



Running Contract Details	
Equipment Name	Cathlab machine
Running Contract Valid Till	26-09-2025
Tender Ref No	KMSCL/EP/T501(R)/634D/2023
Tendered Quantity	10
Supplier Name	M/s Philips India Limited
GST No	33AABCP9487A1ZG
Installation & Delivery Period	24 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
C/o Expeditors International India Pvt. Ltd. Survey No. 523/ 3E2 - 3F - 3G - 3M - 4A - 4B - 524/1B - 2BM - 3A2 Door No.116 Devaneri Village Road - Sholavaram Village Chennai - 600067	Contact Person	Mr. K Ramesh, Mr.Nagaraj Kamt
	Phone	
	Mobile No	9845100119(Ramesh), 9619663999(Nagaraj)
	Email	k.ramesh@philips.com,anoopkumar.r@philips.com

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	CARDIAC CATH LAB WITH EP FACILITY MODEL B <i>Model & Make : Philips Azurion 7C12 Cathlab system/ Philips Medical Systems Netherlands, B.V</i>	59419896.48 Incl.GST :12%	4382217.37	63802113.85
2	Medical Grade large high definition FHD display 55"	5716024.16 Incl.GST :12%	421556.78	6137580.94
3	Four Medical grade high definition display LCD/ LED flat 19" or higher monitors with wide viewing angle, high luminance high contrast, flicker free, distortion free	780524.64 Incl.GST :12%	57563.69	838088.33
4	Electrophysiology Application	2399999.84 Incl.GST :12%	176999.99	2576999.83
5	Workstation Hardware	941013.42 Incl.GST :18%	65870.94	1006884.36

Item-wise Price Details				
6	Workstation software	1819459.04 Incl.GST :12%	134185.1	1953644.14
7	High Pressure Injector with 200 Syringes	2154873.28 Incl.GST :12%	158921.9	2313795.18
8	Online UPS for Cathlab & accessories , Console, Workstation, lights and computer	1528812.72 Incl.GST :18%	107016.89	1635829.61
9	UPS Battery	753757.44 Incl.GST :28%	48640.91	802398.35
10	All in one Computer with Laser Printer	299999.66 Incl.GST :18%	20999.98	320999.64
11	12 channel ECG with PC Connectivity	299999.84 Incl.GST :12%	22124.99	322124.83
12	Full Wrap Around Lead Aprons	23707.04 Incl.GST :12%	1748.39	25455.43
13	Skirt (with fastening belt)-Vest type Lead Aprons	43728.16 Incl.GST :12%	3224.95	46953.11
14	Front full type Lead Apron	8649.76 Incl.GST :12%	637.92	9287.68
15	Light weight leadless single piece aprons with front and back coverage	13799.52 Incl.GST :12%	1017.71	14817.23
16	Light weight leadless skirt and vest with fastening belt	43728.16 Incl.GST :12%	3224.95	46953.11
17	Thyroid Guard lead less	2170.56 Incl.GST :12%	160.08	2330.64
18	Leadless Head Gear radiation protection and light weight Lead Goggles	8300.32 Incl.GST :12%	612.15	8912.47
19	lead Spectacles	6235.04 Incl.GST :12%	459.83	6694.87
20	Lead Gloves	6670.72 Incl.GST :12%	491.97	7162.69
21	Heavy Duty Stand with Hangers to hold atleast 5 Lead Aprons (Stainless steel 304 construction)	25816 Incl.GST :12%	1903.93	27719.93
22	Wall mounted hangers to hold atleast 5Lead Aprons	7720.16 Incl.GST :12%	569.36	8289.52
23	Instrument table	24072 Incl.GST :18%	1685.04	25757.04
24	Accessory table	24072 Incl.GST :18%	1685.04	25757.04

Item-wise Price Details							
25	Buy back offer of existing cathlab Model Philips Allua FD10 installed at MCH Kottayam (The rate needs to be deducted from the main equipment rate if the buyback required)			478000.32 Incl.GST :12%	35252.52	513252.84	
26	ETO Sterlizer, sealing machine & accessories (Not taken for evaluation)			3199999.52 Incl.GST :18%	223999.97	3423999.49	
27	Latest Dose reduction / image quality improvement packages like Autoright / Clarity / OPTIQ. (Not taken for evaluation)			2999999.52 Incl.GST :12%	221249.96	3221249.48	
28	Cathlab machine as per specifications with 18 inches or 46cms diagnol detector except monitors (all configuration as per sr no 13 except detector) (Not taken for evaluation)			7000000 Incl.GST :12%	5162500	75162500	
29	IABP as per the specification (Not taken for evaluation)			6000000.16 Incl.GST :12%	442500.01	6442500.17	
				159031029.48	11699022.34	170730051.82	
Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 th Year	5 th Year	6 th Year	7 th Year	8 th Year	9 th Year	10 th Year
CARDIAC CATH LAB WITH EP FACILITY MODEL B							
Labour	8,48,925.00	8,91,371.00	9,35,940.00	9,82,737.00	10,31,874.00	10,83,467.00	11,37,641.00
Comprehensive	34,64,251.00	36,07,759.00	37,58,442.00	39,16,660.00	40,82,788.00	42,57,223.00	44,40,380.00

Other terms & conditions

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).
2. The supplier shall submit performance security amounting to 5.00% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

Technical Specification

Equipment :CARDIAC CATH LAB WITH EP FACILITY MODEL B

Equipment: Cardiac Cath Lab with EP Facility Model B

General

System should be state of the art, fully digital single plane system for diagnostic angiograms, cardiac interventions, other interventions like peripheral, carotid, including Electrophysiology procedures.

On line digital subtraction angiography (DSA) should be available.

The specification should be part of Tender.

Any advanced application or technique, should be quoted separately

System must be DICOM 3 standard compatible.

All standard software and tools needed must be part of the system

Should be US FDA & European CE Approved

Should meet all national and international safety standard and comply with BARC and AERB guidelines.

Gantry

Type - Ceiling Mounted/ Floor Mounted.

All movements of the gantry including collimator should be motorized and controlled from the table side.

The system should have adequate collision protection for the safety of the patient

Gantry should have fast speed for angulations and positioning; have a speed of at least 18 degrees/second or higher.

Gantry should have automatic positioning capability dependent on the reference imaging being selected

User defined programmed position of the C arm should be available, minimum 50

Gantry angulations should be freely user-selectable

Joystick for patient angle oriented C-arm and detector movements should be available

Manual/motorized parking of C-Arm should be available

Motorized peripheral position for peripheral and vascular intervention should be available

Patient access should be possible from either left or right side at the head end and groin.

The C arm/G arm should travel both side (right and left 90 degrees) of the patient and it should be possible to have head to toe imaging without repositioning of the Patient. Maximum patient coverage should be available (180 cm or more)

The C or G arm movement control should be possible from any side of the Table

The C or G arm rotation up to 15 degrees/second

Angulations LAO/RAO- at least 100/100 degrees Cranio/caudal 45 degrees or more

Arm design should allow sufficient space around the table during resuscitation and defibrillation

Detector size (higher detector size is preferred)

Table

Patient table should be a dedicated interventional X-ray table that supports a full range of applications.

Should be a feather-light free floating tabletop should help to maintain the region of interest with negligible effort.

Should be radiolucent carbon fiber table-top or equivalent

It should have high patient load-ability and CPR can be performed on the table. Maximum table load 300 kg or more (200kg patient weight).

The table should have longitudinal, horizontal and vertical travel

It should be possible to swivel the table in case of emergencies

Table should allow head to toe coverage of adult patients without repositioning

Should have access to patient from all sides and easy transfer and positioning

Should have Table control module for operation of all table functions

Extendable arm rest both sides (4 nos), and elbow guard, head fixing aids(4), mattress(6), drip stand, Accessory clamps, Catheterization arm support, Foot support, Handles with support, Articulating arm support, IV set holder, should be available

Table height movement should be minimum between 80 to 100 cm

X Ray Generator

Generator should be latest technology with high frequency type with at least 100 KW output at maximum factor

Should be optimized for the latest cardiac application for electrophysiological /interventional procedures

High frequency power unit that provides pulsed fluoroscopy capability should have automatic exposure control device for radiographic fluoroscopy and Angio mode

Should have an over loading protection

Output should be 100KW or more

SID (Source to image distance) tracking should be available

KVP range selectability should be 50-125KV or more

Output at 100 KV should be 1000MA or more and should be able to deliver up to 1000MA

It should have digital display of KV & MA

It should have the facility for pulsed fluoroscopy at variable rates for reducing the x-ray dose to the patient during intervention procedure.

X Ray Tube

Should be with a minimum of two focal spots small and large. The small focal spot should not be more than 0.5mm. The large focal spot should not be more than 0.8 mm

The X-Ray tube should have Anode heat storage capacity of at least 5 MHU or more to run continuously for 6-8 hours without shutting off with appropriate anode heat dissipation rate. Higher MHU will be preferred

Cooling system high oil/water cooling to ensure continuous operation. Anode dissipation rate should be mentioned. Highest heat dissipation rate will be preferred

Automatic/programmable spectral filtration mechanism for eliminating soft radiation without any need for manual filter insertion in

both fluoro and cine mode

X ray tube with noise less operation with high anode heat storage capacity to support long interventional procedures without interruption

X ray tube must have Generator/ Secondary grid switching / Equivalent technology

Collimator

Collimator should have facility for pre filtration of 0.2 to 0.9 mm Copper equivalent for reducing the X-ray dose

The collimator leads should have iris type or rectangular type arrangement

The collimator should have the facility for dose measurement chamber in order to display the skin dose on the monitor in the lab.

All cine settings should use 0.5 cu eq filter as default

Detector System

Should be Dynamic flat detector system of current generation for cardiovascular application with excellent spatial and contrast resolution

Resolution - minimum 30 cm diagonally, with pixel size smaller than 160um

Should have acquisition and display in at least 1024 x 1024 Pixels

Should possess the latest image processing software algorithm to reduce quantum noise in image to have excellent image quality

A minimum of 16 bit acquisition or better with at least 3 level acquisition with at least 3 level of zoom should be present

The DQE of detector should be >70%. Higher will be preferred

Should have capability to acquire the images© minimum 30 fps (pediatric application 30fps: adult cardiology 12.5 - 25: peripheral angio range (1- 15fps)

Digital Image System

Digital cardiac imaging for acquisition storage and retrieval in high matrix of 1024 x 1024 or more acquisition/ display and storage of image application to give excellent resolution with latest image processing software/algorithm should be available

Gray scale depth should be of at least 8 bit pixel should be possible at all frame rate

Image storage capacity should be of 1,00,000 image at 1024 x 1024 matrix at a minimum of 8 bits/pixel on main system hard disk

Medical grade large high definition display FHD monitor [55" or more) to display live, reference,3D,CT like image, Hemodynamic and EP waveforms with layout selection from table side control or separate touch screen module in exam Room should be present.

Monitor should have high refresh rate/ flicker free viewing of images

In control room, there should be data entry monitor, live monitor, hemodynamic monitor available

DICOM based or equivalent suitable work station capable of all review including reconstruction , post processing and quantification of coronary and ventricular function in the control room

Post processing should be possible to perform simultaneous off line as well as at the same time of doing procedure inside the lab.

State of art complete coronary ventricular and vascular on line & off line both quantifications software programs which are clinically validated should be available

Operation from exam room and control room should be available

All recall of stored images in fast slow still modes to select images at table side itself should be possible

Auto calibration should be possible

Cine loop replay facility & last image hold facility during fluoroscope should be present

Machine should have facility for 3D rotational angiography. Rotational Speed 30 Degree/Sec or more and frame rate in the range of 10 to 50 fps.

Should have more than 7 physical and simultaneously usable inputs including digital, Analog and High speed Analog

For live and reference back up two 19 inch or higher medical grade monitor should also be provided along with the single monitor

Background transfer of images from Cathlab to digital storage/CD/DVD archiving without interruption of cathlab procedure, (preferably automatic) should be possible

There should be parallel view of archived examinations, permit concurrent measurements of both archived studies and any images of the current study while fluoroscopy or cineradiography (acquisition) is going on.

Ability to display images back to cathlab should be present

Image processing features like zoom, post processing should be present

True on line digital subtraction facility at selectable frame speeds should be present

Facility to measure & display x-ray dose delivery during procedure should be available

Should have ability to run DSA run on CD.

Latest stent enhancement features should be present

Image inversion facility for live procedures should be present

2D and 3D road mapping/ remodelling features should be offered

Should be capable of integration with other imaging modalities like OCT (ACR), Fusion imaging etc

Archival System

Direct digital archival on compact disk (CD /DVD-recordable) in latest DICOM format preferably in loss less compression should be available

Ability to view CD and post process with clinically validated quantification software in DICOM

Ability to export DICOM vascular images on to CD/other image recording medium

DICOM viewing software should be available

The system should be fully DICOM ready and fully compliant for connection to PACS system of any make including currently available PACS system for the Cath Lab

Ability to convert the DICOM locos to BMP/JPEG and AVI format should be present

The system should be supplied with DICOM CD recorder for storing DSA runs photo images and it should be possible to review in any other PC

Cross Sectional Imaging

The system should have ECG/angle triggered and non triggered 3D acquisition and processing capability

Dedicated 3D workstation to be provided for 3D image processing for efficient workflow with display in control room and exam room

3D road-mapping should be available. It should be possible to have TAVI guidance for TAVI procedures with landmark marking and overlay, TAVI guidance packages should be included

Image planning and guidance tool for EVAR procedures to be offered.

Hemodynamic Monitoring

12 Lead ECG Amplifier with floating input

At least 4 pressures with floating inputs

Time and amplitude measurement

Laser Printer with minimum 16 MB memory with minimum 1200 dpi

Storing of patient hemo data on hard disk and retrieval as and when required

18" color wave form monitor with programmable layout and digital monitoring readout – Two

SPO2, cardiac output, pressure gradient facility, NIBP should be available

ECG cable and pressure transducers with facility for superimposition of pressure tracings with printing supports inside the operating room should be available

Live Hemodynamic monitors should be available in operating room as well as console room

Storage of ECG/pressure recording on CD should be available

Storage on hard disk of at least 1 TB should be available

Should have all calculation packages for pressure wave form analysis, valve area; gradient off- line and on-line.

Respiration display should be available

Extra cables - All cables (4 set each) should provided

Essential Accessories

Foot switch for fluoroscopy and acquisition

Ceiling suspended operation lamp

Lead glass (120 x 100cm) (as per international radiation protection standard)

Radiation shield ceiling and table mounted/suspended, (as per international radiation protection standard)

Radiation protective apron - Front type -15, Wrap around -10

Two hanger stands to hold 5 apron each and two wall mounted hangers to hold 5 aprons each

Thyroid guards 10 in number

Lead spectacles 5 in numbers

Lead lined gloves: 5 pairs

High power contrast injector (floor/ceiling mounted) with 200 syringes

Intercom between exam room and control room.

On line UPS for completed cath lab with back up of at least 30 minutes. Emergency lighting should also be on UPS.

Top end state of the art desktop computers (all in one with blue tooth mouse and key board) with multi function laser printers, 1 TB HDD, 8GB RAM, at least 19" monitor, OS and application software (licensed version) with each machine.

12 channel ECG with PC connectivity

Should have auto and rhythm modes

Should have at least one minute disclosure for a selected lead

Should have full ECG display with print preview on a monitor with good resolution of at least 640 x 480

ECG acquisition should be digital

Should have at least 50 ECG memory

Should have rechargeable battery

Print resolution should be at least 200 x 500 dpi

Should have Automatic lead reversal detection

ECG trolley should be provided as standard accessory

Instrument Table completely made of SS 304 – (Length: 130cm, width-45cm, Height-80cm(top span from floor), with 2 span(rack) with side rail on three sides, wheel size- diameter not less than 10cm).

Accessory Table completely made of SS 304 – (Length:80cm, width 45cm, Height 120cm(top span from floor), width5 span(rack) with side rail on three sides, wheel size-diameter not less than 10cm.

Electrophysiology Application

Navigation and ablation facility using precisely registered 3D and 2D live fluoroscopy images

Segment images automatically

Import pre-procedural CT or MRI data, or an intra procedural 3D rotational scan to create the 3D model

Live fluoroscopy or a compatible electro anatomical mapping system can be used for catheter image guidance. System should be compatible with electro anatomic mapping systems

The endocardial surface should be visualized

Point Tagging function should be available

A screen image of the live screen should be possible

ETO Sterlizer (Not taken for evaluation)

The ETO gas sterilizer should be fully automatic type for sterilization of heat sensitive goods such as anesthetic tubing and endoscopes etc.

The sterilization chamber should be double walled, corrosion and gas resistant of suitable alloy. The inner surface should be smoothly finished to minimize gas deposits. The chamber shall be insulated against heat emission and the jacket shall be connected to the warm water circulation arrangement.

The sterilizer door shall have a quick release locking arrangement with door opening.

Suitable safety interlocking arrangement shall be provided for the door so that the sterilization process does not start unless the door is properly locked in position and during the program run it should not open.

The sterilizer shall be provided with a suitable vacuum pump and gas trap to separate and evacuate the gas.

The sterilizer shall be provided with an automatic programmable panel with memory for preset operating sequence of all programs of operation. Monitoring instruments should be provided with the ETO for proper operation and monitoring of sterilizing process such as pressure manometer, thermometer, limit selector for temperature and pressure etc.

The ETO sterilizer should be able to operate for the minimum essential following cycles programmes:

Sterilization cycle for heat sensitive objects that ensure temperature from 40-55° with subsequent aeration for protection of the operating personnel.

Aeration cycle/program to extract residual gas out of the sterilized objects after each sterilization cycle.

Automatic chamber evacuation cycle with subsequent venting before releasing the door lock for opening, thereby prohibiting exposure of the operating personnel by gas dissolving from the chamber walls during shutdown period.

Gas disposal arrangement / catalytic converter.

Capacity: 250 to 300 litre

Sterilization gas: 100% Ethylene oxide.

Sterilization method: Cold sterilization of heat sensitive materials.

Temperature: Cold and Warm Temperature cycle.

No. of doors: One.

The Machine should have micro controller for process sequence control like program, preparation, humidification, sterilization, aeration, completion, remaining time & operation record etc.

System Configuration Accessories, spares and consumables

Sterilization basket of suitable size 1 No.

ETO gas cartridges 50 Nos.

Compressor for degassing

Packing Material with Chemical Indicator and dispenser of four different sizes two rolls each

Sealing machine (1#) as per specification given below

Biological indicator 5 sheets.

The entire unit & Gas cartridges should be EPA (Environmental Protection Agency or certified for Government authority in India. Statutory concerned with Environment protection & occupational safety regulations applicable).

Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. Or should comply with 89/366/EEC; EMC directive.

The unit shall be capable of being stored continuously in ambient temperature of 0 - 50 deg C and relative humidity of 15-90%.

The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%.

Should have built in alpha numeric printer to be available to monitor continuously all the vital sterilization parameter like temperature, vacuum , time etc. Printing paper 10 Roll.

Power input to be 220-240VAC, 50Hz

On line UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.

Shall meet International Organization for Standardization. Biological evaluation of medical devices. Part 7: ethylene oxide sterilization residuals [standard]. 1st ed. ISO 10993-7. 1995 (reaffirmed 2001). OR Any international/ National standard for ETO Safety.

Local Pollution Control Board clearance is mandatory.

The price quoted should be inclusive of installation charges and the complete installation should be done/ arranged by the supplier including exhaust above the building level.

Should have safety certificate from a competent authority CE issued by a notified body registered in the European commission / FDA (US)/ STQC CB Certificate/ STQC S Certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate/ test report shall be produced along with the technical bid

Sealing machine

The unit should have manual heat adjustments.

System should be suitable for the sealing of surgical instruments in paper envelopes.

Should be microprocessor controlled.

iv. Smooth easy cleaning surfaces.

v. Quick sealing time with sealing width of 12mm.

vi. It should be a compact table top system.

vii. Ergonomic handling with anti fatigue movement.

viii. Should have automatic sealing indicator.

Buy Back

The existing cathlab machine must be subject to BUY BACK by bidder. The cost for buyback of old working Cathlab (Make: Philips) shall be offered. The rate offered for buy back will be reduced from the cost offered for the new machine including all accessories and turnkey works. The lowest offer by reducing the buyback rate will be selected as the successful bidder for the purchase of equipment in GMC Kottayam. For the running contract the successful bidder will be declared on the basis of lowest rate offered for the new equipment including all accessories and turnkey works.

L1 for GMC Kottayam : Cost offered for Cathlab with all accessories as per BOQ + cost of turnkey works for the quantity mentioned in BOQ + Applicable CAMC rates – buyback cost offered for old Cathlab available in GMC Kottayam. If the buyback rate offered by the L1 bidder is less than the upset value fixed by the condemnation committee for the old Cathlab, the L1 bidder will be given the opportunity to offer rate more than the upset value. If the upset value could not be matched then the old machine will not be given in buyback.

L1 for Running Contract: Cost offered for Cathlab with all accessories as per BOQ + cost of turnkey works for the quantity mentioned in BOQ + Applicable CAMC rate. This will be calculated manually and published in the price bid opening summary notice.

DETAILED SPECIFICATION OF IABP

Transportable, Compact IABP system with minimum 2 1/2 Hours of Battery Backup.

Fast Pneumatics to provide accurate & reliable ventricular support enhancing augmentation & improved after-load reduction. Preferably a compressor based system for better drive-gas shuttle speed.

Should have 3 modes of Operation, 1) Automatic 2) Semi Automatic 3) Manual.

System should be capable of automatically selecting appropriate Trigger i.e. ECG or Pressure and also accurately select the inflation and Deflation points, in Automatic mode.

System should have Automatic Fiber Optic Pressure Signal Capability and should be capable of working with 7Fr. and smaller Fiber Optic Balloons.

The zeroing / Calibration of the pressure wave form should be automatically done once the Catheter is inserted into the patient (in vivo Calibration). The system should have the capability to recalibrate the pressure wave form every 2 hours or sooner if the patient or environmental condition changes (again in vivo Calibration).

The system should have capability of sending an electrically isolated low level pressure output signal which enables the user to send the Fiber Optic Pressure wave form to a patient monitor by simply attaching a cable.

In the automatic mode of operation user should be in control of the deflation point.

In Automatic and Semiautomatic Mode, Single ECG Trigger should be able to track various Ventricular and Atrial Arrhythmia including VE's, Bigeminy, Trigeminy, Couplets and Atrial Fibrillation etc without any user intervention, and still give optimal performance.

In Automatic and Semiautomatic Mode, Advance Software should automatically adapt the timings for various rhythms and rate variations, without any user intervention.

In Automatic and Semiautomatic Mode, it should automatically identify Atrial Fibrillation and adopt R-Wave deflation mode for better patient support, without any user intervention.

Should be able to trigger on 7mmhg of Pulse Pressure when used in Pressure Trigger mode.

Single Key Start-up to make it fast, user friendly and easy to use.

Should be able to display at least 3 waveform as ECG. Invasive Pressure and Balloon Pressure waveform.

Large Detachable Display for brighter and very good visibility from a distance in any lighting conditions.

On screen indication for Helium level in the cylinder and Battery level for timely intervention and correction.

ECG Inflation marker to indicate inflation period on ECG which can be useful when arterial pressure waveform is not available.

On screen indication of standby time and should give alarm after 20 mins, to draw user's attention on the system being on standby.

Optical Blood back detect for early indication of blood coming into the balloon lumen due to IABC leak

Should have extensive Help Text available during startup to make the system easy to use even for new users

Should give extensive help messages to correct the alarm conditions that are specific to the alarm condition. This should help the user to overcome the alarm problems immediately and with ease.

Should be capable of removing Condensation automatically without user intervention and should be maintenance free

Should have automatic Altitude correction to make it safer for use during Air Transport

PCIABP Software which allows the user to monitor the IABP from any remote location via a modem.

In-built Comprehensive Service Diagnostics to help the technician to locate the fault immediately.

Should have capability to connect on the hospital network.

System should be supplied with the following.

ECG Cable with Lead wires1 Set

Reusable Invasive Blood Pressure Transducer 1 no.

Refillable Helium Cylinder compatible with the IABP system Qty. 3nos

Catheter with Ballon – 2 Nos

The CAMC rate of main equipment should not include the CAMC of 55” and four nos of 19” monitors. The CAMC of all other items taken for evaluation should be included along with the CAMC of main equipment. The CAMC of monitors shall be offered separately.

A. Item Wise Turnkey

Bidder shall hand over the items and materials removed from the site handed over for the execution of turnkey works for installing cath lab machine to the hospital superintendent and obtain proper acknowledgement

Sl.No	Description	Qty	Unit	Estimate Rate
I	Civil			
1	Demolishing R.C.C. work manually / by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer -in-Charge.	5.00	cum	3002.29
2	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge. In cement mortar	15.00	cum	1741.04
3	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead: Of area 3 sq. metres and below	5.00	each	325.14
4	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead: Of area beyond 3 sq. Metre	10.00	each	444.93
5	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	100.00	sqm	65.01

Sl.No	Description	Qty	Unit	Estimate Rate
6	Dismantling aluminium / Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 metres lead as directed by Engineer - in-Charge	50.00	sqm	49.73
7	Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyriphos / Lindane emulsifiable concentrate of 20%	25.00	Litre	237.88
8	Diluting and injecting chemical emulsion for POST -CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion):Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300mm including excavation channel along the wall & rodding etc. complete: With Chlorpyriphos /Lindane E.C. 20% with 1% concentration	100.00	metre	33.50
9	Providing and fixing double scaffolding system (Cup lock type) on the exterior side of building/structure, upto 25 metre height, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40 mm dia M.S. tube, placed 1.5 metre centre to centre, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube chakkus, M.S. clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and / or pointing and / or applying chemical and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc, wherever required, if feasible, for inspection of work at required locations with essential safety features for the workmen etc., complete as per directions and approval of Engineer-in-Charge. Note: - (1) The evaluational area of the scaffolding shall be measured for payment purpose, (2) The payment will be made once only for execution of all items of such works.	100.00	sqm	305.56
10	Disposal of building rubbish/ malba/ similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved	50.00	cum	164.48

Sl.No	Description	Qty	Unit	Estimate Rate
11	Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	10.00	cum	529.11
12	Providing and laying in position cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) up to floor five level excluding the cost of centering, shuttering, finishing for leveling coarse of floor and roof etc.	5.00	cum	7999.89
13	Reinforced cement concrete work in arches, archribs, domes, vaults, shells, folded plate and roof having slope more than 15 degree up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size).	5.00	cum	12187.23
14	Providing and laying in position machine batched and machine mixed design mix M-20 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. Note:- Cement content considered in this item is @ 330 kg/cum. Excess or less cement used as per design mix is payable or recoverable separately. All work above plinth level upto floor V level	5.00	cum	11135.00
15	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Mild steel and Medium Tensile steel bars	3000.00	kg	97.28

Sl.No	Description	Qty	Unit	Estimate Rate
16	Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform	50.00	sqm	820.89
17	Earth work in surface excavation not exceeding 30 cm in 10.00 depth but exceeding 1.5m in width as well as 10 sqm on plan including disposal of excavated earth up to 50 m and lift up to 1.5 m, disposed soil to be levelled and neatly dressed: All Kinds of soil		sqm	109.63
18	Brick work with common burnt clay selected F.P.S (non modular) bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand) Above plinth level and upto floor V level	10.00	cum	9276.76
19	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement: 6 coarse sand) etc complete.	15.00	cum	6622.99
20	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in: CM 1:6 (1 cement : 6 coarse sand etc complete	10.00	cum	6994.22
21	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x10 cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level for 10 cm thick wall in : CM 1:6 (1 cement : 6 coarse sand) including cost of scaffolding complete	10.00	cum	7850.69

Sl.No	Description	Qty	Unit	Estimate Rate
22	cement plaster 12 mm of mix: 1:4 (1 cement : 450.00 4 fine sand)		sqm	316.06
23	cement plaster 12 mm finished with a floating coat of neat cement of mix: 1:3 (1 cement : 3 fine sand)	100.00	sqm	403.73
24	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc., complete.	12.00	sqm	1097.86
25	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600 x 600 mm.	100.00	sqm	1777.34
26	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 800x 800 mm	350.00	sqm	2083.17

Sl.No	Description	Qty	Unit	Estimate Rate
27	Providing and fixing first quality Vitrified wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	800.00	sqm	1934.66
28	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg). including filling /grouting and finishing complete as per direction of Engineer-in-charge. Size of Tile 600x600 mm	100.00	sqm	285.98
29	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg). including filling /grouting and finishing complete as per direction of Engineer-in-charge. Size of Tile 800x800mm	450.00	sqm	227.24
30	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge : Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	10.00	sqm	2933.32

Sl.No	Description	Qty	Unit	Estimate Rate
31	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately), using good quality Anjili wood /jack wood	1.00	cum	110013.51
32	Providing and fixing paneled and glazed shutters for doors, windows and clerestory windows, 35 mm thick shutters including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineerin - charge. using Anjili/ Jack wood	20.00	sqm	3300.75
33	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminnium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	750.00	kg	540.44

Sl.No	Description	Qty	Unit	Estimate Rate
34	For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	500.00	kg	647.13
35	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS : 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer - in- Charge. Pre- laminated particle board with decorative lamination on both sides	25.00	sqm	1240.03
36	Supplying and fixing flush door shutter, shutter of required size, thickness 30mm thick, finished with 1 mm laminate of approved shade with 9 " X 1'6" clear glass vision panels as per design including necessary hinges	25.00	sqm	3484.50
37	Frosted film - Supply and installation of 3M make frosted film pattern throughout all the internal glass panels wherever required of approx. 1.5 m height as per the approved pattern.	25.00	sqm	580.75
38	Providing and fixing extruded section body tubular type universal hydraulic door closer(having brand logo with IS: 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete	10.00	no	1006.71
39	Providing and fixing 4.00 mm thick ACP sheet for cupboard including all cost, conveyance, labour charges	20.00	sqm	2113.60

Sl.No	Description	Qty	Unit	Estimate Rate
	etc complete			
40	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 4.0 mm thickness	25.00	sqm	1184.03
41	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/ sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37 mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50 mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25 mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5x25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with: 12.5 mm thick tapered edge gypsum fire resistant board conforming to IS; 2095-Part I	200.00	sqm	1465.23
42	Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and	150.00	sqm	2054.04

Sl.No	Description	Qty	Unit	Estimate Rate
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fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring "T" with : GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5mm thick with 25 mm height, ,made of G.I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending .

43	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on interlocking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long space between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening of services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanized	50.00	sqm	2084.39
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Sl.No	Description	Qty	Unit	Estimate Rate
	<p>butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.</p> <p>8mm thick fully perforated calcium silicate board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with minimum compressive strength 225 Kg/sq. cm, bending strength 100 Kg/sq. cm, of size 595x595 mm, having perforation of dia, 10 mm with minimum perforated area 18% with non woven tissue on the back side, having an NRC (Noise Reduction Coefficient) of 0.85, with 50 mm thick rockwool of 48 Kg/cum backing.</p>			
44	<p>Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS: 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer -in-Charge. With brass cover plate minimum 1.25 mm thickness</p>	10.00	each	3047.73
45	<p>Providing and fixing 100 mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. Complete</p>	10.00	each	543.17
46	<p>Providing and fixing Thomson Multi wood board or equivalent make paneling 12 mm thick, to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately) as per the direction of site Engineer-in-charge.</p>	50.00	sqm	1959.89
47	<p>Providing and fixing Thomson Multi wood board or equivalent make, in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately) as per the direction of site Engineer-in-charge.</p>	50.00	sqm	2503.86

Sl.No	Description	Qty	Unit	Estimate Rate
48	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work	50.00	sqm	143.94
49	Polishing on wood work with ready mixed wax polish of approved brand and manufacture: New work	20.00	sqm	178.74
50	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	500.00	sqm	136.37
51	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile including applying additional coats wherever required to achieve even shade and colour. Two coats	500.00	sqm	134.94
52	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	100.00	sqm	190.88
53	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Electric resistance or induction butt welded tubes	2500.00	kg	153.22
54	Roofing sheet with Sandwich PUF roof panel with 0.40	100.00	sqm	1858.12

Sl.No	Description	Qty	Unit	Estimate Rate
	mm or nearest size pre painted Galvalume sheet at top & Bottom , 30 mm or nearest size PUF sheet at middle portion , necessary overlap at ends including self screws, cyclone washer etc. complete			
55	Wall cladding with Sandwich PUF Wall panel with 0.40 mm or nearest pre painted Galvalume sheet at top &Bottom , 30 mm or nearest PUF sheet at middle portion , necessary overlap at ends including self screws, cyclone washer etc. complete.	100.00	sqm	1839.90
56	Providing at all heights, levels and locations 0.45 mm thick Galvalume sheet of Alloy 31500/31000/40800, conforming to IS 1254, IS 737, IS 2676. The sheet shall be fixed using self drilling/self tapping SS screws of size 5.5x65 mm with EPDM seal complete upto required pitch in horizontal, vertical or curved surfaces i/c cutting to size and shape where required as per the direction of Engineer-in-Charge. The rate shall be inclusive of all screws, seal, ridge, labour, scaffolding, machinery for fixing and approved sealant where required etc. but excluding the cost of purlins, rafters and trusses.	50.00	sqm	793.42
57	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: W.C. pan with ISI marked black solid plastic seat and lid	5.00	each	6088.84
58	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	5.00	each	3657.34

Sl.No	Description	Qty	Unit	Estimate Rate
59	Supplying and fixing CP Towel rod 45cm or nearest available length including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge	5.00	no	87.64
60	Supplying and fixing CP Health Faucet superior quality (Jagur or equivalent make) including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge.	5.00	no	1280.79
61	Supplying and fixing Stainless steel soap dish including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge.	5.00	no	67.04
62	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	3.00	each	1519.87
63	Supplying and fixing Stainless steel Mirror finished 'H' type handles including material cost, conveyance and fixing charges etc complete.	10.00	each	992.11
64	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 15mm dia 12kgf/cm2 -Internal work- Exposed on wall	30.00	metre	236.79

Sl.No	Description	Qty	Unit	Estimate Rate
65	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 32 mm dia 10Kgf/cm ² - Internal work - Exposed on wall	30.00	metre	318.87
66	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer- in- Charge. Concealed work, including cutting chases and making good the wall etc. 15 mm pipe 12 Kgf/ cm ²	25.00	metre	407.91
67	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc. 32 mm pipe 10Kgf/cm ²	25.00	metre	448.66
68	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chased and making good the wall etc. 110 mm pipe 6kgf/cm ²	100.00	metre	725.82
69	Providing and fixing PVC pipes includings of pipes with one step PVC solvent cement, trenching and refilling & testing of joints complete as per direction of Engineer in Charge. 75 mm dia 4 Kgf/cm ²	50.00	metre	320.17
70	Providing and fixing 24 mm thick factory made PVC	10.00	sqm	1990.67

Sl.No	Description	Qty	Unit	Estimate Rate
	<p>door shutters made of styles and rails of a PVC hollow section of size 59 x 24 mm and wall thickness 2 mm with inbuilt edging on both sides. The styles and rails mitered and joint at the corners by means of M.S. galvanized/plastic brackets of size 75 x 220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by fixing galvanized M.S. tube of size 20 x 20 mm and 1 mm wall thickness. The lock rail made up of 'H' section, a PVC hollow section of size 100 x 24 mm and 2 mm wall thickness, fixed to the shutter styles by means of plastic/galvanized M.S. 'U' cleats. The shutter frame filled with a PVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm wall thickness. The panels filled vertically and tie bar at two places by fixing horizontally 6 mm galvanized M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge(For W.C. and bathroom door shutter).</p>			
71	Supplying and fixing Name board of various sizes using foam sheet board including lettering as per the direction of departmental officers including cost, conveyance and fixing charges etc complete. 45x14cm size	10.00	each	929.20
72	Supplying and fixing the name board of size 8'0" x 3'0" using ACP board with acrylic lettering including cost, conveyance and labour charges for lettering and fixing etc complete	1.00	each	13938.00
73	Supplying and fixing Inaugration board using granite slab including lettering as per direction of departmental officers including cost of granite, lettering and fixing charges etc complete. Size: 100x84cm	1.00	each	17422.50
74	Supplying and fixing skylight of size 1.2mx 1.8m with designed acrylic sheet including 4 numbers LED Tube as per the direction of engineer in charge	2.00	each	15000.00
75	Computer Chair The Medium Back Adjustable Revolving chair made with Mesh back within Built Handle in the Nylon Finish, The Back is designed	10.00	each	8477.79

Sl.No	Description	Qty	Unit	Estimate Rate
	extra lumber support. The seat have provided Seat cover in PP made with 12mm hot pressed ply and PU Moylded foam. The tilting mechanism should be synchro-tilt mechanism as per international ergonomics standards any position locking. The base and pin wheels are made in the Nylon. 120mm H Gas lift should be provided with Tower Bellow			
76	High Back Chair Made with feather Foam Seat & Mesh Back with lumber support. , The Gas lift mechanism should be tested as per BIFMA Standards. The pedestal should be five legged injection moulded in black 30% glass –filled nylon and fitted with 5 nos twin wheel castors. The castors of the chairs should be glass filled, It should have synchro any angle locking arrangement	10.00	each	9483.65
77	Providing and fixing trap doors for access to the areas above false ceiling. The trap door shall have an external frame made of Powder coated aluminium channel on which the shutter is hinged. Shutter shall be made 3 mm thick ACP sheet shutter external frame of shutter made of Powder coated aluminium channel. Concealed heavy duty hinges shall be used to mount the shutters and locking shall be provided. The shutter shall be moulded in level with the false ceiling forming a groove all around. Sufficient number of hinges and locks shall be provided to avoid sagging of the shutter. Key also shall be supplied. No extra rate shall be provided for suspenders or frame works all round for linking the trap door to gyp board /any other false ceiling. The rate including all labour charges ,material charges ect complete.	4.00	each	14541.98
78	Supplying and laying polyster , washable and stainfree cloth(Bio-Active fabric washable germfree-suitable for ICU room) curtain system with maximum curtain cloth height 230cm (top 30 cm white colour net and 200cm light blue colour as per approval) stitching with stifiner tape,pleats,ironing and laying in ICU room around each bed using PVC runner with hooks&stopper for hanging/sliding etc. as per the direction of engineer in	20.00	sqm	1417.03

Sl.No	Description	Qty	Unit	Estimate Rate
	charge including conveyance to site , laying in line and level , sealing all cuttings in false ceiling with powder coated MS cup ,all leads and lifts including all labour charges etc. complete.(unpleated length of the cloth measurement will be considered for payment also the bottom and top foldings will not be considered in cloth measurement)/Supplying and fixing powder coated 20mm dia. GI round tube hanging support of required length (app. length 1.10m) one end fixing from slab by using 6mm dia. expansion bolt at a distance not more than 2 m, c/c down end fixed to powder coated aluminium channel frame 45x20mm x 1mm thick section by using SS screw as per the direction of engineer in charge including conveyance to site, laying in line and level ,sealing all gaps in false ceiling due to hanging supports ,all leads and lifts, including all labour charges etc. complete.			
79	Providing and fixing Vertical blinds as per the direction of Engineer in charge	20.00	sqm	871.13
80	FURNITURE & OTHER WORKS : Lead lined door shutters: 2mm Lead lined door shutters with Solid cored(30mm) Lead(2mm) lined flush door side hung two rebated shutters with plywood(6mm) & laminated (1mm) on both sides and all accessories (SS hinges (4 no's), tower bolt , SS handles etc..)	6.00	Sqm	25000.00
81	Lead lined door frames: Lead(2mm) lined flush door side hung single shutter with plywood(6mm) & laminated (1mm) on both sides and all accessories (Lead sheet should overlap door frame & wall)including Providing wood work in frames of doors and fixed in position with hold fast lugs or with dash fasteners of required dia & length , using good quality Anjili wood /jack wood (frame size 12 cm x 8 cm)	0.10	Cum	100000.00
82	Wood frame for fixing Lead Glass (Lead sheet should	1.00	LS	25000.00

Sl.No	Description	Qty	Unit	Estimate Rate
	overlap door frame & wall)			
83	Steel cupboard (Godrej) for storage 6ft tall 3 feet width	2.00	No.	20000.00
84	cupboard for storage of catheters , 6ft tall 3 feet width. 19 mm ply board construction laminate finish painted (enamel) as per approval. Front panels to have a locking arrangements with one panel having tower bolt on the inner side with handles , magnetic hinges and all complete	2.00	No.	30000.00
85	Providing, Fixing and Installation of floor mounted 2 Bay 1.00 Scrub Station made of SS 304 1.6mm thk. Sheet with timeout facilities, foot operated with hot and cold water mixture complete with all fittings etc. Satin finish and most optimal RA value. Elbow operated water and hand scrub. Curved joints to avoid microbial deposition and growth, ensuring perfect hygiene and ease of cleaning. The station shall be equipped with soap dispensers. Easily openable for refilling the hand scrub/ routine maintenance. Two bay 63"x29"44"	1.00	Nos	120000.00
86	Catheter hanger and wall clamp SS304 for 5 aprons including all materials and fittings	2.00	No.	10000.00
87	Lead Apron Hanger. Completely made of SS304. Provision to hang 10 aprons. The hanger should be 2ft width. Shoould have strong base for stability. The width of the total assembly shall be 3.5ft width and 2 ft depth.	1.00	No.	25000.00

Sl.No	Description	Qty	Unit	Estimate Rate
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The height shall be 153 ft.

88	Providing and fixing 2.0mm th. Vinyl floor with rubber based adhesive over clean and smooth surface including finishing by rolling a light roller all complete.	20.00	Sqm	550.00
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II Electrical

1	Wiring for twin control light point with 1.5 sq.mm FRLS 2.00 PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.	2.00	point	1255.56
2	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	1.00	each	108.47
3	Wiring for group controlled (looped) light point/ fan point/ exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. Group B	10.00	point	603.38
4	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. Group C	30.00	point	1176.92

Sl.No	Description	Qty	Unit	Estimate Rate
5	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2x1.5 sq.mm + 1x1.5 sq.mm earth wire	150.00	meter	173.56
6	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2X 2.5 sq. mm + 1 X 2.5sq. mm earth wire	280.00	meter	197.96
7	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2 X 4 sq. mm + 1 X 4sq. mm earth wire	300.00	meter	238.64
8	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required. 4 x 6 Sq. mmm	50.00	meter	261.69
9	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required. 3 X 1.5 sq.mm	50.00	meter	63.73
10	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required. 3 x 2.5sq. Mmm	50.00	meter	89.49

Sl.No	Description	Qty	Unit	Estimate Rate
11	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required. 3 x 4 Sq. mmm	50.00	meter	138.30
12	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor,unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required. 2 pairs	190.00	meter	24.41
13	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	60.00	meter	39.32
14	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 20mm	150.00	meter	98.98
15	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 25mm	50.00	meter	107.12
16	Supplying and drawn of UTP 4 pair CAT 6 LAN cable in the existing surface/recessed steel/PVC conduit as required 1 run of Cable	175.00	meter	58.30
17	CAT 6 RJ 45 COMPUTER JACK MODULAR SOCKET OUTLET	16.00	no	262.43

Sl.No	Description	Qty	Unit	Estimate Rate
18	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 5/6 amp switch	20.00	each	101.69
19	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 2 way 5/6 amp switch	2.00	each	146.44
20	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 15/16 amp switch	40.00	each	155.93
21	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 3 pin 5/6 amp socket outlet	20.00	each	131.52
22	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 6 pin 15/16 amp socket outlet	40.00	each	207.45
23	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Telephone socket outlet	2.00	each	141.01

Sl.No	Description	Qty	Unit	Estimate Rate
24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. TV antenna socket outlet	2.00	each	141.01
25	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Bell push	1.00	each	149.15
26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	20.00	each	37.97
27	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required. 1 or 2 Module (75mmX75mm)	20.00	each	288.81
28	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required. 3 Module (100mmX75mm)	12.00	each	317.28
29	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular	12.00	each	395.92

Sl.No	Description	Qty	Unit	Estimate Rate
	switches in recess etc as required. 6 Module (200mmX75mm)			
30	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required. 8 Module (125mmX125mm)	2.00	each	455.58
31	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	1.00	each	108.47
32	Extra for fixing the louvers/ shutters complete with frame for an exhaust fan of all sizes	4.00	each	199.32
33	Charges for cutting holes suitable for accommodating exhaust fans up to 305mm sweep including plastering color washing etc. as required.	4.00	each	475.96
34	Installation of exhaust fan in the existing opening, including making good the damage connection testing, commissioning etc. as required. Upto 450 mm sweep	4.00	each	431.18
35	Supply of 300/305 mm sweep Light Duty Exhaust fan in metal frame working on 230 VA/C	6.00	no	1719.25
36	Supply and installation of sheet steel, phosphatised and	1.00	each	2848.18

Sl.No	Description	Qty	Unit	Estimate Rate
	<p> painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. Fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall, making good the damages, color washing etc. as required 4 way (8+12) - three phase double cover (IP 42/43) </p>	4		
37	<p> Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. Fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall, making good the damages, color washing etc. as required 6 way (8+18) - three phase double cover (IP 42/43) </p>	1.00	each	4504.18
38	<p> Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. Fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall, making good the damages, color washing etc. as required 4 way (8+12) - double cover TPN vertical DB with provision for fixing MCCB as incomer and SP/ TP MCB as outgoing (IP 42/43) </p>	1.00	each	7656.45
39	<p> Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. Fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall, making good the damages, color washing etc. as required 6 way (8 + 18) - double cover TPN vertical DB with provision for fixing MCCB as incomer and SP/ TP MCB as outgoing (IP 42/43) </p>	1.00	each	9061.00

Sl.No	Description	Qty	Unit	Estimate Rate
40	Supplying and fixing following way prewired SP&N MCB distribution board of steel sheet for 240 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required. (But without MCB/ RCCB/Isolator) 2+12 way, Double door	1.00	each	5090.05
41	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps	1.00	each	402.70
42	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps	1.00	each	2490.79
43	Supplying and fixing following rating, four pole, (three phase and neutral), 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63 A rating, 4 pole, 30 mA RCCB	2.00	no	3179.03
44	Supplying and fixing following rating, four pole, (three phase and neutral), 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and	1.00	no	2750.80

Sl.No	Description	Qty	Unit	Estimate Rate
	commissioning etc. as required. 40 A rating, 4 pole, 30 mA RCCB			
45	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps	2.00	each	989.81
46	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63 amps	4.00	each	996.59
47	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. single pole	58.00	each	237.28
48	Supplying and fixing following rating, three pole, MCB 63 A rating, 3 pole, MCB	6.00	no	1836.55
49	Supplying and fixing following rating, three pole, MCB 40 A rating, 3 pole, MCB	3.00	no	1767.55
50	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required 100 Amp, 30 KA 4 Pole	1.00	cartridge	8769.96
51	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making	1.00	each	8921.82

Sl.No	Description	Qty	Unit	Estimate Rate
	connections, etc. as required	125Amp, 36KA		
52	Supply, conveyance and fixing the following types & current rated control gears & switchgears conforming to IS 13947 suitable for 440 V, 50 Hz, AC supply in the existing panel assembly as required. 16A -100A, 35/36 kA (Ics=100%Icu), 4 pole, current limiting type MCCB with microprocessor based release with overload setting of 50 - 100% having adjustable OL & SC	1.00	no	13700.03
53	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. Above 35 Sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	20.00	meter	88.13
54	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored aluminum power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required.4 core 185 sq mm	60.00	meter	1362.85
55	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored aluminum power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 4 core 240 sq mm	60.00	meter	1643.85

Sl.No	Description	Qty	Unit	Estimate Rate
56	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored copper power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 3.5 core 25 sq mm with factory made clamp	70.00	meter	1255.81
57	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored copper power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 3.5 core 50 sq mm with factory made clamp	45.00	meter	2207.68
58	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored copper power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 4 core 10 sq mm with factory made clamp	90.00	meter	642.95
59	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored copper power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 4 core 16 sq mm with factory made clamp	80.00	meter	869.81
60	Supply & laying of one no. PVC insulated and PVC sheathed armored copper power cable of 1.1 KV grade of the following sizes in the existing masonry open duct as required. 3.5 core 95 sq mm	15.00	meter	4333.69

Sl.No	Description	Qty	Unit	Estimate Rate
61	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored copper power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 3.5 core 95 sq mm	15.00	meter	4382.68
62	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored copper power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 4 core 70 sq mm	15.00	meter	3491.81
63	Supply & laying of one no. PVC insulated and PVC sheathed armoured aluminum power cable of 1.1 KV grade of the following sizes in the existing masonry open duct as required. 3.5 core 70 sq mm	15.00	meter	529.69
64	Supplying and installing following size of perforated painted with powder coating MS cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with MS suspenders including bolts & nuts, painting suspenders etc as required. 225mm width X 50mm depth X 1.6mm thickness	20.00	meter	709.14
65	Supplying and installing following size of perforated painted with powder coating MS cable trays bends with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with MS suspenders including bolts & nuts, painting suspenders etc as required 225 mm width X50 mm depth X 1.6 mm thickness	20.00	No	1358.61
66	Supplying siemens / tropodur type nickel plated Double compression brass cable gland for PVC insulated and PVC sheathed armoured aluminium/ copper conductor	2.00	no	1152.21

Sl.No	Description	Qty	Unit	Estimate Rate
	cable 1.1 KV grade, and making end termination suitable for 2/ 3/ 3½/ 4 core cable of the following sizes as required. 50 Sqmm			
67	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required. 3 1/2X 70 Sq. mm (38mm)	2.00	set	437.96
68	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required. 3 1/2X 95 Sq. mm (45mm)	2.00	set	562.70
69	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required. 3 1/2X 185 Sq. mm (57mm)	2.00	set	833.88
70	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required. 3 1/2X 240 Sq. mm (62mm)	2.00	set	961.33
71	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required. 4 X 10 Sq. mm (25mm)	2.00	set	260.33
72	Supplying and making end termination with brass	2.00	set	296.94

Sl.No	Description	Qty	Unit	Estimate Rate
	compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required. 4 X 16 Sq. mm (28mm)			
73	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required. 4 X 25 Sq. mm (28mm)	2.00	set	296.94
74	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required. 4 X 50 Sq. mm (35mm)	2.00	set	394.57
75	Supplying siemens / tropodur type nickel plated Double compression brass cable gland for PVC insulated and PVC sheathed armoured aluminium/ copper conductor cable 1.1 KV grade, and making end termination suitable for 2/ 3/ 3½/ 4 core cable of the following sizes as required. 16 Sq.m	8.00	no	186.30
76	Supplying siemens / tropodur type nickel plated Double compression brass cable gland for PVC insulated and PVC sheathed armoured aluminium/ copper conductor cable 1.1 KV grade, and making end termination suitable for 2/ 3/ 3½/ 4 core cable of the following sizes as required. 25 Sqmm	6.00	no	434.40
77	Supplying siemens / tropodur type nickel plated Double compression brass cable gland for PVC insulated and	8.00	no	169.58

Sl.No	Description	Qty	Unit	Estimate Rate
	PVC sheathed armoured aluminium/ copper conductor cable 1.1 KV grade, and making end termination suitable for 2/ 3/ 3½/ 4 core cable of the following sizes as required. 10 Sqmm			
78	Supplying siemens / tropodur type nickel plated Double compression brass cable gland for PVC insulated and PVC sheathed armoured aluminium/ copper conductor cable 1.1 KV grade, and making end termination suitable for 2/ 3/ 3½/ 4 core cable of the following sizes as required. 35 Sqmm	2.00	no	775.88
79	Supply of superior quality copper tubular cable socket and making core termination of cables of the following sizes including crimping etc. as required. 50 Sqmm	8.00	no	36.24
80	Supply of superior quality copper tubular cable socket and making core termination of cables of the following sizes including crimping etc. as required. 35 Sqmm	8.00	no	28.34
81	Supply of superior quality copper tubular cable socket and making core termination of cables of the following sizes including crimping etc. as required. 25 Sqmm	24.00	no	25.44
82	Supply of superior quality copper tubular cable socket and making core termination of cables of the following sizes including crimping etc. as required. 16 Sq.m	32.00	no	14.96
83	Supply of superior quality copper tubular cable socket and making core termination of cables of the following sizes including crimping etc. as required. 10 Sqmm	32.00	no	11.11

Sl.No	Description	Qty	Unit	Estimate Rate
84	Supplying and providing earth clamps for siemens/ tropodur type cable glands of suitable length and other dimensions noted along with each size of glands for the following sizes of cables as required. 25sq - 95sq mm with 20 mm wide x 1.20 mm thick clip	12.00	no	31.05
85	Supplying and providing earth clamps for siemens/ tropodur type cable glands of suitable length and other dimensions noted along with each size of glands for the following sizes of cables as required. 4sqmm-16 sq mm with 12 mm wide x 1 mm thick clip	16.00	no	20.70
86	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required 2.65 mm copper conductor (12 SWG)	50.00	meter	44.91
87	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required 3.15 mm copper conductor (10 SWG)	60.00	meter	62.98
88	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required 4.00 mm copper conductor (8 SWG)	60.00	meter	98.47
89	Supply of superior quality copper earth socket for the following size of earth conductor including crimping etc. as required. 2.65 mm (12 SWG)	8.00	each	24.98
90	Supply of superior quality copper earth socket for the following size of earth conductor including crimping etc. as required. 3.15 mm (10 SWG)	4.00	each	26.98

Sl.No	Description	Qty	Unit	Estimate Rate
91	Supply of superior quality copper earth socket for the following size of earth conductor including crimping etc. as required. 4.00 mm (8 SWG)	4.00	each	27.98
92	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required.	3.00	set	14021.36
93	Supply and clamping the following size of strips on surface of wall/ parapet/ existing cable tray using clamps fabricated from 20 X 3 mm GI flat duly painted or heavy duty GI spacer saddles spacing of clamps not exceeding 1 m, making good the damages, color washing etc. as required (for horizontal run) 25 x 3 mm copper strip	120.00	meter	457.64
94	Supplying, threading, laying and jointing of the following sizes of 'B' class GI pipe with all required accessories in ground in trench as protective covering to earth leads 40mm Dia	20.00	meter	328.44
95	Supplying and laying 25 mm X 5 mm copper strip at 0.50 meter below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	30.00	meter	1014.21
96	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	60.00	meter	1198.62

Sl.No	Description	Qty	Unit	Estimate Rate
97	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required 2.00 mm copper conductor (14 SWG)	190.00	meter	28.85
98	Supply conveyance, installation, testing and commissioning the light fittings of following types made from CRCA sheet 0.5mm thickness with all accessories and lamps directly on wall and giving connections with 16/0.20 mm 3 core PVC insulated and sheathed round copper conductor flex wire or extending the original wiring and giving connections as required 1200 mm 1X20W LED Lamp with box type fixture	5.00	each	1222.95
99	Supply & installation of light fittings on TW round block 2.00 Supply, conveyance installation testing and commissioning the light fittings of following types made of CRCA with 0.5mm thickness complete with all accessories and lamps etc. directly on wall or ceiling with PVC round block neatly painted to suit the fitting and giving connection with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS and giving connections as required. 1200mm 1X20W LED Lamp with box type fixture	2.00	each	1254.23
100	Recess mounted LED luminaire with full diffuser type upto 36 W (max), 2x2 LED, Cool White, 5700k, White powder coated CRCA housing, WIPRO CRCO10R038HP57GL1 or Bajaj BZRSQL 36W GZi CW or Equivalent	30.00	no	4950.75
101	Frame for Fixing Recess mounted LED 2x2 ft luminaire	30.00	no	474.95

Sl.No	Description	Qty	Unit	Estimate Rate
	608 mm x 608 mm			
102	Recess mounted circular LED retrofit downlighter, 15W, 14.00 powder coated white finish, BPSLR 15W WH Bajaj or Equivalent		no	1127.00
103	Supplying and fixing of 6 / 7 W pin type LED bulb in the existing angle batten etc as required (Philips, Wipro or similar superior make)	4.00	no	215.05
104	SITC of 400mm sweep medium duty wall fans with metallic vanes (Make: M/s Almonard/ Crompton/Bajaj or Equivalent)	7.00	no	1955.00
105	ABC Powder Type Fire Extinguisher With NABL Approval, Fights Class A, B, C and Electrically started fires.	4.00	no	2875.00
106	Fire Extinguisher Carbon Di-oxide Type With NABL Approval	4.00	no	6095.00
107	Charges for dismantling the existing Electrical Installations complete making good the damages of the wall and conveying the dismantled materials to store etc as required.	40.00	no	20.00
108	Numbering of ceiling fan / exhaust fan/ fluorescent fittings as required.	60.00	each	56.95
109	Copper Pipe with Superlon Insulation for Suction and Discharge	28.00	meter	1071.80

Sl.No	Description	Qty	Unit	Estimate Rate
110	PVC Drain Pipe with proper insulation	16.00	meter	106.95
111	Weather Proof 3 Core Copper Wire for Indoor to Outdoor Connecting Cable (Size as per the requirement of AC manufacturer)	28.00	meter	252.50
112	Core Cutting charges including Making the surface finished with plastering and painting, making good and finishing with matching surface after housing pipe etc.	7.00	no	232.30
113	Supporting Stand for Fixing Outdoor Unit(Powder coated)	7.00	no	974.05
114	4 KVA Voltage Stabilizer Wall mount type with Time delay, High& low voltage& Thermal overload protection, Input voltage: 170-220V, Output Voltage : 200-240V, High Voltage Cut Off : 240V, Efficiency: >95%, Frequency : 50Hz, V guard VG 500 or Equivalent	7.00	no	3094.08
115	Supply, Conveyance testing and commissioning of 2 Ton 5 Star Inverter Type, split AC unit with Copper Tube cooling coils, 5 star rating Bluestar/LG(Dual Inverter Type)/Voltas/Mitsubishi or Superior Superior brands, Cooling Capacity 6000 KW/hr with rotary/scroll type compressors. with microprocessor controlled code less remote, CFM above 500/450, LED/LCD Display	4.00	no	57500.00

Sl.No	Description	Qty	Unit	Estimate Rate
116	Supply, Conveyance testing and commissioning of 1 Ton 5 Star Inverter Type, split AC unit with Copper Tube cooling coils, 5 star rating Bluestar/LG(Dual Inverter Type)/Voltas/Mitsubishi or Superior brands, Cooling Capacity 3000 KW/hr with rotary /scroll type compressors. with microprocessor controlled code less remote, CFM above 500/450, LED/LCD Display	3.00	no	41400.00
117	SITC of 19 mm thick nitrile rubber for under deck insulation	200.00	sqm	977.50
118	Charges for cutting holes suitable for accommodating the supply ducts including plastering, color washing etc. as required.	2.00	sqm	1000.00
119	Outdoor unit stand with ribbed rubber pads	2.00	no	11500.00
120	Electrical Cabling between indoor and outdoor units, with required size cables/wires(Havells/RR Kabel/V-guard FRLS wires)	40.00	meter	287.50
121	Supply, installation, testing and commissioning UPVC drain pipe 6kg/sq.cm of suitable dia connecting the drain pan of the indoor units to nearest drain point, with 12mm thick closed cell elastomeric insulation as per specification	30.00	meter	345.00
122	Motorized volume control damper for individual operation of ductable split air conditioners	2.00	no	23000.00

Sl.No	Description	Qty	Unit	Estimate Rate
123	Supply and fixing of Canvas connection and ribbed rubber pads as vibration isolators	2.00	no	5750.00
124	Providing and fixing of Thermal insulation lining with 13mm thick nitrile rubber closed cell type with adhesive, on supply duct.	100.00	sqm	977.50
125	Providing and fixing of Acoustic Duct lining with 10mm thick nitrile rubber open cell type inside the ducts	20.00	sqm	948.75
126	Supply, installation, testing and commissioning of Powder coated extruded aluminum Continuous grilles 150mm high for return air as per spec	3.00	sqm	8337.50
127	Supply, installation, testing and commissioning of Powder coated extruded aluminum Continuous grilles 150 mm high for supply air with aluminum damper as per spec	7.20	sqm	9775.00
128	Supply, installation, testing and commissioning of volume control duct damper made of extruded aluminum for ducts/collars to be provided with suitable links, lebers and quadrants for manual control of volume of air flow and for proper balancing of the air distribution in the main duct complete with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc., as per specifications.	7.20	sqm	6282.45
129	Supply, installation, testing and commissioning of GSS sheet metal ducting for Air distribution network from indoor unit as per ducting specifications complete with angle flanges ,supports, GI rods , anchor bolts ,GI nuts and bolts, PVC/ rubber gaskets complete with all fittings , bends, transformations, vanes, splitter dampers, inspection doors, plenums, channels, rods, anchor bolts, etc to roof /truss as per IS 655. The job includes entire air	100.00	sqm	1035.00

Sl.No	Description	Qty	Unit	Estimate Rate
	distribution network and sizing of ducts also. Thickness: 24G			
130	Supply, installation, testing and commissioning of GSS sheet metal ducting for Air distribution network from indoor unit as per ducting specifications complete with angle flanges ,supports, GI rods , anchor bolts ,GI nuts and bolts, PVC/ rubber gaskets complete with all fittings , bends, transformations, vanes, splitter dampers, inspection doors, plenums, channels, rods, anchor bolts, etc to roof /truss as per IS 655. The job includes entire air distribution network and sizing of ducts also. Thickness: 22G	60.00	sqm	1150.00
131	Supply, installation, testing and commissioning (SITC) of 11 TR x 2 No's or higher capacity air cooled ductable split air conditioner with ceiling suspended IDU and all standard fittings, IDU SS drain pan, as per specifications complete with suitable capacity drive motor, air cooled condenser with all accessories, hermetically sealed scroll compressor, electronic microprocessor pendant controller with digital display, first charge refrigerant gas, vibration isolator pads, structural supports for fixing IDU/ODU as shown in the drawing, safety devices including thermal protector, pressure relief valve , over load relays single phase preventer etc, power wiring(max 3m from isolator) and control cabling(indoor to outdoor),thermostat wiring, high-low pressure cut out,suitable for three phase 440V supply etc complete as required	1.00	no	325737.50
132	Supply, installation, testing and commissioning (SITC) of 8.75 TR x 2 No's or higher capacity air cooled ductable split air conditioner with ceiling suspended IDU and all standard fittings, IDU SS drain pan, as per specifications complete with suitable capacity drive motor, air cooled condenser with all accessories, hermetically sealed scroll compressor, electronic microprocessor pendant controller with digital display, first charge refrigerant gas, vibration isolator pads, structural supports for fixing IDU/ODU as shown in the drawing, safety devices including thermal	1.00	no	231610.00

Sl.No	Description	Qty	Unit	Estimate Rate
133	protector, pressure relief valve , over load relays single phase preventer etc, power wiring(max 3m from isolator) and control cabling(indoor to outdoor),thermostat wiring, high-low pressure cut out,suitable for three phase 440V supply etc complete as required Supply and providing copper earth bus in the panel board	1200.00	Cum cm	6.00
134	Cardiac catheter wash station : Completely made of SS 304 GSatin finish, All curved joints should be as per HTM standards to ensure perfect hygiene and ease of cleaning, Provision for connecting the catheter using 3 way adapter, provision to connect Air (high pressure) and water through separate discharge pipe lines to clean the catheter, wall mounted type, approximate dimension 33"LX 24"W X 57"H, provisions to connect and clean at least 6 catheters simultaneously.	1.00	No	125000.00
135	Supply of LT Switch board cubicle type, made out of 2 mm thick CRCA sheet, totally enclosed, IP42, free standing, wall/floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral , 415 V, 50Hz AC system with busbars extendable on both sides, including all the necessary internal wiring , suitable spreader etc. The panel shall be fabricated from a firm having CPRI certification with test certificates for similar panel(required for short circuit rating, temperature rise and IP classification) and with following switchgears, metering instruments and accessories etc. complete as required as per drawing & specification. RYB Indicating lamps LED type 4A SP MCB (0-500)V Class 1 with 90 deg defl. Scale. (0-200)A Class 1 with 90 deg defl. Scale Voltmeter selector switch 200/5 A 5 VA Class .5S CTs ON/OFF INDICATION LAMP Digital multifunction meter to read V,A.Hz,PF,Kwh Surge protection device (type1+2) Incomer 400A FP Molded Case Circuit Breaker with Micro processor based release with OL and SC protection neutral link (Ics =100%Icu= 25kA) -1 Nos 200A Copper TPN busbar chamber with Copper busbar Out Goings 250A FP Molded Case Circuit Breaker with Micro processor based release with OL and SC protection neutral link (Ics =100%Icu= 25kA) -1 Nos	1.00	no	223560.00

Sl.No	Description	Qty	Unit	Estimate Rate
136	<p>160A FP Molded Case Circuit Breaker with Micro processor based release with OL and SC protection neutral link (Ics =100%Icu= 25kA) -1 Nos 100 A FP MCCB ISOLATOR-2Nos 63 A FP MCCB ISOLATOR-2Nos The panel shall be Top Entry/Exit and suitable for termination of cable system as per SLD and technical specification</p> <p>Supply, conveyance and fixing the following types & current rated control gears & switchgears conforming to IS 13947 suitable for 440 V, 50 Hz, AC supply in the panel assembly made out of 1.6mm CRCA Powder Coated Sheet as required. 320A/400A, 50/55 kA (Ics=100%Icu), 4 pole, current limiting type MCCB with microprocessor based release with overload setting of 50 - 100% having adjustable OL & SC</p>	1.00	no	25901.10
137	<p>Supply of LT Switch board cubicle type, made out of 2 mm thick CRCA sheet, totally enclosed, IP42, free standing, wall/floor mounting, dust and vermin proof, powder coated, indoor, compartmentalized, suitable for operation on 3 phase and neutral , 415 V, 50Hz AC system with bus-bars extendable on both sides, including all the necessary internal wiring , suitable spreader etc. The panel shall be fabricated from a firm having CPRI certification with test certificates for similar panel(required for short circuit rating, temperature rise and IP classification) and with following switchgears, metering instruments and accessories etc. complete as required as per drawing & specification.</p> <p>4A SP MCB (0-500)V Class 1 with 90 deg defl. Scale. (0-200)A Class 1 with 90 deg defl. Scale, Voltmeter selector switch 200/5 A 5 VA Class .5S CTs ON/OFF INDICATION LAMP, Digital multi-function meter to read V,A.Hz,PF,Kwh Incomer 250A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) -1 Nos 250A Copper TPN busbar chamber with Copper busbar. Out Goings 200 A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) - 1 Nos 125 A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) - 1 Nos.</p>	1.00	no	184575.00

Sl.No	Description	Qty	Unit	Estimate Rate
138	<p>100 A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100% Icu= 25kA) - 2 Nos.</p> <p>63 A FP Molded Case Circuit Breaker - 2 Nos. The panel shall be Top Entry/Exit and suitable for termination of cable system as per SLD and technical specification</p> <p>Suitable De- Humidifier units : Extraction at least 35 litres/day, compresor : rotary, Air flow : at least 220m3/hr, reputed brand, input 230Vac</p>	2.00	no	25000.00
139	Charges for obtaining electrical inspectorate's approval including scheme apporval and final approval and regularizing with KSEB	1.00	LS	50000.00
140	24-Port Gigabit manageable smart Network Switch with 2 SFPs. Rack mountable	1.00	no	10000.00
141	Patch panel - 24-Port patch panel with cable tray. Rack mountable	1.00	no	5000.00
142	4U Rack- Wall Mountable including 4x 6Amp power distribution box	1.00	no	10000.00
143	Supply of LT Switch board cubicle type, made out of 2 mm thick CRCA sheet, totally enclosed, IP42, free standing, wall/floor mounting, dust and vermin proof, powder coated, indoor, compartmentalized, suitable for operation on 3 phase and neutral , 415 V, 50Hz AC system with bus-bars extendable on both sides, including all the necessary internal wiring , suitable spreader etc. The panel shall be fabricated from a firm having CPRI certification with test certificates for similar panel(required for short circuit rating, temperature rise and IP classification) and with following switchgears, metering instruments and accessories etc. complete as	1.00	no	124912.00

Sl.No	Description	Qty	Unit	Estimate Rate
	<p>required as per drawing & specification. R/Y/B Indicating lamps LED type 4A SP MCB (0-500)V Class 1 with 90 deg defl. Scale (0-200)A Class 1 with 90 deg defl. Scale, Voltmeter selector switch 200/5 A 5 VA Class .5S CTs ON/OFF INDICATION LAMP, Digital multi-function meter to read V,A.Hz,PF,Kwh, Incomer 200A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) -1 Nos Out Goings 160 A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) - 1 Nos 125 A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) - 2 Nos 100 A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) - 2 Nos.The panel shall be Top Entry/Exit and suitable for termination of cable system as per SLD and technical specifications.PN busbar chamber with Copper busbar. (Not taken for evaluation)</p>			
144	<p>Supply of LT Switch board cubicle type, made out of 2 mm thick CRCA sheet, totally enclosed, IP42, free standing, wall/floor mounting, dust and vermin proof, powder coated, indoor, compartmentalized, suitable for operation on 3 phase and neutral , 415 V, 50Hz AC system with bus-bars extendable on both sides, including all the necessary internal wiring , suitable spreader etc. The panel shall be fabricated from a firm having CPRI certification with test certificates for similar panel(required for short circuit rating, temperature rise and IP classification) and with following switch gears, metering instruments and accessories etc. complete as required as per drawing & specification. R/Y/B Indicating lamps LED type Digital multi-function meter to read V,A.Hz,PF,Kwh Incomer 160A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) -1 Nos 160A Copper TPN busbar chamber with Copper busbar. Out Goings 125A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) - 1 Nos %Icu= 25kA) - 2 Nos 63A FP MCCB - 3 Nos The panel shall be Top Entry/Exit and suitable for termination of cable system as per SLD and technical specification.</p>	1.00	no	140760.00

Sl.No	Description	Qty	Unit	Estimate Rate
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(Not taken for evaluation)

145	<p>The scrub station shall be made of high-grade stainless steel 304 with stain polish finish and wired to the current IEE regulations & BS 7971. The scrub stations control system shall be based on advanced microprocessor. The scrub station shall be sensor-activated 24VAC. The scrub station shall be provided with user selectable time out control. The supply shall not be interrupted in case of power failure or maintenance. The station shall be equipped with thermostatic mixing valve to controls the temperature of hot / cold water supply. The washing faucet shall be made of Chrome plated brass hand. The station shall be equipped with soap dispensers. Two bay 63"x24"x31" (Not taken for evaluation)</p>	1.00	No	130000.00
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A. Review workstation in addition to console and Main work Station

There should be additional review workstation with CD/DVD recorder and latest generation computer with medical grade 19 inch LCD monitor with storage capacity of at least 1 Tera byte memory and 32 GB RAM and with licensed version operating system. Workstation from Principle manufacturer to be provided. Advantage windows / Synco / Intelliview/ equivalent workstation to be provided. All the software and features available in the console shall be made available in the review workstation.

Note:

1. If CDSCO (Central Drugs Standard Control Organization) certification is required for the import and marketing of the equipment, then the same shall be submitted along with the technical bid
2. Warranty exclusions if any shall be discussed at the time of prebid meeting else the tender condition as per clause 6.31.20 shall prevail