	No Change
		Should have facility for image transfer through USB or any other port.	No Change
		Should have inbuilt rechargeable battery with capacity of min 2 hrs.	No Change
		Should have CMOS camera of atleast 2 MP and with white LED light source for high performance visualisation.	No Change
		Should be supplied with disposable blades.	No Change
		Blades should be supplied as sterile, vacuum packed which connects securely to the video laryngoscope handle with a lock.	No Change
		Should be light weight.	No Change
		Following different types of blades to be provided as per quantity mentioned below:	No Change
		Macintosh blade (MAC - 3) adult - 50 nos.	No Change
		Macintosh blade (MAC - 4) - 15 nos.	No Change
		Macintosh blade (MAC - 2) - 15 nos.	No Change
		Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
		Should perform yearly calibration and preventive maintenance (2 nos.) during warranty & if entered into AMC (includes unlimited breakdown calls) / CMC(which will include spare replacement, consumable spares, breakdown calls) Testing & measuring equipment used should be traceable to SI units through National / international standards. (As per NABH Norms)	Deleted
		Local Service Support: should have local office and service support/service engineer for attending the breakdown calls.	Deleted

			Response Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty-2 years	warranty 3 year
50	Micro drill saw system	1	It should be a multispecialty console with provision to attach multiple handpieces such as Micro drill, Small bone Micro Saws, Microdebrider & Heavy Duty bone power tools, Bone mill etc.	No Change
			Should have the provision to attach 3 hand pieces simultaneously and should be able to select any one handpiece by a click of the footswitch.	No Change
			The console should have the provision to use 2 handpieces simultaneously with two separate foot switches	No Change
			Power Supply should be 220-240V.	No Change
			It should identify different hand pieces with display on console It should be programmable as per surgeon preference, which can be saved	No Change
			It should have function of controlling brightness, contrast and alarms on the console	No Change
			It should have the option of controlling the speeds and features of the different types of hand pieces from the same unit.	No Change
			Console should offer change from variable/fixed mode, forward/reverse/oscillation mode.	No Change
			Integrated irrigation pump should be available for drill & saw system	No Change
			Should have option to save surgeon preferred setting inside the console with name	No Change
			Should have torque adjustment software to deliver desired torque as per surgeon preference	No Change
			Should be bi-directional footswitch with two pads	No Change

		Should have fully programmable footswitch as per user needs	No Change
		User should be able to control following functions via footswitch: Forward/Reverse/Oscillation, Increase/Decrease the speed, Enable/Disable the handpiece	No Change
		Should have identification marks for ease of use	No Change
		MICRO DRILL HANDPIECE – qty-1	No Change
		Should run at RPM up to 50000	No Change
		Weight of the handpiece should not be more than 150 gm. Should be made of durable material.	No Change
		Should have torque in range of 4.5-4.8 in oz.	No Change
		Sterilizable through steam/ ETO/flash autoclavable	No Change
		MICRO DRILL ATTACHMENTS	No Change
		Medium Straight attachment (Qty: 1)	No Change
		Medium Angled attachment (Qty: 1)	No Change
		MICRO SAWS:	No Change
		Sagittal Saw- Qty 01	No Change
		a) Should run at CPM of 25000 cpm	No Change
		b) Weight of the handpiece should not be more than 180 gm.	No Change
		Oscillating saw- Qty 01	No Change
		a) Should run at CPM of 20000 cpm	No Change
		Weight of the handpiece should not be more than 220 gm	No Change
		Reciprocating saw- Qty 01	No Change
		a) Should run at CPM of 14000 cpm	No Change
		Weight of the handpiece should not be more than 250 gm	No Change
		Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
		warranty- 2 year	warranty 3 year

			All Micro saws handpiece should be compatible to external irrigation facility	Deleted
51	Crash Cart	5	Technical Specifications will be as per s.n 89	No Change
E	Sub total			
VI	Minor OT (1)			
52	Cautery machine	1	Microcontroller Based Isolated Electrosurgical Generator Having Both Monopolar And Bipolar Outputs Designed For All Surgical Procedures.	No Change
			Smart Generator Should Be Able To Monitor Changes In Tissue Impedance Continuously And Adjusts Power.	No Change
			Monopolar Outputs Should Have Three Cutting Modes:	No Change
			Low Cut For Delicate Tissue Or Laproscopic Cases Having Maximum Power Of 300 W	Low Cut For Delicate Tissue Or Laproscopic Cases Having Maximum Power Of 300 W or more
			Pure Cut For Clean, Precise Cut In General Surgery Having Maximum Power Of 200W	No Change
			Blend Mode For Cutting With Homeostasis Having Maximum Power Of 200W	No Change
			All Cut Modes Should Be Able To Adjust Output Power Depending On Tissue Density By Less Than 15% Or 5W, Whichever Is Greater.	No Change
			It Should Have Three Coag Modes With Maximum Power Of 120W	No Change
			A. Desiccate Mode For Low Voltage Contact Coagulation Suitable For Laproscopic And Delicate Tissue Work.	No Change
			B. Fulgurate Mode For Efficient Non-Contact Coagulation In Most Applications.	No Change
			C. Spray Mode Should Have Randomized Spray Effect Of Varying Amplitude And Frequency For Coagulating Large	No Change

			Tissue Areas With Minimum Depth Of Necrosis.	No Change
			It Should Have Three Bipolar Modes With Maximum Power Of 70W	It Should Have Three Bipolar Modes With Maximum Power Of 70W or more
			A.Precise Mode Have Fine Control Of Desiccation In Delicate Tissue.	No Change
			B. Standard Mode For Applications At Low Voltage To Prevent Sparking.	No Change
			C. Macro Mode For Applications On Tissue With High Resistance	No Change
			It Should Have Patient Plate Monitoring Facility And Should Give Audiovisual Alarm And Deactivate Output If Contact Between Patient And Patient Plate Is Not Proper To Eliminate The Risk Of Patient Burns.	No Change
			The Unit Should Have Two Hand Switching And Two Footswitch Monopolar Outputs And One Hand Switching And Footswitching Bipolar Output.	No Change
			It Should Have Membrane Keyboard For Power Settings.	No Change
			The Unit Should Have Individual Digital Display Of Power For Bipolar,Monopolar Cut And Monopolar Coag.	No Change
			The Unit Should Not Have Rf Leakage Current More Than 150Ma	No Change
			Accessories:-	No Change
			A.Monopolar Footswitch:- 02 No.	No Change
			B.Bipolar Footswitch:- 01 No.	No Change
			C.Reusable Hand Switching Pencil: - 02 Nos.	No Change
			D.Reusable Patient Plate : - 02Nos.	No Change
			E.Bipolar Forceps: - 01No.	No Change
			F.Forceps Cord:- 02Nos.	No Change
			G.Universal Adaptor: - 01No.	No Change
			It Should Follow International Safety Standard And Requirement	Should have USFDA/european CE from notified

			With CE Certification Or USFDA Approval	body. Should have IEC 60606-1-1/60606-1-2/60606-2-2
			Demonstration Compulsory.	Deleted
			Operating And Service Manual Should Be Supplied.	No Change
			Operating Temp. Upto 40Deg. C;	No Change
			Warranty 2 Years	warranty 3 year
53	Multiparamonit or monitor	1	GENERAL DESCRIPTION	No Change
			Modular & Suitable for Adult/Paediatric monitoring	No changed
			Minimum 15 inches multi color TET display screen	No Change
			Eight Channel digital and waveforms/ traces display	No Change
			Capability of storage of patient data and printing of patients report	No Change
			PARAMETERS	No Change
			Eight digital and waveforms/traces display	No Change
			Facility to monitor and display –	No Change
			ECG, Respiration, NIBP, SpO2, EtCO2, Temp.Dual IBP	No Change
			ECG	No Change
			Multichannel (up to 12 lead) ST segment analysis	No Change
			3 or 5 lead with cascade waveform facility.	No Change
			HR range 20-350 BPM	No Change
			HR/PR Source selection facility from Automatic,	No Change
			Spo2 IBP and NIBP.	No Change
			Automatic arrhythmia detection & alarm for standard & lethal arrhythmia	No Change
			standard & lethal arrhythmia	No Change
			PULSE OXYMETRY	No Change
			Nellcor or Masimo technology.	No Change
			Display of Plethysmograph with Pulse Strength	No Change
			indicator & SpO2 values & perfusion index.	No Change
			SpO2 Range – 1-100%	No Change
			PR Range – 20 to 230 BPM	No Change
			ETCO2 **	No Change

		Should be Main Stream capnography with display of CO2 and digital Values of EtCO2, FiCO2 & RR	No Change
		EtCO2 Range – 0-99 mmHg	No Change
		FiCO2 0 to 20 MMHg.	No Change
		Flow rate – 50ml/min	No Change
		Units – mmHg, KPA/Vol%	No Change
		NIBP	No Change
		Measurement and display of systolic diastolic and mean pressure values of NIBP measurement for adult ,child & neonate	No Change
		User selectable alarm settings,	No Change
		Mode : Manual, STAT (continuous 5 minute operation)	No Change
		and automatic (selectable time interval 2-90 minutes).	No Change
		Range 20-250 mmHg.	No Change
		TEMPERATURE	No Change
		Two channels and with two units (°c and °F) slectable	No Change
		Temp. Range – 0- 50 Deg C.	No Change
		Option for differential temperature should be provided.	No Change
		RESPIRATION	No Change
		RR range 1-150bpm,	No Change
		Sourced through ECG cable or CO2. Priority to co2.	No Change
		Apnea alarms should be provided.	No Change
		TRENDS & ALARMS	No Change
		72 Hrs. non volatile graphical/tabular trends with	No Change
		zoom facility and separate dedicated trend for storing min 200 NIBP readings	No Change
		Should have multiple patient data storage facility	No Change
		Auto-setting of alarm limits depending on present	No Change
		patient condition for all the parameters	No Change
		Should have Alarm recall facility for last 24	No Change
		Alarm events with date, time and Message	No Change

		Should have facility to print Graphical trend,	No Change
		tabular trend and alarm recall.	No Change
		OTHERS	No Change
		Should work on Mains as well as battery (backup for 2Hrs.)	No Change
		Should have facility to download trend data on USB and SD Card.	No Change
		ACCESSORIES	No Change
		Lead ECG with clips – 2 sets	No Change
		NIBP Cuffs for Adult – 2, Child – 2 Nos.	No Change
		EtCO2 module with all accessories.	No Change
		Esophageal/Rectal Temperature probe – 2 Nos.	No Change
		skin temperature probe- 1 Nos.	No Change
		Dual IBP cable-2 Nos.	No Change
		Reusable SPO2 probes adult 2 Nos. and paediatric 2 Nos.	No Change
		ENVIRONMENTAL& DEPARTMENTAL CONSIDERATIONS	No Change
		The unit shall be capable of operating continuously in ambient temperature of 10-40 deg c and relative humidity of 15-90%	No Change
		The unit shall be capable of being stored continuously in ambient temperature of 0-50 deg C	No Change
		and relative humidity of 15-90%	No Change
		POWER SUPPLY	No Change
		Power input to be 220-240 VAC, 50Hz fitted with indian plug	No Change
		meeting ISI Specifications. (Input 160-260 V and output 220-240V and 50 Hz)	No Change
		STANDARDS, SAFETY & TRAINING	No Change
		Should be USFDA,CE approved product	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
		Shall meet the safety requirements as per IEC	No Change

			Should have local service facility. The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test.	Deleted
			Comprehensive warranty for 2 years and	warranty 3 year
			DOCUMENTATION	Deleted
			Log book with instruction for daily, weekly,	Deleted
			monthly and quarterly maintenance checklist.	Deleted
54	Pedestal light	2	Should be a Mobile Surgical Light incorporating the latest LED technology only for Homogenous and shadow less operating light field.	No Change
			Should have mains cable and integrated ON/OFF switch on the light-head.	No Change
			It should have continuous height adjustment, weight balance in joint, no tilting, asymmetric stand, lockable castors.	No Change
			Should have Single Color LED's with lifetime of 50000 hrs or more.	No Change
			<u>The mobile light should have the following specifications :</u>	No Change
			Light Intensity 50000 lux or more	No Change
			should have LEDs in the light head	No Change
			Light Field diameter should be 20cm or better	No Change
			Fixed Color temperature 4300 K or more	No Change
			Color rendering index 95	No Change
			Depth of Illumination 110 cm or better	No Change
			Should be provided with unquisterilisable (autoclavable) handle - 2 nos	No Change
			Should have stable illumination through out the life period of the light.	No Change

			Should perform yearly Preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable to SI units through National/international standards(As per NABH norms) .To submit SOPs for PMS at the time of installation/commisioning.	Deleted
			Please specify footprint size & weight.	Deleted
			Predispatch inspection at factory will be required if desired by authorities.	Deleted
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			Please specify power consumption.	Electrical power requirements 220-230 Vac, 50-60Hz
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 12 hrs from logging a breakdown complaint on toll free or by email.	Deleted
			Warranty : 2 years	Warranty 3 year
			Warranty for the LEDs should be 10 years.	Deleted
55	Laryngoscope with all blades	2	Miller Blade	No Change
			Type: Conventional.	No Change
			Blade Type: Straight.	No Change
			Number of Blades: 7.	No Change
			Size of Blade: 000,00,0,1,2,3,4.	No Change
			Light Source: LED.	No Change
			Working Length: Good.	No Change

			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
56	Video Bronchoscope	1	<u>Adult video bronchoscope</u>	No Change
			Should have the facility of simultaneous suction and application of medication via removable suction valve.	No Change
			It should be high definition, waterproof, fully immersible for cleaning and disinfection and Sterilizable.	No Change
			Tip deflection should be 180 UP/130 Down deg or more.	No Change
			Angle of view should be more than or equal to 120 degrees.	No Change
			Working length should be more than or equal to 60 cm.	No Change
			Working channel diameter should be of size from 2.8 mm to 3.5mm.	No Change
			Outer diameter of the distal end should be of size from 5.8 mm to 6.5 mm.	No Change
			Insertion tube outer diameter should be of size from 5.8 mm to 6.4mm.	No Change
			It should include the standard accessories as Carrying case, leakage tester, bite protector, cleaning brush.	No Change
			Two or more no. of remote control switches on control body.	No Change
			Scope should be fiber less with CCD on tip, compatible with video processor.	No Change
			<u>Pediatric video bronchoscope</u>	No Change
			Should have the facility of simultaneous suction and application of medication via removable suction valve.	No Change
			It should be high definition, waterproof, fully immersible for cleaning and disinfection and Sterilizable.	No Change
			Tip deflection should be 180 UP/130 Down deg or more.	No Change

		Angle of view should be more than or equal to 120 degrees.	No Change
		Working length should be more than or equal to 60 cm.	No Change
		Working channel diameter should be of size from 1.2 to 2.2mm.	No Change
		Outer diameter of the distal end should be of size from 3.2 mm to 4.5 mm.	No Change
		Insertion tube outer diameter should be of size from 3.2 mm to 4.5mm.	No Change
		It should include the standard accessories as Carrying case, leakage tester, bite protector, cleaning brush.	No Change
		Two or more no. of remote control switches on control body.	No Change
		Scope should be fiber less with CCD on tip, compatible with video processor.	No Change
		<u>Video OGD scope</u>	No Change
		Should have the facility of simultaneous suction and application of medication via removable suction valve.	No Change
		It should be high definition, waterproof, fully immersible for cleaning and disinfection and Sterilizable.	No Change
		Tip deflection should be 210 UP/90 Down deg or more.	No Change
		Tip deflection should be Right/ Left 100deg or more.	No Change
		Angle of view should be more than or equal to 120 degrees.	No Change
		Working length should be more than or equal to 103 cm.	No Change
		Working channel diameter should be of size from 2.5 to 3.0mm.	No Change
		Outer diameter of the distal end should be of size from 9.0mm to 10 mm.	No Change
		Insertion tube outer diameter should be of size from 9.0mm to 10mm.	No Change
		Depth of field should be of size from 4-100mm or better.	No Change

			Direction of viewing should be forward Viewing	No Change
			It should include the standard accessories as Carrying case, leakage tester, bite protector, cleaning brush,Biopsy Forceps.	No Change
			Two or more no. of remote control switches on control body.	No Change
			Scope should be CCD on tip, compatible with video processor .	No Change
			<u>Specs for video Processor</u>	No Change
			Compatible with Analog and Digital (Y/C,RGB, COMPOSITE,DVI) to reproduce high definition (1080p/i) images / video.	No Change
			White balance adjustment should be available	No Change
			Colour adjustment (Red, Green, Blue) should be available	No Change
			<u>Specs for Light Source</u>	No Change
			It should be a 300W Xenon light source	No Change
			Lamp life should be 500hrs	No Change
			Atleast 24" Medical grade monitor to be provided with complete system for visualisation.	No Change
			Image management and recording software with 1TB capacity (PC based or built in) to supplied, along with necessary hardware.	No Change
			Should be supplied with cart/trolley.	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
			Should perform yearly calibration and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable to SI units through	Deleted

			National/international standards(As per NABH norms) To submit SOPs for PMS at the time of installation/ commissioning.	
			Please submit the technical data sheet along with the brochuer as a tender document with reference to the quoted make & model.	Deleted
			Please specify footprint size & weight.	Deleted
			Predispatch inspection at factory will be required if desired by authorities.	Deleted
			Please specify power consumption.	Deleted
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty: 2 years	warranty 3 year
			Additional Point	Electrical power requirements 220-230 Vac, 50-60Hz
F	Sub total			
VII	Recovery (5 beds)			
57	Bed side monitor	5	Bed side monitor should be portable and light weight and should monitor vital parameters of patients.	No Change
			Capability of storage of patient data and printing of patient reports.	No Change
			Capability to integrate with the HIS and transfer the data through LAN / Wireless LAN to any other monitoring room / doctors desk. Should be HL-7 compatible for transmitting and receiving data to/fro LAN/HIS(OPTIONAL)	No Change
			Portable and Light weight preferably <10kg	No Change
			Modular with 12 inch multi colour TFT display	No changed

			Monitoring parameters;- ECG, respiration,NIBP,SpO2 and temperature	No Change
			Digital and 6 waves / traces display	No Change
			Monitor should have audible and visual alarms capability. Alarms should have three distinct audible alarm tones to distinguish alarm levels as under. Also monitor should permit automatic viewing of alarming parameter waveform and numeric from any bedside in alarm as and when connected in a network.	No Change
			Remote access of patient data - should have facility of accessing patient data including waveforms and numeric remotely in Hospital or at Consultants residence through hardwired LAN connection or through modem.	Deleted
			2.Should also offer viewing station for viewing this data as optional item.	Deleted
			3.Should be upgradeable.	No Change
			Accessories	No Change
			ECG cables(5lead) -01	Each monitor
			Adult NIBP Cuff - 01	Each monitor
			Paediatric NIBP Cuff -01	Each monitor
			Adult SPO2 probe -02	Each monitor
			Skin Temp Probe -02	Each monitor
			11.Dual channel recorder -01	Deleted
			The unit shall be capable of operating continuously in ambient temperature of 10 -45 deg C and relative humidity of 15-90%	No Change
			Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electrical safety.	No Change
			Should be FDA or CE approved or ISI marked product	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			Manufacturer should have ISO certification for quality standards.	No Change

			power supply 220-30 VAC , 50HZ fitted with indian plug	No Change
			warranty - 2year	Warranty 3 year
58	laryngoscope for all blade	2	Miller Blade	No Change
			Type: Conventional.	No Change
			Blade Type: Straight.	No Change
			Number of Blades: 7.	No Change
			Size of Blade: 000,00,0,1,2,3,4.	No Change
			Light Source: LED.	No Change
			Working Length: Good.	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
59	Nebulizer	2	Compact, light weight, low noise	No Change
			Durable long life compressor. Suitable for heavy duty/ institutional (hospital) use, should be able to run uninterruptedly for one hour, Max Press= 2.0-2.5 bars	No Change
			Should produce particle of size 1-5 micron	No Change
			should be Aluminium cabinet painted with epoxy powder	No Change
			should be Piston-type electric aspirator that offers high performance and great durability.	No Change
			should be Protective thermal cut out relay	No Change
			Air delivery rate should be app.15 L/min.	No Change
			Able to 24 hours continuous work for hospital use	No Change
			Should Be CE or USFDA or BIS Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			Manufacturer should have ISO certification for quality standards.	No Change
			Additional Point	warranty 3 year
60	Cardiac table	5	Overall approx size of top should be 960 mm L x 420 mm W from handle to base ($\pm$ 10 mm Engineering Variation)	No Change

			Top size is 810 mm x 355 mm. (± 10 mm Engineering Variation)	No Change
			M.S. Tubular telescopic stem made from MS CRCA sheet 2.0 mm (14 G) with hardened EN grade material gear and SS handle with HDP bush for grip for height adjustment from approx.: minimum 715 mm to maximum 1080 mm. (± 10 mm Engineering Variation)	No Change
			MS flat size 100 mm L x 50 mm W x 5 mm thick is welded at the bottom of the base at telescopic stem area for strength.	No Change
			Two sections top shall be fixed on frame work made from 19 mm Square ERW tube and MS HR flat 20 mm x 5 mm and 170 mm L x 50 mm W x 6 mm thickness. (± 10 mm Engineering Variation)	No Change
			Size of Fixed section is 200 mm x 355 mm. Size of adjustable section is 610 mm x 355 mm (± 10 mm Engineering Variation)	No Change
			Bigger section of the table top should be hinged & could be inclined to three raised position options. The raised position is achieved by three slot provided in MS flat size 265 mm x 6 mm and lever made from MS rod diameter 6 mm. The one end of the rod is covered with red colour PVC sleeve.	No Change
			PVC Extrusion on one side of bigger section.	No Change
			Railing S.S (304 grade) on small section covering three corner.	No Change
			Small section is mounted on the telescopic stem with help of MS "U" shape external size 120 mm x 96 mm x 6 mm with 19 mm square tube.	No Change
			Weighing bearing capacity should be 20 kg or more	No Change

			Base of the adjustable table made from M.S rectangular tube of size 60 mm x 30 mm x 1.6 mm and 40 mm x 20 mm x 1.6 mm and fitted with four castor wheel dia 50 mm without brake made from anti rusting material.	No Change
			Pre-treatment and powder coating should be an inhouse process of the manufacturer.	No Change
			Pre-treatment should be done with Zirconium coating	No Change
			Antimicrobial Epoxy Powder should be used. A test certificate should be enclosed	No Change
			Dry film thickness- minimum 50 micron	No Change
			A test report for impact test and dry film thickness by a NABL accredited lab	No Change
			Mandatory Standards and Conformations	No Change
			European CE, Central Drugs Standard Control Organisation registration, ISO 13485: 2016, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001: 2018	No Change
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 24 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty: 2 years	warranty 3 year
G	Sub total			No Change
VIII	IPD (50 beds)			No Change
61	Ventilator	1	Should have facility for Invasive and Non-Invasive ventilation	No Change
			Microprocessor Control suitable for Adult and Pediatric ventilation;	No Change
			Should have modes of ventilation equipped with newer modes of ventilation:	No Change
			3.1) Assist/ Control	No Change
			3.2) Volume control	No Change

			3.3) Pressure control	No Change
			3.4) Pressure support	No Change
			3.5) SIMV with pressure support (Pressure and volume control)	No Change
			3.6) PEEP	No Change
			3.7) Inverse ratio Ventilation	No Change
			3.8) Noninvasive ventilation-BIPAP, CPAP	No Change
			3.9) Apnea ventilation, user selectable, volume & pressure control;	No Change
			Should have built in color screen TFT/LCD display of minimum 8''	No Change
			(inch) for display of waveforms and monitored value;	No Change
			Should have inbuilt facility to upgrade with EtcO ₂ .	No Change
			Should have facility to measure and display of the following parameters:	No Change
			6.1) Airway Pressure (Peak & Mean)	No Change
			6.2) Tidal volume (Inspired & Expired)	No Change
			6.3) Minute volume (Inspired & Expired)	No Change
			6.4) Respiratory mechanics	No Change
			6.5) Spontaneous Minute Volume	No Change
			6.6) Total Frequency	No Change
			6.7) FiO ₂ dynamic	No Change
			6.8) Intrinsic PEEP	No Change
			6.9) Plateau Pressure	No Change
			6.10)Resistance & Compliance	
			6.11)Use selector Alarms for all measured & monitored parameters	No Change
			6.12)Occlusion Pressure	No Change
			6.13)Pressure Flow & Volume curves;	
			Automatic compliance and leakage compensation for circuit and ET tube;	No Change
			Should have facility of log book, for events and alarms with date & Time	No Change
			Should have following setting;	No Change

			9.1) Tidal volume (Minimum 50ml, Maximum up to 2000ml); pre-set range for both adult & pediatric modes to be provided	Tidal volume (Minimum 20ml, Maximum up to 2000ml); pre-set range for both adult & pediatric modes to be provided
			9.2) Inspiratory pressure (up to 80cm of H2O);	No Change
			9.3) Respiratory rate 1 to 80 bpm;	No Change
			9.4) Apnea back up rate;	No Change
			9.5) CPAP/PEEP;	No Change
			9.6) Pressure support;	No Change
			9.7) FiO2 setting range between 21% and 100%;	No Change
			9.8) Pause time;	No Change
			9.9) Pressure/flow Trigger; 9.10) Inspiratory flow up to 120 Lpm;	No Change
			Oxygen cylinder/central pipeline connector/(to be supplied along with machine) should be compatible with ventilator	No Change
			Disposable Heat Moisture Exchanger, Qty 100 to be supplied with unit.	No Change
			User's interface: Manual and Automatic.	No Change
			Software and/or standard of communication(where ever required) :	No Change
			1) Inbuilt software;	No Change
			2) Convenient and quick USB interface;	No Change
			Configuration :	No Change
			1) Compatible hanged arm for holding the circuit;	No Change
			2) Should have caster with braking system;	No Change
			Noise (in dBA), heat dissipation :	No Change
			1) Noise of device operation max-50dbA;	No Change
			2) Should have audio visual alarm for battery low, source gas low and high/low pressure in the breathing circuit or source gas inlet;	No Change

		3) Should maintain nominal Temp of the control unit and the heat should be disbursed through an cooling mechanism;	No Change
		4) Alarm volume - min. 65dB	No Change
		Mobility, portability : Yes.	No Change
		ENERGY SOURCE (electricity, UPS)	No Change
		Power Requirements: Input voltage 220, VAC, 50Hz;	No Change
		Battery operated:	No Change
		1) Battery powered, silenceable alarm for power failure.	No Change
		2) Battery charger to be integral to mains power supply, and to charge battery during mains power operation of unit.	No Change
		3) Internal, replaceable, rechargeable battery allows operation for at least four hour in the event of power failure.	No Change
		Tolerance (to variations, shutdowns): Voltage corrector / stabilizer	No Change
		to allow operation at $\pm 10\%$ of 220V AC. Use of SMPS to correct voltage.	No Change
		Protection :	No Change
		1) Electrical protection, resettable over current breakers or replaceable fuses (fitted in both live and neutral lines);	No Change
		2) Leakage.	No Change
		Power consumption: To be declared by the supplier.	No Change
		ACCESSORIES, SPARE PARTS.	No Change
		Accessories & Spares : 1) Full face mask- 5 Nos each of 0,1 and 3	No Change
		2) Reusable breathing circuit of silicone material (5Nos) Disposable breathing circuit (50No.s)	No Change
		3) Air & oxygen hose- 1 each	No Change
		ENVIRONMENTAL AND DEPARTMENTAL	No Change
		CONSIDERATIONS.	No Change

		Atmosphere / Ambiance (air conditioning, humidity, dust ...) :	No Change
		1) Operating condition: Capable of operating continuously in ambient Temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances.	No Change
		2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.	No Change
		User's care, Cleaning, Disinfection & Sterility issues : Complete unit to be easily washable and serializable using alcohol and other	No Change
		Chemical agents.	No Change
		STANDARDS AND SAFETY.	No Change
		Certifications :	No Change
		Should be USFDA,CE approved product	Model should be USFDA/European-CE (Issued by notified body) approved
		Local and/or international: Manufacturer / supplier should have ISO	Deleted
		certificate for quality standard.	Deleted
		TRAINING AND INSTALLATION.	No Change
		Training of staff (medical, paramedical,technicians):	No Change
		1) Training of users in operation and basic maintenance shall be provided;	No Change
		2) Advanced maintenance tasks required shall be documented	No Change
		WARRANTY AND MAINTENANCE	No Change
		Warranty: 2 Years.	No Change
		Maintenance tasks:	No Change
		1) Maintenance manual detailing;	No Change
		2) Complete maintenance schedule;	No Change
		Service contract clauses, including prices :	No Change

			1) The spare, accessories & consumables list required for maintenance and repairs in future after guarantee / warranty period should be attached;	No Change
			2) Free servicing during warranty period;	No Change
			DOCUMENTATION.	No Change
			Operating manuals, service manuals, other manuals : Should provide 2 sets(hardcopy) of:-	No Change
			1) User, technical, maintenance and service manuals to be supplied along with machine diagrams;	No Change
			2) List of equipment and procedures required for routine calibration and maintenance.	Deleted
62	Bedside monitor	10	Technical Specifications will be as per s.n 57	
				Bed side monitor should be portable and light weight and should monitor vital parameters of patients.
				Capability of storage of patient data and printing of patient reports.
				Capability to integrate with the HIS and transfer the data through LAN / Wireless LAN to any other monitoring room / doctors desk. Should be HL-7 compatible for transmitting and receiving data to/fro LAN/HIS(OPTIONAL)
				Portable and Light weight preferably <10kg
				Modular with 12 inch multi colour TFT display

				Monitoring parameters;- ECG, respiration,NIBP,Sp O2 and temperature
				Digital and 6 waves / traces display
				Monitor should have audible and visual alarms capability. Alarms should have three distinct audible alarm tones to distinguish alarm levels as under. Also monitor should permit automatic viewing of alarming parameter waveform and numeric from any bedside in alarm as and when connected in a network.
				3.Should be upgradeable.
				Accessories
				ECG cables(5lead) - 01-for each monitor
				Adult NIBP Cuff - 01 for each monitor
				Pediatric NIBP Cuff -01-for each monitor
				Adult SPO2 probe - 02-for each monitor
				Skin Temp Probe - 02-for each monitor
				The unit shall be capable of operating continuously in ambient temperature of 10 -45 deg C and relative humidity of 15-90%

				Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electrical safety.
				Model should be USFDA/European-CE (Issued by notified body)/BIS approved
				Manufacturer should have ISO certification for quality standards.
				power supply 220-30 VAC, 50HZ fitted with indian plug
				Warranty 3 year
63	Laryngoscope with all blade	5	Technical Specifications will be as per s.n 55	
				Miller Blade
				Type: Conventional.
				Blade Type: Straight.
				Number of Blades: 7.
				Size of Blade: 000,00,0,1,2,3,4.
				Light Source: LED.
				Working Length: Good.
				Model should be USFDA/European-CE (Issued by notified body) approved
				Additional point warrenty-3 years
64	Nebulizer	10	Technical Specifications will be as per s.n 59	
				Compact, light weight, low noise

				Durable long life compressor. Suitable for heavy duty/ institutional (hospital) use, should be able to run uninterruptedly for one hour, Max Press= 2.0-2.5 bars Should produce particle of size 1-5 micron should be Aluminium cabinet painted with epoxy powder should be Piston-type electric aspirator that offers high performance and great durability. should be Protective thermal cut out relay Air delivery rate should be app.15 L/min. Able to 24 hours continuous work for hospital use Model should be USFDA/European-CE (Issued by notified body)/BIS approved Manufacturer should have ISO certification for quality standards. Additional Point warranty 3 year
65	Patient warmer	4	Technical Specifications will be as per s.n 43	
				Should Have Temperature Settings Range From 35Deg C To 40Deg C Or More That

				Allows To Select The Temperature Appropriate For Every Patient.
				Should Have Hose-End Temperature Control And High Air Flow Which Facilitate Consistent And Controlled Temperature Of Air Delivered Regardless Of Ambient Temperature.
				Should Have Following Alarms: Over Temperature, Under Temperature, And Disconnect/ Occlusion Alarm.
				Should Be Provided With Standard Accessories Such As Trolley, Adult Blankets ,Etc.
				Model should be USFDA/European-CE (Issued by notified body)/BIS approved
				warranty 3 year
66	DVT Pump	2	The System should provide complete solution to meet all Intermittent Pneumatic Compression requirements.	No Change
			One pump should deliver uniform &/or sequential, Gradient and Circumferential Compression therapy options at the press of a button.	No Change
			The system cycle for leg sleeves compression is 12-14 second and foot cuff is 6 second. Decompression time is 48-52 second for leg sleeves and 24 second for foot sleeves	No Change

			The system should be compatible to 3 cuff/sleeves styles like knee length, thigh length and foot garment.	No Change
			Sleeve should be connected to system via single tube only, permanently fixed to the systems.	No Change
			The system should have auto sleeve recognition feature to automatically identify the type of sleeve connected and adjusts the compression therapy cycle accordingly	No Change
			When knee and/or thigh sequential garment is attached, system should deliver gradient sequential compression the pressures for leg sleeves at 45 mmHg for ankle chamber, 35 mmHg for mid chamber and 25 mmHg for thigh chamber. Chambers inflate sequentially from the ankle upward, and then deflate through two outlets at the top and bottom of the garment	No Change
			When foot garment is attached, system should deliver single pulse uniform foot compression at 130 mmHg	No Change
			When single chamber knee and or thigh length garment is attached, system should deliver single pulse uniform compression at 40 mmHg.	No Change
			The system should show real time pressure delivered in the sleeves	No Change
			The system should have Patient Hours Meter which on selection should show the total therapy time in hours.	No Change
			While in use, in case if one garment is accidentally get disconnected from pump, then after two inflation cycles, system should give visual alarm indication of display and after 10 inflation cycles, should give audio alarm indication also	No Change

			The system should have LCD display of minimum 8 cm (width) x minimum 5cm (Length) (approx.)	No Change
			Sleeve's construction should be lightweight mesh outer fabric helps prevent buildup of heat, to keep the patient's skin cool and dry. Cushioning interior fibers aid patient comfort. Soft and breathable inner fabric transfers heat and moisture away from the skin through small micro vents.	No Change
			Sleeves material should be certified at an accredited independent laboratory to assess heat, air and water vapour characteristics following internationally recognized test standards for 76.1% for Water Vapour Permeability WVP Index BS7209:1990 (1997), 5.6 score for Ret Water Vapour Resistance EN31092, 0.76 score for Thermal Resistance (TOG) BS4745	No Change
			For Calf and thigh length sleeves, for minimum 12 second in one minute, the sleeves' bottom air chamber should able to hold pressure of 45 mmHg, middle air chamber should able to hold pressure of 35 mmHg and top air chamber should able to hold pressure of 25 mmHg .	No Change
			For foot sleeve, for minimum 6 second in 30 second, the air chamber should able to hold pressure of 130 mmHg	No Change
			The pump should incorporate an internal battery pack, which is a secondary power source to back up the pump in the event of failure or disconnection accidentally or deliberately from the mains power supply.	No Change
			The system power requirement is 100-240 VAC, 50 VA, 50/60 Hz	No Change
			Sequential calf sleeves up to 43cm circumference	No Change

			Sequential calf sleeves up to 58cm circumference	No Change
			Sequential thigh sleeves up to 71cm thigh circumference	No Change
			Sequential thigh sleeves up to 89cm thigh circumference	No Change
			The unit should comply with standards and should have CE or FDA marking / BIS/ ICMED approved.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			Warranty 2 years	warranty 3 year
H	Sub total			
IX	HDU (5 Beds)			
67	Ventilator	1	Should have facility for Invasive and Non-Invasive ventilation	No Change
			Microprocessor Control suitable for Adult and Pediatric ventilation;	No Change
			Should have modes of ventilation equipped with newer modes of ventilation:	No Change
			3.1) Assist/ Control	No Change
			3.2) Volume control	No Change
			3.3) Pressure control	No Change
			3.4) Pressure support	No Change
			3.5) SIMV with pressure support (Pressure and volume control)	No Change
			3.6) PEEP	No Change
			3.7) Inverse ratio Ventilation	No Change
			3.8) Noninvasive ventilation-BIPAP, CPAP	No Change
			3.9) Apnea ventilation, user selectable, volume & pressure control;	No Change
			Should have built in color screen TFT/LCD display of minimum 8'' (inch) for display of waveforms and monitored value;	No Change
			Should have inbuilt facility to upgrade with EtcO ₂ .	No Change
			Should have facility to measure and display of the following parameters:	No Change
			6.1) Airway Pressure (Peak & Mean)	No Change
			6.2) Tidal volume (Inspired & Expired)	No Change

		6.3) Minute volume (Inspired & Expired)	No Change
		6.4) Respiratory mechanics	No Change
		6.5) Spontaneous Minute Volume	No Change
		6.6) Total Frequency	No Change
		6.7) FiO2 dynamic	No Change
		6.8) Intrinsic PEEP	No Change
		6.9) Plateau Pressure	No Change
		6.10)Resistance & Compliance	No Change
		6.11)Use selector Alarms for all measured & monitored parameters	No Change
		6.12)Occlusion Pressure	No Change
		6.13)Pressure Flow & Volume curves;	No Change
		Automatic compliance and leakage compensation for circuit and ET tube;	No Change
		Should have facility of log book, for events and alarms with date & Time	No Change
		Should have following setting;	No Change
		9.1) Tidal volume (Minimum 50ml, Maximum up to 2000ml); pre-set range for both adult & pediatric modes to be provided	Tidal volume (Minimum 20ml, Maximum up to 2000ml); pre-set range for both adult & pediatric modes to be provided
		9.2) Inspiratory pressure (up to 80cm of H2O);	No Change
		9.3) Respiratory rate 1 to 80 bpm;	No Change
		9.4) Apnea back up rate;	No Change
		9.5) CPAP/PEEP;	No Change
		9.6) Pressure support;	No Change
		9.7) FiO2 setting range between 21% and 100%;	No Change
		9.8) Pause time;	No Change
		9.9) Pressure/flow Trigger;	No Change
		9.10)Inspiratory flow up to 120 Lpm;	No Change
		Oxygen cylinder/central pipeline connector/(to be supplied along with machine) should be compatible with ventilator	No Change

		Disposable Heat Moisture Exchanger, Qty 100 to be supplied with unit.	No Change
		User's interface: Manual and Automatic.	No Change
		Software and/or standard of communication(where ever required) :	No Change
		1) Inbuilt software;	No Change
		2) Convenient and quick USB interface;	No Change
		Configuration :	No Change
		1) Compatible hanged arm for holding the circuit;	No Change
		2) Should have caster with braking system;	No Change
		Noise (in dBA), heat dissipation :	No Change
		1) Noise of device operation max-50dbA;	No Change
		2) Should have audio visual alarm for battery low, source gas low and high/low pressure in the breathing circuit or source gas inlet;	No Change
		3) Should maintain nominal Temp of the control unit and the heat should be disbursed through an cooling mechanism;	No Change
		4) Alarm volume - min. 65dB	No Change
		Mobility, portability : Yes.	No Change
		ENERGY SOURCE (electricity, UPS)	No Change
		Power Requirements: Input voltage 220, VAC, 50Hz;	No Change
		Battery operated:	No Change
		1) Battery powered, silenceable alarm for power failure.	No Change
		2) Battery charger to be integral to mains power supply, and to charge battery during mains power operation of unit.	No Change
		3) Internal, replaceable, rechargeable battery allows operation for at least four hour in the event of power failure.	No Change
		Tolerance (to variations, shutdowns): Voltage corrector / stabilizer	No Change

			to allow operation at $\pm 10\%$ of 220V AC. Use of SMPS to correct voltage.	No Change
			Protection :	No Change
			1) Electrical protection, resettable over current breakers or replaceable fuses (fitted in both live and neutral lines);	No Change
			2) Leakage.	No Change
			Power consumption: To be declared by the supplier.	No Change
			ACCESSORIES, SPARE PARTS.	No Change
			Accessories & Spares : 1) Full face mask- 5 Nos each of 0,1 and 3	No Change
			2) Reusable breathing circuit of silicone material (5Nos) Disposable breathing circuit (50Nos)	No Change
			3) Air & oxygen hose- 1 each	No Change
			ENVIRONMENTAL AND DEPARTMENTAL	No Change
			CONSIDERATIONS.	No Change
			Atmosphere / Ambiance (air conditioning, humidity, dust ...) :	No Change
			1) Operating condition: Capable of operating continuously in ambient Temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances.	No Change
			2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.	No Change
			User's care, Cleaning, Disinfection & Sterility issues : Complete unit to be easily washable and serializable using alcohol and other	No Change
			Chemical agents.	No Change
			STANDARDS AND SAFETY.	No Change
			Certifications :	No Change
			should be CE/ USFDA approved product	Model should be USFDA/European-CE (Issued by notified body) approved

			Local and/or international: Manufacturer / supplier should have ISO	Deleted
			certificate for quality standard.	Deleted
			TRAINING AND INSTALLATION.	No Change
			Training of staff (medical, paramedical, technicians):	No Change
			1) Training of users in operation and basic maintenance shall be provided;	No Change
			2) Advanced maintenance tasks required shall be documented	No Change
			WARRANTY AND MAINTENANCE	No Change
			Warranty: 2 Years.	No Change
			Maintenance tasks:	No Change
			1) Maintenance manual detailing;	No Change
			2) Complete maintenance schedule;	No Change
			Service contract clauses, including prices :	No Change
			1) The spare, accessories & consumables list required for maintenance and repairs in future after guarantee / warranty period should be attached;	No Change
			2) Free servicing during warranty period;	No Change
			DOCUMENTATION.	No Change
			Operating manuals, service manuals, other manuals : Should provide 2 sets(hardcopy) of:-	No Change
			1) User, technical, maintenance and service manuals to be supplied along with machine diagrams;	No Change
			2) List of equipment and procedures required for routine calibration and maintenance.	Deleted
68	Laryngoscope for all blade	2	technical specificatins will be same as s.n-55	
				Miller Blade
				Type: Conventional.
				Blade Type: Straight.
				Number of Blades: 7.

				Size of Blade: 000,00,0,1,2,3,4.
				Light Source: LED.
				Working Length: Good.
				Model should be USFDA/European- CE (Issued by notified body) approved
				Additional point warrenty-3 years
69	DVT pump	1	technical specificatins will be same as s.n-66	
				The System should provide complete solution to meet all Intermittent Pneumatic Compression requirements.
				One pump should deliver uniform &/or sequential, Gradient and Circumferential Compression therapy options at the press of a button.
				The system cycle for leg sleeves compression is 12-14 second and foot cuff is 6 second. Decompression time is 48-52 second for leg sleeves and 24 second for foot sleeves
				The system should be compatible to 3 cuff/sleeves styles like knee length, thigh length and foot garment.

				Sleeve should be connected to system via single tube only, permanently fixed to the systems.
				The system should have auto sleeve recognition feature to automatically identify the type of sleeve connected and adjusts the compression therapy cycle accordingly
				When knee and/or thigh sequential garment is attached, system should deliver gradient sequential compression the pressures for leg sleeves at 45 mmHg for ankle chamber, 35 mmHg for mid chamber and 25 mmHg for thigh chamber. Chambers inflate sequentially from the ankle upward, and then deflate through two outlets at the top and bottom of the garment
				When foot garment is attached, system should deliver single pulse uniform foot compression at 130 mmHg
				When single chamber knee and or thigh length garment is attached, system

				should deliver single pulse uniform compression at 40 mmHg.
				The system should show real time pressure delivered in the sleeves
				The system should have Patient Hours Meter which on selection should show the total therapy time in hours.
				While in use, in case if one garment is accidentally get disconnected from pump, then after two inflation cycles, system should give visual alarm indication of display and after 10 inflation cycles, should give audio alarm indication also
				The system should have LCD display of minimum 8 cm (width) x minimum 5cm (Length) (approx.)
				Sleeve's construction should be lightweight mesh outer fabric helps prevent buildup of heat, to keep the patient's skin cool and dry. Cushioning interior fibers aid patient comfort. Soft and breathable inner fabric transfers heat and moisture away from the skin

				through small micro vents.
				Sleeves material should be certified at an accredited independent laboratory to assess heat, air and water vapour characteristics following internationally recognized test standards for 76.1% for Water Vapour Permeability WVP Index BS7209:1990 (1997), 5.6 score for Ret Water Vapour Resistance EN31092, 0.76 score for Thermal Resistance (TOG) BS4745
				For Calf and thigh length sleeves, for minimum 12 second in one minute, the sleeves' bottom air chamber should able to hold pressure of 45 mmHg, middle air chamber should able to hold pressure of 35 mmHg and top air chamber should able to hold pressure of 25 mmHg .
				For foot sleeve, for minimum 6 second in 30 second, the air chamber should able to hold pressure of 130 mmHg

				The pump should incorporate an internal battery pack, which is a secondary power source to back up the pump in the event of failure or disconnection accidentally or deliberately from the mains power supply.
				The system power requirement is 100-240 VAC, 50 VA, 50/60 Hz
				Sequential calf sleeves up to 43cm circumference
				Sequential calf sleeves up to 58cm circumference
				Sequential thigh sleeves up to 71cm thigh circumference
				Sequential thigh sleeves up to 89cm thigh circumference
				Model should be USFDA/European-CE (Issued by notified body)/BIS approved
				warranty 3 year
70	B.P apparatus manual(adult)	2	technical specificatins will be same as s.n-76	
				Measuring device mechanical
				should be Portable
				should be Auscultatory method
				inflation should be manual
				deflation should be manual

				cut off range medium should be (22-32)cm.
				AA size chargeable battery set, Either Chargeable Battery Set .
				Model should be USFDA/ European CE(issued by notified body)/ BIS approved.
71	Stethoscope	3	should be aneroid type	Listening to sounds from the heart, lungs, and/or gastrointestinal tract.
			measuring device should be mechanical	Stethoscope of standard size, chromium plated metal binaural, V rubber tube in one piece. Rotating piper fitting for both flip functions.
			should be portable	Diaphragm approx: 20 mm.
			inflation should be manual	1 x spare set of earpiece, 1 x spare diaphragm
			deflation and rapid air release should be manual	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
			cut off range medium 22 to 32 cm	No Change
			Should be FDA, CE, UL or BIS approved product	Model should be USFDA/European CE (Issued by notified body)/ISO 13485 approved

I	Sub total			
X	Emergency Bed (5)			
72	Multiparamonit or monitor	3		No Change
73	Stretcher	10	Overall approx. size: 2020mm-2030mm L x 550mm-	No Change
			560mm W x 810mm-820mm H.	No Change
			Frame work should be of ERW tubular welded with vertical upright of 31.75mm OD×18G ERW tubes.	No Change
			Trolley should be provided with 200mm dia. Swivels castors wheels.	No Change
			All horizontal stays should be of 25.4mm OD x 18G tube.	No Change
			Stretcher should be made of SS304 18G sheet dished horizontally in the middle. Stretcher should be removable from trolley.	No Change
			Three additional 31.7 x 6mm flat supports that should be welded to main frame to support SS sheet top from underneath width wise.	No Change
			Pushing handle at both ends shall be made of 25.4mm x 18G SS tubes.	No Change
			FINISH: All components shall be thoroughly pre-treated chemically to remove rust and foreign matter like grease, oil etc. by dip tank processes, including separate Degreasing, Derusting, phosphating each followed by water rinsing and hot air drying to give phosphate coating conforming IS 3618-1966 Class 'C'. The treated metal surface should then be coated with epoxy polyester powder with paint film thickness of 60microns and oven baked at 180 and 200 centigrade. This finish should exclude stainless parts, some hardware, ebonite rubber,PVC, castor wheel if any.	No Change
			The company should have ISO 9001:2008 & ISO 13485 certification.	No Change

			All steel section should have powder coating.	No Change
			Pushing handles at both ends should be covered with PVC sleeves.	No Change
			Two section tops should be smooth edges and burr free.	No Change
			All SS used should be of 304 grade.	No Change
			Warranty- 1 year	No Change
			Company should be ISO certified	Deleted
74	Wheel chair	10	1. Overall approx size: 670mm W x 1120mm D x 920mm H. 2. Welded frame construction of round tubes. 3. Two solid rubber tyred bicycle wheels with brakes & self propelling stainless steel hoops. 4. Minimum frames size of round steel 22.2 x 18 G tubes and 19.05 x 18 G tubes. 5. Mild steel tubular construction fitted with cushion seat and back. 6. Wheel chair is fitted with minimum 24'' dia rim of bicycle wheel fitted on specially developed and heat treated axle with solid tyre in the rear. 7. In the front minimum 150mm dia castor wheels are fitted. In front of castor wheels, aluminum foot paddles are provided on adjustable brackets. 8. Two handles are provided with hand grips. Brakes are provided on rear wheel to hold the chair to stop in 5 degree ramp. 9. All mild steel components should be thoroughly pre-treated chemically to remove rust and foreign matter like grease, oil etc. by dip tank process pretreatment system. 10. The treated metal surface should have coating of epoxy polyester powder and oven baked at 180 degree to 200 degree centigrade to avoid contamination of the clean metal surface from dust particles.	No Change
			The company should have ISO 9001:2008 & ISO 13485 certification.	No Change
J	Sub total			

XI	OPD (5)			
75	B.P apparatus manual	1	technical specifications will be same as per s.n-76	
				Measuring device mechanical
				should be Portable
				should be Auscultatory method
				inflation should be manual
				deflation should be manual
				cut off range medium should be (22-32)cm.
				AA size chargeable battery set, Either Chargeable Battery Set .
				Model should be USFDA/ European CE(issued by notified body)/ BIS approved.
76	Stethoscope (Adult)	2	Stethoscope should be standard size, chromium plated metal binaural, V rubber tube in one piece. Rotating piper fitting for both flip functions.	No Change
			Should be FDA, CE, UL or BIS approved product	No Change
			Warranty- 1 year	Warranty- 3 year
77	Colposcopy	1	Should be digital colposcope with 1-50X magnification minimum.	No Change
			Should have variable light intensity	No Change
			Should have features like facility to choose 5 color images, fast focusing, zooming and image freezing.	No Change
			Should have facility for green filter and blue filter	No Change
			Should have bright LED light for true color production and Color temperature 7000° k, average LED lamp life is > 20000 hrs	No Change
			Control panel has feather touch and water proof button	No Change

			Should have inbuilt live video recording with inbuilt recording facility of 1000 images	No Change
			USB footswitch for capturing and saving images	No Change
			Should have feature of comparison of reports, multiple formats of reporting should be available	No Change
			Should be supplied with remote control set to operate important functions from distance.	No Change
			Should be supplied with Image, Video & Patient Data Management Software with following features:	No Change
			Colposcopy, Auto analysis, Statistical data representation with graph, Marking and highlighting Hysteroscopy Including USB dongle and video Grabber Card.	No Change
			Should be supplied with latest PC configuration (4GB/1TB/NO DVD/WIN10/WIRED+21.5" monitor) and ink Jet printer	No Change
			Should perform yearly calibration/validation and preventive maintenance (2nos) during warranty & if entered into AMC (includes unlimited breakdown calls) /CMC (which will include spare replacement breakdown calls) Testing & measuring equipment used should be traceable to SI units through National/international standards (As per NABH norms). To submit SOPs for PMS at the time of installation/commissioning.	Deleted
			Please specify footprint size & weight.	Deleted
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
			Predispatch inspection at factory will be required if desired by authorities.	Deleted
			Please specify power consumption.	Deleted

			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 12hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty- 2 years	warranty 3 year
			Additional Point	Electrical power requirements 220-230 Vac, 50-60Hz
78	X-ray view box	10	single chamber	single chamber
	Additional Point			Light frequency should be 50KHz
				thickness should be approx 4.5cm
				input voltage should be 220-230 VAC, 50-60 Hz
				brightness should be 4000 lux
				Manufacturer should have ISO-13485 certification
79	Height Scale	5		As per standard requirements in the hospital
K	Sub total			No Change
XII	Day Care (25 beds)			No Change
80	Bed side monitor	10	technical specifications will be same as per s.n-57	
				Bed side monitor should be portable and light weight and should monitor vital parameters of patients.
				Capability of storage of patient data and printing of patient reports.

				Capability to integrate with the HIS and transfer the data through LAN / Wireless LAN to any other monitoring room / doctors desk. Should be HL-7 compatible for transmitting and receiving data to/from LAN/HIS(OPTIONAL)
				Portable and Light weight preferably <10kg
				Modular with 12 inch multi colour TFT display
				Monitoring parameters;- ECG, respiration,NIBP,Sp O2 and temperature
				Digital and 6 waves / traces display
				Monitor should have audible and visual alarms capability. Alarms should have three distinct audible alarm tones to distinguish alarm levels as under. Also monitor should permit automatic viewing of alarming parameter waveform and numeric from any bedside in alarm as and when connected in a network.
				3.Should be upgradeable.
				Accessories

				ECG cables(5lead) - 01-for each monitor
				Adult NIBP Cuff - 01 for each monitor
				Paediatric NIBP Cuff -01-for each monitor
				Adult SPO2 probe - 02-for each monitor
				Skin Temp Probe - 02-for each monitor
				The unit shall be capable of operating continuously in ambient temperature of 10 -45 deg C and relative humidity of 15-90%
				Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electrical safety.
				Model should be USFDA/European-CE (Issued by notified body)/BIS approved
				Manufacturer should have ISO certification for quality standards.
				power supply 220-30 VAC , 50HZ fitted with indian plug
				Warranty 3 year
L	Sub total			No Change
XIII	Blood Bank Storage Unit			No Change
81	Blood Bank Refrigerator	2	Volume capacity approx : 400 ltr Standard Blood bags of 450 ml.	No Change
			It should be made from durable white epoxy painted/stainless steel	No Change

			finish SS304/SS316, these feature inner shelves made of SS304/SS316 using epoxy plastic coated steel rod.	
			Set Temperature 4°C. Temperature Range: 2°C to 8°C, accuracy: $\pm 0.1^{\circ}\text{C}$, uniformity: $\pm 1^{\circ}\text{C}$.	No Change
			Refrigerator must have Positive forced-air circulation.	No Change
			Refrigerator must have hinged glass/ transparent double glazed glass doors with full length illumination (self-closing) with 90° stop to assist with inventory loads.	No Change
			Refrigerator must have Mercury-free LED interior lighting.	No Change
			Refrigerator must have a 1 minute door opening recovery of less than or equal to 4 minutes.	No Change
			Refrigerator must have standard set of four casters with brake option and installed in factory.	No Change
			Refrigerator must have adjustable cold and warm alarms. Refrigerator must have both audible and visual alarms indicating unsafe temperatures. Refrigerator must have door open alarm.	No Change
			Refrigerator must have a keyed on/off power switch	No Change
			Refrigerator must have service alarm and icon. Refrigerator must have low battery alarm	No Change
			Digital temperature Indicator with 7 days circular chart recorder with 100 additional charts. Digital temperature display (LED) with 0.1° C graduation on temperature recording device.	No Change
			The PT-100 sensor for control and display of accurate temperature recording. Addition port for placing central monitoring system sensor.	No Change
			Audio visual alarm for temperature variations and utility failure. Electrical circuit breaker. Overload cut off relay for compressor. Time delay for compressor switch on.	No Change

		Electrical power requirements: 230 volts +/- 10%, 50 Hz. Equipment should meet standard for electrical safety.	No Change
		Refrigerator must be Energy Star rated and certified to the laboratory refrigeration standard	No Change
		Refrigerator must use environmentally friendly SNAP and EU F-Gas compliant HC refrigerants (Green Gas and Natural Gas) as per current Global Norms.	No Change
		Refrigerator must operate at less than or equal to 52 dba	No Change
		Inbuilt Battery Backup for control Panel during power failure for 48 Hours or more.	No Change
		Temperature holding time during power failure is 240 Minutes (4 hours) or better from 4° C to 10° C.	No Change
		Overall cool down time to +4° C should be faster than 50 Minutes.	No Change
		Heat-free defrost Technology for maximum uniformity to avoid Temperature fluctuation during Defrost cycle.	No Change
		Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
		Unit should be Class 2 MDD certified from International Notified Body.	No Change
		Should perform (2nos) yearly calibration/Validation and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable to SI units through National/international standards(As per NABL norms). To submit SOPs	Deleted

			for PMS at the time of installation/commissioning.	
			Performance certificates of IQ,OQ,PQ tests to be submitted at the time of installation/commissioning.	No Change
			Should be supplied with standard make stabilizer.	No Change
			Please specify footprint size & weight.	Deleted
			Please specify pre installation requirement	Deleted
			Predispatch inspection at factory will be required if desired by authorities.	Deleted
			Please specify power consumption.	Deleted
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty- 2 years	warranty 3 year
82	Platelet Incubator with agitator	1	Should have a provision to store the agitator.	No Change
			Should have a single transparent outer door for clear visibility.	No Change
			Should be able to maintain a temperature off $22 \pm 2^{\circ}\text{C}$, Set temperature of 22°C .	No Change
			Should have a digital temperature indicator.	No Change
			Seven day inkless chart recorder with battery back-up for minimum of 2 hours for continuous operation during power failure.	No Change
			Single digital temperature sensor for both recording and controlling	No Change
			Should have audible visual high/low alarm for temperature control, battery on/low, sensor failure, agitator off, power failure, compressor and system.	No Change
			Should have forced air circulation method for the uniformity of the	No Change

			temperature at all sides of the incubator.	
			Chamber mounted electrical outlet for agitator should be available.	No Change
			Facility to connect with central (temperature) monitoring system.	No Change
			Platelet Agitator :	No Change
			Should have Internal body of SS304 grade	No Change
			Should have External body of corrosion resistant at least 1 mm thickness	No Change
			Should have the capacity to hold random platelet packs or SDP packs or a mixture of both type (Provision for storage of 96 to 100 RDPs or 25 to 30 SDP bags)	No Change
			Should have transparent door	No Change
			Design of shelves should have non-slip, corrosion resistant material, coated with bacteria resistant material, perforated to ensure air circulation and with sufficient clearance to minimize noise.	No Change
			Should have Gentle side to side agitation at 3.6 – 4 cm with side to side 60 – 70 stroke/ minute.	No Change
			Should have heavy duty ball bearing gear motor for noise less and continuous operation for 24 hours a day throughout the year.	No Change
			Should have motor with internal fan.	No Change
			Should have 7-day chart recorder capability	No Change
			Should have temperature controller with sensor.	No Change
			Should have Non –CFC air cooled refrigeration.	No Change
			Should have audio alarm for temperature fluctuation.	No Change
			Should have auto stop function for agitation when the door is opened.	No Change
			Should have power failure alarm.	No Change
			Should have 'Push buttons switch' with pause function for temporary stoppage of the motion.	No Change

			Should provide free chart till warranty period	No Change
			Power supply- 100-240VAC, 50-60Hz.	No Change
			The unit should apporeve with international standard like CE or FDA	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			Should be able to withstand temperature and humidity fluctuations in case of failure of air.	No Change
			Should perform calibration/Validation(Once) & preventive maintenance (twice) of the equipment yearly during warranty/ service period. Testing & measuring equipment used should be traceable to SI units through National /international Standards (as per NABL norms).	Deleted
			Performance certificates of IQ,OQ,PQ tests to be submitted at the time of installation/commissioning.	No Change
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty: 2 years	warranty 3 year
M	Sub total			No Change
	Common Equipment			No Change
83	Weight Machine	5	Should be digital display	No Change
			Should be portable	No Change
			Weighing capacity should be min. 3kg or less and maximum 180kg or more	No Change
			Readability should be 0.05kg	No Change
			width should be 28-30cm	width should be 28-30cm(+/-2)
			length should be 28-30cm	length should be 28-30cm(+/-2)

			Depth should be 2-3 cm	Depth should be 2-3 cm(+/-2)
			warranty 1 year	warranty 3 year
			Manufacturer should be ISO certified for quality standards.	No Change
			Should be FDA , CE,UL or BIS approved product	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
84	Infusion pump	15	Comprehensive alarm system for following parameters or similar should be available:	No Change
				No Change
			Occlusion,	No Change
			end of infusion,	No Change
			lock mode,	No Change
			air in line,	No Change
			door open,	No Change
			low battery,	No Change
			system malfunction, etc	No Change
			Intended for use on adult/pediatric.	No Change
			Easy dose rate calculation, easy loading and operation process.	No Change
			Should have drug library.	No Change
			Should have volume and drop control.	No Change
			Equipment should fit on IV stand, should be compact.	No Change
			Universal plugging system and should fit in the present electric board.	No Change
			Equipment should be compatible with all standard IV sets including paediatric IV sets	No Change
			Battery charging time should be less than 8 hours for depleted battery.	No Change
			Battery back up should be up to 4 hrs at 25 ml/hr	No Change
			Pole clamp material should be of metal or hard teflon.	No Change
			Should have drip sensor.	No Change
			Should have purge function.	No Change
			Infusion Volume limit should be upto to 999.9ml	No Change

		Over all accuracy of flow should be $\pm 10\%$ or better.	No Change
		Should have bright LED/LCD display showing infusion parameters.	No Change
		Air bubble sensor should be available	No Change
		Equipment should be capable for preventing free flow and back flow.	No Change
		Should be light weight, pls mention weight.	No Change
		Should perform yearly calibration/Validation and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable to SI units through National/international standards(As per NABL/NABH norms). To submit SOPs for PMS at the time of installation/commissioning.	Deleted
		Please specify footprint size & weight.	Deleted
		Predispatch inspection at factory will be required if desired by authorities.	Deleted
		Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
		Please specify power consumption.	Deleted
		Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
		Response Time: Should not be more than 06 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
		Warranty : 2 years	warranty 3 year

			Additional Point	Electrical power requirements 220-230 Vac, 50-60Hz
85	Pulse oxymeter	5	spo2	No Change
			measurement range should be 70%-100%	No Change
			Resolution should be 1%	No Change
			Pulse rate	No Change
			measurement range should be 30 - 235 bpm	No Change
			Resolution should be 1bpm	No Change
			Display	No Change
			should be Dual color OLED display	No Change
			parameters spo2,PR,PI	No Change
			Should be ISO/CE certified	No Change
86	Glucometer	5	The unit should automatically power ON when the strip is inserted in to the port.	No Change
			The Glucometer should guide the user by talking through the blood glucose testing steps.	No Change
			It should provide the test result on the LCD display in few seconds.	No Change
			Measuring range: 10 – 600 mg/dL with $\pm 2\%$ accuracy Blood Volume: not more than 1 -2 microliter	No Change
			A storage facility for not less than 300 test results with date and time should be available.	No Change
			Glucometer should be supplied with lancing device and universal needle set.	No Change
			ISO,CE Certificates for goods manufacturing	No Change
			Warranty 1 year	No Change
87	Portable suction	5		
88	Defibrilattor	2	Defibrillator should be easy to use, having facility for AED (Automated External Defibrillation) and Manual mode defibrillation based on latest Biphasic technology.	No Change
			It should be able to deliver shock from 2 J to 200 Joules (or more) in	No Change

			Manual Mode and AED mode for pediatric & adult patient.	
			It should have 5 Lead ECG Monitoring.	No Change
			Should have CPR Metronome for CPR assist during AED Mode operation.	No Change
			It should have 7 inch (or more) diagonal color LCD/TFT/LED screen facility to view color and black & white mode display in brighter sunny field environment.	No Change
			Should work on A.C. and D.C. and on latest rechargeable Lithium-Ion batteries with fully charged Battery capacity to monitor min 4 hours of operation and 100 (± 20) shocks of 200 Joules discharges.	No Change
			Should have inbuilt printer / recorder.	No Change
			Should have vital sign monitoring of SpO ₂ , NIBP.	No Change
			Should have facility for external pacemaker (with Demand and Fixed/Non demand mode) and Synchronous Cardioversion.	No Change
			Should supply along with standard accessories:	No Change
			Reusable Hard Paddles-1 Set, Multipurpose Electrode (AED cum Pacing Pads)-3 No.s Adult and 2 No.s Pediatric Pads, SpO ₂ Probe-1 Qty. Adult & 1 Qty. Pediatric, NIBP Hose & Cuff 1Qty. Adult & 1Qty. Pediatric along with Operating manuals.	No Change
			Quoted item should be USFDA/ European CE with 4 digit notified body approved and Manufacturer should be ISO 13485 certified	No Change
			Should perform yearly calibration/Validation and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown	Deleted

			calls) Testing & measuring equipment used should be traceable to SI units through National/international standards(As per NABL/NABH norms). To submit SOPs for PMS at the time of installation/commissioning.	
			Please submit the technical data sheet along with the brochure as a tender document with reference to the quoted make & model.	Deleted
			Please specify list & cost of consumables/consumable Spares(i.e.spares need to be replaced at regular intervals, maybe quarterly/half yearly/yearly such as annual maintenance kit etc.) if any.(Quote Rate)	Deleted
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 12hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty : 2 years	Deleted
			Response Time: Should not be more than 6 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty- 2 years	warranty 3 year
89	Crash cart	5	Overall Size: 1030 mm L x 595 mm W. • Platform Dimension (Top Polymer Molded Panel) -: 560 mm L X 370 mm W. • Height (Floor To Top Polymer Molded Panel) : 950 mm. • Maximum height (Floor to eye level detachable fully S.S top shelf) : 1610 mm. • Four Drawers with centralized locking. • Upper Drawer ABS tray: 560 mm L X 340 mm W X 65 mm H. • Middle Drawer ABS tray 2 nos : 560 mm L X 340 mm W X 145 mm H. • Cardiac Massage Board: 710 mm X 390 mm X 6 mm thick. • Lower Drawer ABS tray : 550 mmx 330	No Change

			mm x 230 mm. • Poly Carbonate Partition plates for top and second drawer. • Integrated with Chart / File holder, 2 nos of Catheter Holder, 1 no of Trash bin. • Crash cart mounted on twin wheel 125 mm dia non-rusting castor two with brakes and two without. Castor made from high grade non floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly. • Base structure provided with rubber buffer, one on either sides. • Frame work is made from tube size: 25.4 mm x 1.2 mm (18 G). • Pull out cardiac massage board made of MDF of minimum size 710 mm x 390 mm x 6 mm laminated on top and bottom of laminate of 1 mm and 0.6 mm respectively. MDF shall have water resistance property and it should be made from ecofriendly material. • Safe Working Load & Patient bearing capacity - 50 kg. • Oxygen cylinder stand epoxy powder coated, on one side. • All stainless steel wherever used should be 304 grade. S.S parts finished with Matt Polish. • M.S. tubular parts, linkages, flats aluminum base are to be In-house, pretreated / shot blasted and Epoxy powder coated with coating thickness 50 to 100 microns. • All Process Parameters to be as per documented IMS Procedures for Quality Assurance (ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 & ISO 13485:2003 Quality Management System Company should be European CE Certified. Dealers participating should enclose certificate from their Parent manufacturer company. • Cardiac Massage Board: 710 mm X 390 mm X 6 mm thick. • Defib tray holder platform of 300 mm X 200	
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			mm. • S.S detachable top shelves one without lid and one with 5 polycarbonate partition and cover lid at eye level. • Poly Carbonate Partition plates. • Scissor Holder • I.V Rod S.S with two hooks	
			Warrantey :- 2 years	Warranty 3 year
			Should have flow rate range from 0.1 to 500 ml/hr depending on syringe capacity.	No Change
			Should have purge and bolus facility.	No Change
			Should have occlusion pressure detection.	No Change
			Should have rechargeable Battery with backup of atleast 4 hours from fully charged	No Change
			Battery capacity indicator.	No Change
			Should have various Alarms such as near empty, end, occlusion, low battery, etc.	No Change
			Volume Infused Display	No Change
			Should be portable and easy to carry.	No Change
			Should be provided with pole clamp to fix on IV stand.	No Change
			Should perform yearly calibration and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable to SI units through National/international standards(As per NABH norms). To submit SOPs for PMS at the time of installation/ comissioning.	No Change
			Please specify footprint size & weight	No Change
			Should Be CE or USFDA Approved Product.	No Change
			Plesae specify power consumption.	No Change
			Local Service Support: Should have local office and service	No Change

			support/service engineer for attending the breakdown calls.	
			Response Time: Should not be more than 12hrs from lodging a breakdown complaint on toll free or by email.	No Change
			Warranty: 2 years	No Change
91	BIPAP	2	Operational Requirements	No Change
			The system should meet all the numerical values given in the technical specifications within a tolerance of +/- 10 %.	No Change
			IPAP 4 to 30 cm	No Change
			2. EPAP 4 to 25 cm	No Change
			3. Breach rate 0 to 30 BPM with spontaneous for time mode	No Change
			4. Timed inspiration 0.5 to 3.0 sec	No Change
			5. Rise Time 100 to 600 msec	No Change
			6. Machine should be based on the solenoid valve technology and should offer preferably auto track sensitivity and adjustable risetime.	No Change
			7 System Configuration Accessories, spares and consumables	No Change
			System should be supplied with all reusable accessories	No Change
			Environmental factors	No Change
			The unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90%	No Change
			The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%	No Change
			Power Supply	No Change
			Power input to be 220-240VAC, 50Hz	No Change
			Standards, Safety and Training	No Change
			Should be USFDA/ CE/UL approved product	Model should be USFDA/European-CE (Issued by notified body) approved
			warranty- 2 years	warranty 3 year

			Manufacturer should have ISO certification for quality standards.	No Change
			Documentation	No Change
			User/Technical/Maintenance manuals to be supplied in English.	No Change
			List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.	No Change
			Certificate of calibration and inspection.	No Change
			Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.	Deleted
			Additional Point	Mode of operation CPAP, S, ST,PS,T
92	ECG machine(12-Channel)	3	Description of function	No Change
			ECG Machine is primary equipment to record ECG Signal in various configuration. 12 channels with interpretation is required for recording and analyzing the waveforms with a special software.	No Change
			operational requirements	No Change
			The ECG Machine should be able to acquire all 12 Leads simultaneously and interpret them	No Change
			Should acquire simultaneous 12 lead ECG for both adult and pediatric patients	No Change
			Should have Real time Colour display of ECG waveforms with signal quality indication for each lead	No Change
			Should have Artifact, AC, and low and high pass frequency filters.	No Change
			Should have a storage memory of at least 100 ECGs with easy transfer by optional modem and data card.	No Change
			Should have full screen preview of ECG report for quality assessment checks prior to print.	No Change

			Should have interpretation facility of the amplitudes, durations and morphologies of ECG waveforms and associated rhythm for adult and pediatric patients	No Change
			Should have alphanumeric Keyboard for patient data Entry.(virtual or hard keys)	No Change
			Should have High resolution (200 dpix500dpi on 25 mm/sec speed) digital array A4 size printer	No Change
			Should have report formats of 3 x4; 6 x2, Rhythm for up to 12 selected leads; 12 Lead Extended measurements, 1 minute of continuous waveform data for 1 selected lead.	No Change
			Should have battery capacity of at least 30 ECGs or 30 minutes of continuous rhythm recording on single charge	No Change
			Should be able to be connected to HIS /LAN/Wireless LAN(OPTIONAL)	No Change
			Should display ECG on LCD/TFT Display of 640x480 pixel resolution.	No Change
			USB Support for Storage on external portable memories.	No Change
			Multimode of ECG Storage capability on Floppy(min 2), 150 ECG on Internal Flash Memory	“Multimode of ECG Storage capability on USB pendrive, 1500 ECG on Internal Memory”
			System Configuration Accessories, spares and consumables	No Change
			Patient Cable -02	Patient Cable -01 each ECG machine
			Chest Electrodes Adult-(set of six) -02 sets.	Chest Electrodes Adult-(set of six) -01 sets each ECG
			Chest Electrodes Paediatric-(set of six) -02 sets	Chest Electrodes Paediatric-(set of six) -01sets Each ECG

			Limb Electrodes(set of 4)- 02 sets	Limb Electrodes (set of 4)- 01 sets Each ECG
			Thermal Paper A4 Size for 500 patients	No Change
			Environmental factors	No Change
			The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%	No Change
			The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%	No Change
			Power Supply	No Change
			Power input to be 220-240VAC, 50Hz	No Change
			Standards, Safety and Training	No Change
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			Documentation	No Change
			Service manual in English	Deleted
			Warranty-2 years	Warranty- 3 year
			User Manual in English	No Change
93	CR system	1	Radiography System To Replace Conventional Film/Screen Based X- Ray Processing Techniques With Photostimulable Phosphor Plate Technology To Obtain Digital X-Ray Images.	No Change
			Operational Requirements	No Change
			It Shall Operate On Ac Power Supply.	Deleted
			System Configuration	No Change
			Computed Radiology Must Be A State Of The Art System Manufactured By A Reputed Brand Or Manufacturer Adhering To Following Specifications. Cr System Should Broadly Comprise Of Following Modules/ Components.	No Change
			I. Image Reading System (Reader/ Digitizer)	No Change

			Ii. Image Processing Workstation	No Change
			Iii. Dry Image Printer (Film Printer) And Other Standard Accessories Listed Below.	No Change
			Technical Specifications	No Change
			The System Shall Be Able To Record X-Ray Images On Imaging Plates (Ip).	No Change
			Operationally And Functionally Equivalent To And Better Than The Present Film Based System.	No Change
			Must Record Patient Identification Data And Anotation On The Image.	No Change
			Retrieve And Reproduce Accurate, High Quality High Resolution Images From Stored Data Without Loss Of Image Quality.	No Change
			Shall Have Read And Write Facility In Cd/Dvd For Data Storage And Review.	No Change
			Image Reader (Cr Reader/ Digitizer)	No Change
			Should Have Automatic Scanning Mechanism To Read, Erase And Process The Images From The Imaging Plate. (Ip)	No Change
			The Cr Reader / Digitizer Should Be Able To Process 60 Image Plates/Hr Or More Of 14X17 Inch Size.	No Change
			Gray Scale Resolution: Cr Reader / Digitizer Should Have A Minimum Resolution Of 12Bits/ Pixel For Images Sent To Cr Processing Station.	No Change
			Mechanism For Accepting Exposed Imaging Plates Without Patient Demographics, For Hospital Workflow Requirement.	No Change
			Mechanism For Re-Routing The Newly Acquired Images To The Preconfigured Cr Workstation.	No Change
			Capability Of Retrieving (Service Intervention) At Least Last 10 Scanned Images, As Part Of Contingency Plan.	No Change
			Cr Workstation:	No Change

		Accept Images Form Cr Reader Without Any Loss Of Data.	No Change
		Capable Of Archiving & Printing Selected Image To A Standard Dicom Destination.	No Change
		Multi-Function Console With Quality Assurance (Main Workstation)	No Change
		High Resolution 17" Or More Lcd Monitor	No Change
		Image Manipulation/Post Processing Software.	No Change
		Multi Patient Viewing And Printing	No Change
		Pip (Picture In Picture) Option For Viewing Each Part In A Conventional Way.	No Change
		Exporting Images In Bmp, Jpeg, And Avi Formats On Dicom & Non-Dicom.	No Change
		Cd/Dvd Burning Facility.	No Change
		Should Have Following Special Features On Work Station Software	No Change
		A. Image Post Processing	No Change
		B.Windows Leveling	No Change
		C. Annotation	No Change
		D.Area Of Interest Zoom	No Change
		E.Magnification	No Change
		F. Flipping & Panning	No Change
		G. Automatic Exposure Correction	No Change
		H.Pre View Software	No Change
		I. Edge Enhancement Stepwise	No Change
		J.Contrast/ Brightness Adjustment	No Change
		L. The System Should Have Software To Perform Full Leg/Full Spine/Long Body Imaging/Imaging Stitching.	No Change
		Dry Imaging Printer.	No Change
		Single Tray Option And Should Be Capable Of Any Film Size Printing Option With Changing Tray.	No Change
		The System Must Have A Dry Imager.	No Change
		Pixel Size Less Than 100 Micron.	No Change
		The System Must Be Able To Print At Least 40 Films/ Hr Of The Largest Size.	No Change

		It Must Be Dicom Compatible Allowing Multiple Modalities To Be Connected At A Time.	No Change
		The Imager Should Support Daylight Loading Of Films.	No Change
		The Imager Must Have Minimum Spatial Resolution Of 500 Dpi.	No Change
		Accessories, Spares And Consumables	No Change
		All Standard Accessories, Consumables And Parts Required To Operate The Equipment, Including All Standard Tools And Cleaning And Lubrication Materials, To Be Included In The Offer.	No Change
		Cr Cassette & Image Plate: ·	No Change
		10" X 12" = 2 Pcs	No Change
		14" X 17" = 2 Pcs	No Change
		Mini Pacs System To Transfer The Image From Radiology Department To Doctors Room.	No Change
		Operating Environment	No Change
		The Product Offered Shall Be Designed To Be Stored And To Operate Normally Under The Conditions Of The Purchaser'S Country. The Conditions Include Power Supply, Climate, Temperature, Humidity, Etc.	No Change
		Power Supply: 220 - 240 Vac, 50Hz Fitted With Appropriate Plug.	No Change
		Standards And Safety Requirements	No Change
		This Unit Shall Be Certified To Meet Iso 9001 And/Or Iso 14971 And/Or Iso 13485:2003/Ac: 2007. And	Deleted
		should be CE/USFDA approved product	Model should be USFDA/European-CE (Issued by notified body) approved
		User Training	No Change
		Must Provide User Training (Including How To Use And Maintain The Equipment).	Deleted

			Warranty	warranty 3 year
			Comprehensive Warranty For 2 Years.	Deleted
			Maintenance Service During Warranty Period	Deleted
			Installation And Commissioning	Deleted
			Please Specify The Pre Installation Requirement	Deleted
			Documentation	Deleted
			User (Operating) Manual In English.	Deleted
			Service (Technical / Maintenance) Manual In English.	Deleted
			Certificate Of Calibration And Inspection From Factory.	Deleted
N	Sub total			No Change
Xiv	Dental			No Change
	Dental Set (capital)	1		No Change
			It should have double articulating headrest with seesaw movement.	No Change
			It should be provided with soft cervical support.	No Change
			Dental unit should have latest overhead delivery system.	No Change
			It should have two 3 way syringes (Tip autoclavable, with spare tips) one on unit side and other on the assistant side.	No Change
94	Dental Chair	2	It should have two high speed Air rotor terminals with two rotor hand pieces and accessories and one terminal for fiber optic. One for air motor/micro motor having straight and contra angle hand pieces and other for air rotor terminal with two air rotor hand pieces with two spare cartridges.	No Change
			It should have LED light cure unit with minimum intensity 1200 mW/cm2.	No Change
			It should have infection control system with non-retraction valves (Bio system /equivalent).	No Change
			All hand pieces / terminals should be kept on Autoclavable pads. 8 spare autoclavable pads should be	No Change

			supplied. Arm of unit should be pneumatically locked.	
			All air tubing of the delivery system can be disinfected internally after every dental procedure.	No Change
			It should have one in built piezo ultrasonic scalar (max frequency should be 36 KHZ)	No Change
			Removable auxiliary tray (autoclavable) shall be supplied – 10 sets. It should have integrated latest foot operated LED light (30000 - 50000 Lux).	No Change
			It should have rotatable water system with removable spittoon. It should have Medium Vacuum Suction and high suction (Motorized Suction).	No Change
			Should have following multiple programmes Two programmable working positions.	No Change
			Spitting and last working position with light ON and OFF automatically.	No Change
			Return to Zero position with light OFF automatically.	No Change
			It should have emergency stop control with luminous indication.	No Change
			Programmable bowl water and cup filler water.	No Change
			It should have LED based X-ray viewer (For I.P.G/O.P.G films).	No Change
			It should be provided with right arm.	No Change
			It should have multi functional foot control base.	No Change
			It should be provided with two stool with adjustable backrest tilt including an adjustable ring for foot rest	No Change
			Oil free medical grade compressor of 1. HP (fully imported)	Deleted
			should be CE/USFDA approved product	Model should be USFDA/European-CE (Issued by notified body) approved
			warranty- 3 year	No Change

	Dental Chair Compressor	2	Medical grade, Oil free, Noise free at least 1 HP Compressor.	No Change
			The compressor should be fitted with	No Change
			Built in thermo cut off to save motor during excess of heat	No Change
			auto head air release valve,	No Change
			Automatic cut off	No Change
			Safety release valve	No Change
			Drain Valve	No Change
			Should be CE/USFDA/BIS approved product	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
			warranty- 2 year	warranty 3 year
	Ultrasonic Scaler with scaler tip	1	Piezotronic Scaler with frequency of 28000-36000 Hz	No Change
			Autoclavable hand piece , Total control is Micro processor based	No Change
			Hand Pieces most sleek.	No Change
			warrant- 2 year	warranty 3 year
			Should be USFDA,CE approved product	Model should be USFDA/European-CE (Issued by notified body) approved
			The scalar supplies with: Piezotronic scalar with 4 tips. FOOT	No Change
	Dental Micromotar - Clinic	1	It should have digital display of speed.	No Change
			High Torque Micro motor (Foot Controlled) with Speed range of 2000 -40000 RPM	No Change
			It should have reverse and forward speed along.	No Change
			It should have auto cut off system for over load.	No Change
			it should be supplied with	No Change
			Contangle Hand piece (Autoclavable) : Speed : 40000 RPM	No Change
			Straight Hand Piece (Autoclavable): Speed 40000 RPM.	No Change
			should be ISO 13485 approved product	No Change

			warranty- 1 year	No Change
			It should have digital display of speed.	No Change
			High Torque Micro motor (Foot Controlled) with Speed range of 2000 -40000 RPM or more	High Torque Micro motor (Foot Controlled) with Speed range of 2000 -50000RPM
			It should have reverse and forward speed along.	It should have reverse and forward speed along.
			It should have auto cut off system for over load.	It should have auto cut off system for over load.
			it should be supplied with	it should be supplied with
			Contangle Hand piece (Autoclavable) : Speed : 40000 RPM or more	Contangle Hand piece (Autoclavable) : Speed : 50000 RPM
			Straight Hand Piece (Autoclavable): Speed 40000 RPM.	Straight Hand Piece (Autoclavable): Speed 50000RPM.
			should be ISO 13485 approved product	should be ISO 13485 approved product
			warranty- 1 year	warranty 3 year
	Straight Handpiece for Micromotor	2	straight handpiece	No Change
			Air Rotor hand piece clean head with a speed of 350000 RPM	No Change
			Supplies with Titanium/ SS Air rotor torque hand piece.	No Change
			should be ISO certified product	No Change
			Ultra push type non retraction valve.	No Change
	Dental Airotar Bur Set	2	as per dental unit standard	No Change
	Composit Curing Light	1	as per dental unit standard	No Change
	Vacuum forming machine	1	as per dental unit standard	No Change
	Electric Induction Wax Knief heater	1	as per dental unit standard	No Change
	Lathe Machine	1	as per dental unit standard	No Change

	Acrylizer	1	as per dental unit standard	No Change
	Model Trimmer	1	as per dental unit standard	No Change
	Portable Suction machine	1	Should be fitted with oil immersed noiseless motorized vacuum pump.	No Change
			Cabinet made from stainless steel.	No Change
			Two glass jars on the top of having minimum capacity of 2 Ltrs fitted with rubber air tight lids and overflow safety device.	No Change
			Should be supplied with adequately long pressure tubing providing required pressure.	No Change
			Should have vacuum control by knob.	No Change
			Should be mounted on four caster wheels.	No Change
			Should have motor of 1/4 HP capacity and power consumption not more than 250 Watts.	No Change
			Should have vacuum at least between 100 mm Hg to at least 575 mm Hg (-75 kPa).	No Change
			International standards: the unit should comply with international standards and should have CE or FDA or BIS marking.	Model should be USFDA/European-CE (Issued by notified body)/ISO 13485 certified
			Should perform yearly calibration and preventive maintenance (2 nos) during warranty & if entered into AMC (includes unlimited breakdown calls)/CMC (which will include spare replacement, consumable spares, breakdown calls)/Testing & measuring equipment used should be traceable to SI units through National/international standards (As per NABH norms).	Deleted
			Please specify pre installation requirements (electrical, HVAC etc.)	Deleted
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted

			Reponse Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty: 2 Years	warranty 3 year
	X-Smart Endomotor with Apex Locator	1	as per dental unit standard	No Change
	UV Sterilizer Chamber	1	as per dental unit standard	No Change
	Mini Autoclave	1	The autoclave should provide sterilization at 121o C and 134o C for both wrapped and unwrapped tools and also a flash cycle for rapid sterilization.	No Change
			The autoclave should be equipped with a powerful vacuum pump to eject air pockets from the chamber at the beginning and at the end of cycle (Pre-vacuum and Post vacuum)	No Change
			It should have minimum four sterilization programs and two test programs.	No Change
			Minimum volume at least 20liters.	No Change
			It should be class B autoclave so that hollow bodied instruments, hand pieces, and turbines can be fully autoclaved	No Change
			warranty- 2 years	warranty 3 year
			should be CE/USFDA/BIS approved product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
	Xray machine	1	Operation should be conventional as well as automatic.	No Change
			Completely micro controller based digital timer assuring the accuracy of the exposure time selected.	No Change
			Ease of operation as all the functions can be selected from the remote control as well as timer.	No Change
			Feather touch keypad and length of exposure cable should be 5 to 6 meters.	No Change

		Digital timer with the accuracy of 0.01 Sec (0.01 Sec to 4.00 Sec).	No Change
		Patient selection Switches (Thin, Normal and Obese) Film Speed selection switches (3 Speeds) RVG mode for RVG sensor.	No Change
		An excellent output of 65 kV to 70 kV, 7mAs to 10 mAs.	No Change
		Audible and Visual indication of “X-Ray On” (Radiation indications).	No Change
		Should provide compatible voltage stabilizer (Built in/External).	No Change
		Collimating device should be 20 cm in length and parallel/square in a lead shield should also be provided.	No Change
		Excellent, Mechanical maneuverability, long reach scissor arm.	No Change
		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.	No Change
		Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%	No Change
		Manufacturer/Supplier should have ISO 13485 certificate for quality standard.	No Change
		should be CE/USFDA approved product.	Model should be USFDA/European-CE (Issued by notified body)/BIS approved
		The unit should be AERB approved	No Change
		power requirements 230V, AC, 50 Hz, 15 Amps	No Change
		protection-Suitable stabilizer to be provided.	No Change
		High voltage protection for X-ray tube.	No Change
		Should maintain nominal temp and the heat should be disbursed through a cooling mechanism	No Change

			Should provide a pedestal stand with freely movable round wheels with locking devices to prevent unusual and excessive movement/ System should be wall mounted. It has to be set as per the requirement of the facility.	No Change
			Warranty- 3 year	No Change
	Led Apron with Thyroid Collar	2	Two numbers of BARC approved whole body lead aprons with all attachments and thyroid colors.	No Change
	Hanger for Lead Apron	1	as per required	No Change
	view box	1	single chamber	No Change
	RVG Sensor with sleeve	1	SUPER CMOS/CCD Technology	No Change
			Sensor Size No.1 (universal)/ Size No.0 (pediatrics)/Size No.0 (optional).	No Change
			No. of Pixels 16 lp/mm – 24lp/mm (true solution).	No Change
			Pixel size is 18.5 x 18.5 micron.	No Change
			Should provide compatible software with Image capture, enhancement and manipulation tools.	No Change
			Sensor cable length should be 3 meters and reinforced for durability and reliability (Fiber optic and scintillator tech).	No Change
			RVG (with Software) should be supplied with adequate and compatible computer system with latest operating system i.e desktop of latest version with 500 GB or more Hard disk drive and RAM approx 4 GB) and suitable laser printer.	No Change
			Manufacturer/Supplier should have ISO 13485 certificate for quality standard.	No Change
			should be CE/USFDA approved product.	Model should be USFDA/European-CE (Issued by notified body) approved
			warranty- 2 year	warranty 3 year

			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.	No Change
	Deionized Water system with Accessories	1	as per standard dental unit setup	No Change
	Crown Remover	1 set	as per standard dental unit setup	No Change
	Electric Kettle	1	as per standard dental unit setup	No Change
	Eye Protection Glass	2	as per standard dental unit setup	No Change
	Hydraulic Clamp	1	as per standard dental unit setup	No Change
95	Instrument Dressing Trolley	1 pc	As per standard dental unit setup. The surgical instruments should be made using top quality medical grade hardened stainless steel with defined specifications like AISI-410, AISI-420, AISI-304, AISI-303, AISI- 440 etc. using guidelines of ASTM standard F899-94 and ISO 7153 and with a dull finish.	No Change
	Instrument Dressing Tray	2 pc		No Change
	Dressing Drum	2 pc (Medium)		No Change
	Dressing Drum	2 pc (Small)		No Change
	Kidney Tray	6 pc (Medium)		No Change
	Steel Bowl	6 pc		No Change
	Non Tooth Forcep	2 pc		No Change
	Suture cutting Scissor	2 pc		No Change
	BP Handle	6 pc		No Change
	Conservative Instrument Kit	1 set		No Change
	Composite Polishing kit	1		No Change
	Endo Files - K file (15-85)	2 set		No Change
	Endo Files - H file (15-85)	2 set		No Change
	Endo Box	1		No Change

	Hand Scaling Kit/ Perio Scaler	1 set		No Change
	Periosteal Elevator	10 pc		No Change
	Extraction Forcep (Pediatric)	1 set		No Change
	Extraction Forcep	1 set		No Change
	Bone Currete	2 pc		No Change
	Bone File	2 pc		No Change
	Chisel - Mallet	1 set		No Change
	Gracy Currete	1 set		No Change
	Mettalic Syringe	10 pc		No Change
	Universal Plier	2 pc		No Change
	Adams Plier	1 pc		No Change
	Semicircle Orthodontic plier (Half-round)	1 pc		No Change
	Orthodontic Wire Cutter	1 pc		No Change
	Wax Knife	2 pc		No Change
	Wax Carver	2 pc		No Change
	Wax Spoon	2 pc		No Change
	Lacron Carver	5 pc		No Change
	Hylin Carver	2 pc		No Change
	Mettalic Scale	2 pc		No Change
	3-Way Syringe	4 pc		No Change
	Perforated impression tray	2 set (plastic)		No Change
	Perforated impression tray	2 set (stainless steel)		No Change
	Sectional dentulous upper-lower perforated impression tray	2 set (stainless steel)		No Change
	Sectional dentulous upper-lower	2 set (plastic)		No Change

	perforated impression tray			
	Micromotor Stone Bur/ Trimmer	2 set		No Change
	Micromotor Carbide Trimmer/ Bur	2 set		No Change
	Composite Polishing kit	1 set		No Change
	Articulator	2		No Change
	Clamp	2		No Change
	Flask	2 set		No Change
	Dental Cement Mixing Spatula (Straight)	2 pc		No Change
	Dental Cement Mixing Spatula (Curve)	2 pc		No Change
	Hot Plate	2 pc		No Change
	Cheek Retractor	10 pc (stainless steel)		No Change
	Blow Torch	2 pc		No Change
	Spirit Lamp	2 pc		No Change
	Chip Blower	2 pc		No Change
	Eye Protection Glass	2		No Change
	Dappen Dish	2 pc		No Change
	Glass Slab	2 pc		No Change
	Rubber Mixing Bowl	4 pc		No Change
96	Absorbable Gelatin Sponge (Gelostat)	10 packet	Absorbable Gelatin Sponge (Gelostat)	No Change
	Lignospan Cartridge (Septodent)	10 packet	Lignospan Cartridge (Septodent)	No Change
	Sterile Siliconized Dental Needle (Septojet)	6 packet	Sterile Siliconized Dental Needle (Septojet)	No Change

Sand paper (Number- 320)	10 pc	Sand paper (Number- 320)	No Change
Sand paper Mandrel	6 pc	Sand paper Mandrel	No Change
Articulating paper	10 pc	Articulating paper	No Change
Dental Cement Mixing Pad	5 pc	Dental Cement Mixing Pad	No Change
Agate Spatula	2 pc	Agate Spatula	No Change
Suction Tip	10 packet	Suction Tip	No Change
Flouride Gel	6 bottle	Flouride Gel	No Change
Flouride gel Applicator Brush/ Tip	20 box Tip diameter- 2mm	Flouride gel Applicator Brush/ Tip	No Change
GIC - Luting	2 pc	GIC - Luting	No Change
GIC - Restorative	2 pc	GIC - Restorative	No Change
Zinc oxide eugenol (Sealer)	1 pc	Zinc oxide eugenol (Sealer)	No Change
Zinc oxide eugenol (Paste)	1 pc	Zinc oxide eugenol (Paste)	No Change
Formacresol	1 pc	Formacresol	No Change
Calcium Hydroxide Powder	1 box	Calcium Hydroxide Powder	No Change
Hydrogen Peroxide	1 bottle	Hydrogen Peroxide	No Change
Sodium Hypochlorite	1 bottle	Sodium Hypochlorite	No Change
EDTA Gel	1 tube	EDTA Gel	No Change
Paper Points	2 box	Paper Points	No Change
Gutta percha points	2 box	Gutta percha points	No Change
Alginate	25 kg	Alginate	No Change
Soft liners/ Tissue conditioner - Mollosil	1 box	Soft liners/ Tissue conditioner - Mollosil	No Change
Soft Putty impression material	1 set	Soft Putty impression material	No Change

Pumice Powder	1 packet	Pumice Powder	No Change
Cotton Polishing Buff	25 pc	Cotton Polishing Buff	No Change
Polishing Cake	2 pc	Polishing Cake	No Change
Soft Tray Ultradent (Night guard sheet)	6 packet	Soft Tray Ultradent (Night guard sheet)	No Change
Heat cure Powder & Liquid	1 box	Heat cure Powder & Liquid	No Change
Acrylic Repair Material Pink Colour	10 box (400gm each)	Acrylic Repair Material Pink Colour	No Change
Clear Acrylic (J.C. Acrylic)	3 box	Clear Acrylic (J.C. Acrylic)	No Change
Sticky wax	2 packet	Sticky wax	No Change
Green Stick	2 packet	Green Stick	No Change
Modelling Wax	6 packet	Modelling Wax	No Change
Shelac Base plate	5 packet	Shelac Base plate	No Change
Full Teeth Set	5 box	Full Teeth Set	No Change
Complete Teeth Sets With Different Sizes, Shapes & Shades	5 box	Complete Teeth Sets With Different Sizes, Shapes & Shades	No Change
Airotar Spray	2 file(Bottle)	Airotar Spray	No Change
Dye Stone	5 kg	Dye Stone	No Change
Plaster Gypsum (POP)	10 kg	Plaster Gypsum (POP)	No Change
Plaster Stone	10 kg	Plaster Stone	No Change
Remanium Clinical Coil 0.80MM Orthodontic Wire	6 pc (50gm)	Remanium Clinical Coil 0.80MM Orthodontic Wire	No Change

	Vaseline Green Apna	4 pc (400gm)	Vaseline Green Apna	No Change
97	Deca head Microscope with camera	1	Optical system: Infinity corrected system	No Change
			Focus : Vertical stage movement 25mm per coarse stroke	No Change
			Vertical stage movement 1micron per fine stroke	No Change
			Stage rotation of 200 degrees or better with Stage Lock	No Change
			Stage Tension adjustment	No Change
			Illuminator : Built-in-Koehler illumination for transmitted light LED bulb/100W Halogen with 15 no speare bulb (pre-centered).	No Change
			Revolving nosepiece : Interchangeable/Removable Reversed Coded Quintuple Nosepiece .	No Change
			Objectives : Plan 2/2.5x, 4/5x, 10X, 40X, & 100XOil	No Change
			FOV 22 or more	No Change
			Condenser: APPROPRIATE SWING OUT CONDENSER FOR 2X - 100X	No Change
			Digital Camera: Camera attachment capable of handling bright field, dark field images with 1/2.3" CMOS or 2/3" high density CCD Chip, more than 5 Million pixel resolution with 17" or better TFT LCD monitor White Balance adjustment, Image Adjustment (Gamma Correction, shading Adjustment, Black level adjustment Hue Wheel variation, colour saturation adjustment)	No Change
			Software: Image analysis software that include length, width and circle measurements, comparison of images on PC. Branded PC with 4GB RAM, 500GB HDD, Win 8/10, Graphic card 1GB with 17" or better HD monitor, Printer.	No Change
			System should be European CE with notified body number or USFDA approved product	No Change

			LED pointer and oil should be supplied along	No Change
			warranty- 2 years	warranty 3 year
			Additional Point	Electrical power requirements 220-230 Vac, 50-60Hz
98	Binocular Microscope	5	Should be infinity- corrected optical system binocular microscope	No Change
			Should be supplied with tilting/adjustable ergonomic binocular tube.	No Change
			Should have high luminescent LED Light source.	No Change
			Manual single- axis coarse or fine motion handle system.	No Change
			Nosepiece: Sextuple nosepiece.	No Change
			Condensers: Phase condenser	No Change
			Eyepiece- 10X	No Change
			FOV-22mm or more	No Change
			Objectives- 10X, 20X, 40X, 100 X, 40 X for phase contrast.	No Change
			Both sides diopetre adjustment.	No Change
			Stage double slide holder.	No Change
			Should have smooth movements ceramic-coated coaxial stage rotating mechanism and torque adjustment mechanism.	No Change
			Power supply- 100-240VAC, 50-60Hz	No Change
			Should perform yearly calibration/Validation and preventive maintenance (2nos) during warranty & if entered into AMC(includes unlimited breakdown calls) /CMC (which will include spare replacement, consumable spares,breakdown calls) Testing & measuring equipment used should be traceable to SI units through National/international standards(As per NABL/NABH norms). To submit SOPs for PMS at the time of installation/commissioning.	Deleted

			Please specify list & cost of consumables/consumable Spares(i.e.spares need to be replaced at regular intervals, maybe quarterly/half yearly/yearly such as annual maintenance kit etc.) if any.(Quote Rate)	Deleted
			Please specify footprint size & weight.	Deleted
			Predispatch inspection at factory will be required if desired by authorities.	Deleted
			Should Be CE or USFDA Approved Product.	Model should be USFDA/European-CE (Issued by notified body) approved
			Please specify power consumption.	Deleted
			Local Service Support: Should have local office and service support/service engineer for attending the breakdown calls.	Deleted
			Response Time: Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.	Deleted
			Warranty : 2 years	Warranty 3 year