MINISTRY OF HEALTH & QUALITY OF LIFE
GOVT. OF MAURITIUS

Tender

For

Supply, Installation, testing & Commissioning of furniture work and other associated works like minor civil, electrical, PHE works etc. and their maintenance during defect liability period for Exiting Block of Cancer Hospital at Solferino, Vacoas, Mauritius (2nd call)

Volume-III

Technical Specification

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PQ. Tender No. HSCC/Mauritius/Cancer Hospital/Fur/2nd call/2019
TECHNICAL SPECIFICATION FOR FURNITURE/FURNISHINGS FOR

**Name of work:** Supply, Installation, testing & Commissioning of furniture work and other associated works like minor civil, electrical, PHE works etc. and their maintenance during defect liability period for Exiting Block of Cancer Hospital at Solferino, Vacoas, Mauritius

2nd call

Following Basic Material to be used in Office & Hospital furniture with prior approval of Client:

**Material Requirements For All Revolving And Tubular Chairs:**

1. Cushion chairs are made out of flexible polyurethane foam molded to have consistent hardness of 20-24 kg.

2. The polyurethane foam should be molded with density 45 +/- 2 kg/meter cube and hardness 20 +/- 2 kg on hardness machine at 25% compression.

3. Armrest of chairs should be made out of integral skin polyurethane foam of shore hardness ‘a’ 50-70 and reinforced with ms steel insert except unless otherwise specified.

4. Gas lift mechanism for height adjustments tested for 100000 cycles of operation.

5. Chair base of the pedestal consists of 5 prongs made of 5 mm thick ms plates.

6. Plastic cladding is provided to make the pedestal look good aesthetically. The ms pedestal should be tested for load bearing.

7. Twin wheel castors are made of nylon and should be tested to carry a load upto 82 kgs on the chair.

8. All steel components should be powder coated conforming to:
   - Dry film thickness more than 45 microns.
   - Salt spray test to withstand corrosion.
   - Adhesion as per din 53152 standards.
   - Scratch hardness as per bs 3900/e2
   - Impact test.
   - Pencil scratch test

**Mandatory Tests To be Done By Manufacturer on Chairs:**

- Seating Impact test.
- Arms Strength Test
- Back Durability Test
- Castor/Chair durability test.
- Base Test.
- Castor retention test.
- Castor Pull Out test.
- Castor Breakability Test.

**Powder Coating Tests:**

All MS components shall be epoxy polyester powder coated using the seven chamber pretreatment process with the powder thickness greater than 40 microns Dry Film Thickness.

Tests to Be Carried Out on Powder Coating:
• Cross Cut Test- To check Adhesion
• Impact Resistance Test – To 150 kgs/cm as per BS 3900/E3.
• Scratch Hardness- Upto 4 kgs as per BS 3900/E2.
• Salt Spray Test.

**Anti Rust Treatment To Be Followed For All Metal Components:**

The manufacturer should have anti rust treatment facilities for treating all the metal components. The anti rust treatment shall consist of Removal of oil by treating metal Components with sodium carbonate and alkaline phosphate at 60 degrees centigrade followed by Rinsing with water at normal temperature. The rinsed components are to be dipped in phosphoric acid solution at 45 degrees centigrade for 10 minutes minimum for de-rusting followed by Rinsing. Components shall undergo phosphating by dipping in phosphating tank containing iron hydrogen phosphate dissolved in phosphoric acid at normal temperature for minimum 5 minutes followed by rinsing and finally Dipping components in chromic phosphatic acid reducing agent chemical at temperature of 80 degree centigrade(+/-10%) for minimum period of 60 seconds.

**Specifications For Materials And Processes To Be Used On Furniture**

**Specifications For Steel Used In Chairs and Other Items:**

- Cold rolled steel for MS sheet shall have thickness ranging from 0.63mm to 1.2mm as per IS:513-1994.
- Hot rolled steel for MS sheet shall have thickness ranging from 2.5mm to 3.15mm as per IS:10748 Group I.
- MS ERW tubes used for tubular components should satisfy IS-7138.

**Specification For Fabric To Be Used For Upholstery:**

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Description / Selection Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Polyester, fiber dyed</td>
<td>For a Span of 1.2 Meters shall have weight 330-grams/ meters.</td>
</tr>
<tr>
<td>100% poly Propylene</td>
<td>For a Span of 1.2 Meters shall have weight 230-grams/ meters.</td>
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</tbody>
</table>

**Material Specifications:**

1) **Plain Particle Board (Medium Density):**
   
   Particle boards conforming to IS 2380(1977) with physical characteristics as under
   
   Density : 600 – 900 kg per meter cube.
   
   Moisture content : 5.10%
   
   Water absorption : 2 hour test – max 15%
   
   24 hour test – max 40%

   Swelling in water : 2 hour – max. 5% thickness

   Swelling due to water absorption : max 6%

   Tensile strength perpendicular to surface : min 0.3 Newton per millimeter square. (for all thickness)

   Tensile strength after cyclic test : min 0.3 N/mm square

   Screw withdrawal strength on face : min 1250 N
Screw withdrawal strength on edge : min 850 N

2) Medium Density Fiber Boards:

Medium Density Fiber Board conforming to IS: 2380-1977 with following physical characteristics:
- Specific Gravity : 0.5 to 0.9
- Density : 600 – 900 kg per meter cube.
- Moisture content : 5 to 10%
- Water absorption : 2 hour test – max 7%
- 24 hour test – max 15%
- Modules of rupture upto 20mm thick : min 30 N/mm square.
- Modules of rupture above 20 mm thick: min 25 N/mm square.
- Linear expansion in thickness due to surface absorption : max 5%
- Swelling due to general absorption after 24 hour soaking in Thickness : max 4%
- Length : max 0.4%
- Width : 0.4 % min.
- Tensile strength perpendicular to surface : 0.7 N/mm square (for all thickness)
- Screw withdrawal strength on face : min 1500 N
- Screw withdrawal strength on edge : min 1250 N

3) Pre Laminated And Twin Particle Boards:

Pre-laminated and twin particle boards as per IS:2380-1977.
- Density : 600 – 900 kg per meter cube.
- Moisture content : 5 to 10%
- Water absorption : 2 hour test – max 15%
- 24 hour test – max 30%
- Swelling in water : 2 hour – max. 8% in thickness
- Modules of rupture : min. 15 N/mm square.
- Tensile strength perpendicular to surface : min 0.5 N/mm square (for all thickness)
- Screw withdrawal strength on face : min 1550 N
- Screw withdrawal strength on edge : min 850 N

The following characteristics are according to annexure of IS:128323-1990.
- Resistance to steam: No sign of blister, delaminating or change in surface finish.
- Resistance to crack: No sign of crack and delimitation.
- Resistance to cigarette burn.
- Resistance to stain.
- Abrasion Resistance (min) in no of revolutions.

4) Post formed Laminate Sheets:

The pos formed (high pressure decorative laminate) one side bearing 0.6 or 0.8 mm thick decorative conform to NEMA specification- ANSI/NEMA/LD-3-1991. The physical characteristics and test requirements are as per NEME-LD-3-1991.
- Impact strength - Ball Impact resistance min 20”
- Wear resistance - Min 400 cycles.
- Gross dimensional change in machine direction - Max. 1.1%
- Gross dimensional change in cross machine direction - 1.4% max.
- High temperature resistance - slight effect is accepted on specimen at the
final examination.
Stain resistance - No effect is acceptable on the specimen.
Formability - Min radius 12.5mm.
Blisters Resistance - Min 40 Sec.
Boiling water immersion test (2 hour test) as per IS:2046-1969.
Increase in weight - Max. 30%.
Increase in thickness - Max 30%.

5) Decorative Laminated Sheets:

Decorative thermosetting synthetic resin bonded laminated sheets are used in 1.0mm thickness and are of type 1 with having one side bearing the decorative surface. The finish, shade, color and pattern shall be mutually decided by the purchaser and supplier. Physical characteristics and test requirements are as per appendix of IS:1046-1969. Resistance to dry heat – no blistering or appreciable surface deterioration or loss of gloss. Dimensional stability in low humidity test at 70+/-2 deg C for 24 hours.- Less than 0.5% in length and width dimensions.
Resistance to immersion in boiling water.
Increase in weight - Max 5%
Increase in thickness - Max 5%

Resistance to staining for 24 hours with standing against agents specified in IS 2046-1969. specimen should not show blistering at the final examination. Cross breaking strength for 0.6mm thick—2000 kg per CM Square.
Cross breaking strength for 1.0 mm and 1.5mm thick – min 4000 kg per CM square.
Impact strength - min 0.035 kg fm
Machinery test - no Slitting or cracking.

6) Epoxy Powder Coating.

Epoxy powder used for coating shall be of a standard shade or as specified at the time of tender. The specific gravity of powder 1.6(+/-0.2) gives a DFT of 50-60 microns. Pencil Hardness of 2H; Cross hatch Adhesion (DIN 553151) or GT – ‘O’ gloss @ 60 DIN 67530 of 80 +/- 5% for all standard except black for which it shall be 45 +/-5 for black. The coating should be able to withstand min 500 hour of salt spray test. Impact resistance of 150kgcm. The following IS will be followed for the following items:

1.) The grade IS : 513 will be followed in case of steel items. IS: 10748 the right classification Grade 1 shall be used. The steel tubes for furniture shall be as per IS: 7138.
2.) The powder coating thickness at P-2 is 45 micron & P-3 is 40 micron.
3.) The rated IS/International Standard nos. under which the respective tests are to be performed shall be used. The requisite values against which the test results will be compared for conformity.
4.) The “Consistent hardness shall be 20-24 kg”.
5.) For MDF boards, maximum water absorption after 2 hours soaking shall be 6% for grade I & II boards. All the required test as per IS code shall be carried out for MDF boards,
6.) Under decorative Laminated sheets (P-5) the IS 1046 shall be followed for cash boxes.
If any differences is found between BOQ & Specification. The Specification will supersede over Bill of quantities items.

NOTE: Sizes in dimensions of all items may vary upto + or – 5%
ITEM WISE SPECIFICATIONS (All Images are Indicative Only)

1. 2 Door Personal Locker

Overall size of 2 - Door PLU + Lkr (Base) shall be 380mm(W)x450mm(D)x1830mm(H). Stackability shall have add - on units that can be stacked width wise to form bank of lockers having common side panel. Locking shall have 10 Lever cam lock with lock lever plus option of hasp arrangement. Material shall be CRCA 0.6 mm thickness. Construction shall be Rigid Knockdown construction, shelf shall be uniformly distributed load capacity per each shelf level is 35 Kg maximum. Finish shall be epoxy polyester powder coated to the thickness of 50 microns. Handle/Label holder shall be Aesthetically appealing Snap fit ABS plastic handle. Ventilation shall be attractive punched pattern for ventilation. 1 Hanging rod in both compartment.

2. 4 Seater Dining Table

4 Seater PU Coated size shall be 1135 Width mm x 1175 Depth mm x 750 Height mm. Top shall be 25 mm thick base material shall be 25 mm MDF board. On top PU painting of minimum 2H hardness with 75% glass as per color chart. Combination color graphics on the centre. Brown Laminate on bottom specially profiled edges for comfort. The Understructure shall be having bend pipe structure of MS powder coated. Pipe dia 38 mm, 2 mm thick and it shall be fitted with top by SS machine screws. Legs shall be of MS powder coated and 38 mm dia. pipe legs are fixed with understructure and table top. Glide shall be of Plastic fixed at the understructure to prevent the damage of table top during stacking.

3. Three Seater Waiting Chair
The seat and back to be made up of high density Polyurethane (PU) Foam reinforced with 3 mm MS perforated sheet insert. The PU Foam having density of 680 +/- 10 Kg/m3 with hardness of 55 +/- 5. Seat Size : 52.0 cm (W) X 46.5 cm (D). Back Size : 52.0 cm (W) X 51.5 cm (H). Cross Beam made up of black powder coated MS ERW square tube of size 6.0 +/- 0.05cm X 6.0 +/- 0.05cm X 0.018 +/- 0.016 cm thick fitted with polypropylene end caps. Legs & Armrest made up of powder coated High pressure Aluminium Die cast. Legs are fitted with Soft grip PVC level adjusting shoes.

4. Almirah

Almira shall have an overall size of 916mm(W)x486mm(D)x1980mm(H) with welded construction. It should have the shelf thickness of 0.7 mm, Back thickness of 0.8 mm, Door thickness of 0.8 mm (high yield strength) and all other components shall have a thickness of 0.9 mm. These components shall be made of CRCA ‘D’ grade high yield strength as per IS:513. The Storwel Plain should have a Mazak handle and Three way locking mechanism with Shooting Bolts. It should have a height wise adjustable shelf mounting which shall have a Uniformly Distributed Load Capacity of max 40 Kg. It should also have a M10 Screw type Leveller with Hex plastic base. The finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10). Plenty of colour options and shelving options shall be available.

5. Attendant Stool

Overall Sizes Diagonal Leg Dia 538 mm H470 min-655max SS 202 made sheet with spin section of thickness 1mm & should be non corrosive. It should have a diameter of 305 mm, seat base is made of MS ring and rectangular tube. EN8 Screw having dia of 22 mm should be used for height adjustment of the seat base. The hub should be made of MS ERW tube having dia of 38 mm and thickness 2 mm. The Hub should be welded with the legs and it should accommodate and cover the lead screw mechanism. The understructure should consist of 4 legs made up of MS ERW tube of diameter 25.4 mm and 1.6 mm thick. The press formed pipe leg should give a round & clean look. All the legs should be provided with 4 nos
of Nylon-6 bush. All metal components should be pre treated with zinc phosphating in 9 tank process and then powder coated with anti microbial epoxy polyester powder coating to fulfill the requirements for bacterial protection against at least 2 commonly found bacteria in Hospital environment [Gram positive and Gram Negative]. Safe working load must be 135 kg

6. Consultant Chair.

![Consultant Chair Image]

The seat & back is made up of 1.2 ± 0.1 cm thk. hot pressed plywood upholstered with synthetic leather over moulded High Resilience Polyurethane foam. Size of back shall be 51.8 cm. (W) x 75.2 cm. (H) & size of Seat Shall be 49.0 cm. (W) x 51.4 cm. (D). High Resilience (HR) foam should be used in making seat & back which shall be moulded with density 55+/–2 kg/m³ and hardness 16 ± 2 kgf as per IS:7888 for 25% compression. The Back can be adjusted in 5 positions by manually. Stroke of height adjustable spine is 7 cm. Back height adjustability is applicable for Mid back chair. The adjustable armrest is designed Up-Down adjustment – 8 steps (8.0 ± 0.5 cm range). Height adjustable armrest structure which is chrome plated & fitted with an armrest top. Fixed Armrest Top is PU moulded over metal insert. Front Pivot Synchro Mechanism of the Chair is adjustable tilting mechanism is designed with 360° revolving type. Single point control. Front-pivot for tilt with feet resting on ground ensuring more comfort. Tilt tension adjustment. 4-position locking with anti-shock feature. Seat/back tilting ratio of 1:2. The pneumatic height adjustment has an adjustment stroke of 10.0 ± 0.3 cm. The pedestal is High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal is 65.0 ± 0.5 cm. pitch-center dia. (75.0 ± 1.0 cm. with castors). The twin wheel castors are injection moulded in black PP. The tubular frame is powder coated (DFT 40-60 microns) cantilever structure & made of Dia.Ø 2.54 ± 0.03 cm. x 0.2 ± 0.016 cm. thk. M.S. E.R.W. Tube with a connecting M.S. Spine welded to it. Back spine is fitted to the frame assembly. Seat can be slide horizontally as per user convenience. Stroke of seat slide is 5 cm. This option is available for revolving pedstal type of chair.

7. Consultant Visitor Chair

![Consultant Visitor Chair Image]

The seat & back is made up of 1.2 ± 0.1 cm thk. hot pressed plywood
upholstered with synthetic leather over moulded High Resilience Polyurethane foam.
WIDTH (W) : 57.5 CM
DEPTH (D) : 58.2 CM
HEIGHT (H) : 100.8 CM
SEAT HEIGHT (SH) : 47.0 CM.
Fixed Armrest Top is PU moulded over metal insert.
The tubular frame is powder coated.
M.S. E.R.W. Tube with a connecting M.S. Spine welded

8. Bed Side Locker

Overall dimension of the locker should be 490(l) x 410 (w) x 941(h) (all in mm)
Top should be made of ABS cover & should have minimum thickness of 2.2mm. Top should have recessed and contoured shaped for better usability.
Plastic molded knob should be provided on the drawers and Cabinet for easy opening.
50mm dia plastic molded castor placed infront.
Cabinet and drawer should be made of CRCA sheet of thickness 0.8mm. Cabinet should be provided with lock.
Telescopic ball slides should be used for easy smooth operation of the drawer.
Corner tubes should be made of MS ERW tubes of dia 25.4 mm x 1.2mm.
Locker should be Anti microbial and thermosetting epoxy polyester powder coated for bacterial protection.

9. Mid Back Chair.

The seat and back shall be made up of 1.2 ±0.1cm. thick hot-pressed plywood and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam shall be designed with contoured lumbar support for extra comfort. The seat shall be extra thick foam on front edge to give comfort to popliteal area. The dimensions of back shall be 47.5 cm(W) x 58.0 cm(H) and of seat shall be 47.0 cm (W) x 48.0 cm (D). The HR
polyurethane foam shall be moulded with density= 45±2 kg/m3 and hardness load 16 ± 2 kgf as. per IS:7888 for 25% compression. The one-piece armrests shall be injection moulded from black Co.polymer Polypropylene. The mechanism shall be designed with 360° revolving type, Upright-position locking, Tilt tension adjustment, Seat/back tilting ratio of 1:3. The pneumatic height adjustment shall have an adjustment stroke of 12.0 ±0.3cm. The bellow shall be 3 piece telescopic type and injection moulded in black Polypropylene. The pedestal shall be injection moulded in black 33% glass-filled Nylon-66 and fitted with 5 nos. twin wheel castors. The pedestal shall be 66.3 ±0.5cm. pitch-center dia. (76.3 ±1.0cm with castors). The twin wheel castors shall be injection moulded in Black Nylon. Overall Dimensions of Chair shall be Seat Height - min 42.5 to max 54.5cm, Height - min85.5 to max 97.5cm, Width & Depth of Chair as measured from pedestal - Width-76.3 cm and Depth-76.3 cm.

10. Visitor Chair

The seat and back shall be made up of 1.2 ±0.1cm. thick hot-pressed plywood and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam shall be designed with contoured lumbar support for extra comfort. The seat shall be extra thick foam on front edge to give comfort to popliteal area. The dimensions of back shall be 47.5 cm(W) x 58.0 cm(H) and of seat shall be 47.0 cm (W) x 48.0 cm (D). The HR polyurethane foam shall be moulded with density= 45±2 kg/m3 and hardness load 16 ± 2 kgf as. per IS:7888 for 25% compression. The one-piece armrests shall be injection moulded from black Co.polymer Polypropylene. Overall Dimensions of Chair shall be Seat Height - 46.5cm, Height - 89.5cm, Width & Depth of Chair as measured from pedestal - Width-61.4 cm and Depth-64.5 cm.

11. Fully Motorised Bed
Fully automatic wire remote control Intensive care unit bed with back rest up down, knee rest up-down, trendelenburg and reverse trendelenburg, hi-low position controlled through noiseless electro mechanical actuators operated by soft touch attendant( nurses’) control panel. The overall dimension should be 2206 mm (L)x 1010mm (W) x Height adjusted from 450 mm to 825 mm without mattress. Base frame should made of 30mmx 60mm 2mm thick CRCA rectangular tube with the bed frame of 50x 25mm and 40 x20mm, 2mm thick rectangular tube. bed should have four section lying surface with ABS vacuum from with antimicrobial property which should be easily removable, washable to maintain hygiene with integrated mattress retainer. The bed should have four numbers of pp moulded side board with drop down mechanism, completely collapsible to maintain zero transfer gap.

There should be 4 nos of bumpers given at the four corners made up of neoprene with excellent shock absorbing property. In order to achieve the Deep vein Thrombosis (DVT) position, the lower leg rest portion of the bed frame should have the provision of a ms zinc plated ratchet. The ratchet should be adjustable in eight different positions. The back rest, Knee rest, TR & ATR positions should be operated up to 70 degree, 24 degree and 15 degree respectively. (Should work in all operating heights) The head board and leg board should be with 3mm wall thickness. The head board, leg board & side boards should have provision for color stickers & made of moulded pp with antibacterial additives. Both the head & leg board should be removable without locking mechanism for ease of use during emergency. There should be four nos of nylon moulded patient lifting pole holders and saline stand holders provided at the four corners of the bed. The bed should be provided with 125mm plastic injection moulded twin wheel castors with central and directional locking facility. The castors should be provided with MS round tube made auxiliary brake.

It should have accessories like urine bag holders; ms chrome plated linen tray and provision for bed extension upto 180mm. The bed should have provision for front loading medium sized ms made oxygen cylinder cage. The unit should have the total load bearing capacity of 300kg with patient load bearing capacity of 135kg,17. The unit should work on power input of 230v +/- 15% and 50-60 HZ as appropriate fitted with Indian plug. All the MS parts should be treated with nine tank pre-treatment procedure with zinc phosphate and powder coated with antimicrobial and thermosetting epoxy polyester to control the bacterial growth.. Bed should be provided with telescopic IV pole. This SS made IV pole should be of MS frame and SS made saline stand which can be fitted on the bed. The bed should be provided with 40 density 100 mm thick PU foam mattress which should be covered by heavy helium material which is water proof, flame retardant, vapour & X-ray permeable. The zip & stitches for the mattress cover should be concealed. The bed should comply with IEC 60602-52 standards and compliant with current protection level of class 1 and shock protection level of Class B. All the electrical parts should have the liquid ingress protection as per IPX4.

12. Crash Cart
Overall dimension of L 855 W 405 H 1520 mm. SS 304 grade made top sheet with 2mm thickness should be used. Middle & bottom sheet should be used made of SS 304 grade with thickness 1mm. SS 304 grade frame bar with section of 25.4, 19, 1.2 & 16mm should be used. MS plated Cylinder case should be used welded with cylinder holding unit to hook giving the curve bend at the bottom to hold the cylinder. SS 304 grade pipe of section 12mm should be used to provide provision to mount IV rod. High endurance anti static, plastic injected molded 4 swivel castors of dia 125mm should be used & should have provision for diagonal locking. SS 304 handle pipe should have section of 25.4mm with length of 365mm & should have thickness of 1.2mm giving a glossy finish. SS 304 tubular frame should have five different colored removable bins mounted on top shelf and two polystyrene lockable storage units with three drawers each. The top drawers should have containers of different sizes. Thermosetting epoxy polyester with semi gloss finish powder coating must be used. Safe working load must be 30kgs.

13. Examination Couch

Overall Sizes (L)1957mm X (W)625 mm X (H)808. It has gas-lift assisted head rest with continuous adjustment from 0° to 30°. The design focuses on ease of operation, hygiene, doctor and patient ergonomics, and aesthetics. Homogeneous soft forms with rounded edges evoke feeling of comfort and safety. Lying surface overall dimension 625 mm x 65 mm, Mattress and Upholstery is to be made with PU molded foam with density 50-55, 23 mm thick. Mattress is to be projecting out from the understructure to provide soft touch from all sides. Seamless upholstery is to be provided to avoid spread of bacteria Head rest overall dimension is 625 mm x 497 mm made of PU molded foam with 50-55 density and 23 mm thick. Understructure is to be made of MS square tubes with unique styling that provides better strength and stability. It is to be provided to reduce the visual clutter and offers better access and reach. BP Apparatus tray: CRCA sheet construction with SS handle and SS hinge Dia 10 for handle. Sheet thickness 1.2, 0.8 and 0.6. swivel tray is to be designed for BP Apparatus that should be concealed when not in use SS Handle: SS 202 Dia 10 - Aesthetically designed handles are placed in such a way that to give a unique look also provide wider space for gripping to users. Ergonomics: Increased width of the table (625mm) to give better comfort for patients. Optimized height (808mm) of the table for comfortable observation and reach. Tapered shape is to be provided to give a unique look and better access for doctor. L-shape leg is to be provided for better stability. Single Step stool is to be made of ERW square tube. Textured and Rubber mat is to be provided, of 20mm X 20mm size. Tube 1.2 mm thick and mat 3.0 mm thick Size: 485(L) x 335 (W) X 210 (H) Step stool is to be made of MS square tubes, is to be strong and firm. Top is to be made of textured rubber offering firm grip for climbing There should be a ss 304 ERW tube of 12.7 mm dia and 1.2mm thick is to be provided at the back of the back rest section to mount tissue roll which should be used as tissue roll holder. Powder coating is to be Bacterio static and thermosetting epoxy polyester,
formulated to fulfill the requirements for bacterial protection. Maximum patient load is to be 135 kg. Head Rest is to be adjustable 0 - 30°. BP Apparatus tray is to be provided to Swivel angle 0 to 180 deg. Approx. To ensure good quality welding " Co2 Argon" process should be adhered to. All metal components should be pre treated with zinc phosphating in 9 tank process and then powder coated with anti microbial epoxy polyester powder coating to fulfill the requirements for bacterial protection. Goods should be supplied in knocked down construction to reduce carbon emission. Proof loading test, cycle tests, impact test. The manufacturer should compliant with ISO 9001, 14001, OHSAS 1800 and CE certification.

14. Consultant Table with Side Unit

Height (ERU). Top shall be of 18 mm thickness made of PLT board with 2 mm Edge banding. Wenge and savannah Maple PLT board shall be used. The Understructure shall be in pre-laminated panels made with PLT boards. 2- Drawer and 3 - Drawer storage units with different combinations to support tops made with 18 mm PLT boards of different colours. Modesty and back panels made with 18 mm PLT boards. The pedestals / storages shall be fitted with necessary locks.

15. Dressing Trolley

SS 304 sheet should be used at top for the placement of the instruments being used & also for easy portability. SS 304 sheet should be at the top as well as bottom shelf for keeping the instrument being used. Horizontal bars should be welded with legs to provide protection at sides with supporting legs for sturdy structure. Castors of 125mm Dia. should be used for easy in movement. Spin section should be provided to the bowl giving a aesthetic look & also bucket should be provided with removable lid & a handle to lift the bucket. Overall Dimension must be 1232mm X 531mm X 915mm H. Maximum safe working load must be 40kg.
16. Over Bed Table

Overall Sizes (L) 899 mm X (W) 555 mm X (H) Adjustable from 970 mm to 1170 mm
OBT should be a height adjustable Over Bed Table. Table top Height can be adjusted with the help of operating lever and with help of plastic gear which is smooth and noise less. Base frame should be made of ERW Round Tubes and Oval Tubes Housing should be made of ERW Round Tubes Operating lever Handle : Plastic injection molded lever handle with SS rod insert making strong and provides the wider area for the grip Telescopic column with lead screw on Crank for smooth height adjustment of table top height. Table top frame should be made of MS tube 1.2 mm thickness, should be designed to hold the top as well as extension works as a handle for the handling of over bed table.
Top: MDF top with membrane press, should give anti scratch Property with good surface finish. Also Glass Holder profiling should be provided on to it. Castors: High endurance anti-static, Plastic injection molded castors are provided of Ø 50 mm Powder coating should be Bacteriostatic and thermosetting epoxy polyester, formulated to fulfill the requirements for bacterial protection. All powder coated parts in RAL white. Plastic parts in Grey Max Safe Working Load: 20 kg UDL The manufacturer should compliant with ISO 9001, 14001, 13485 & OHSAS 1800 and CE certification. goods should be supplied in knocked down construction to reduce carbon emission.

17. Sofa 2 Seater

SEAT FOAM: The seat is made of PU foam with Density 28± 2 kg/cu.mtr having an additional top layer of super soft PU foam in Density 32± 2 kg/cu. upholstered with fabric or leatherette.
BACK FOAM: The back is made of PU foam with Density 28± 2 kg/cu. mtr with two additional top layer of supersoft foam of density 32±2 kg/cu. mtr, upholstered with fabric or leatherette.
UNDERSTRUCTURE: Understructure is made up of 1.2±0.1 cm. thick hot pressed plywood (moisture resistance & termite proof as per IS: 303) & pinewood of cross section devoid of major knots & surface defects 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over understructure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over understructure for cushioning purpose.
LEG ASSEMBLY: It is a welded assembly made in Stainless steel (grade SS 202) tube & plate with plastic endcap. (W) 146.0* (D) 90.5(H) 85.5 cm seat (H) 45.0 cm

18. Sofa 3 Seater
1) **SEAT FOAM**: The seat is made of PU foam with Density $28 \pm 2$ kg/cu.mtr having an additional top layer of super soft PU foam in Density $32 \pm 2$ kg/cu.mtr upholstered with fabric or leatherette.

2) **BACK FOAM**: The back is made of PU foam with Density $28 \pm 2$ kg/cu.mtr with two additional top layer of super soft foam of density $32 \pm 2$ kg/cu.mtr, upholstered with fabric or leatherette.

3) **UNDERSTRUCTURE**: Understructure is made up of 1.2±0.1 cm. thick hot pressed plywood (moisture resistance & termite proof as per IS: 303) & pinewood of cross section devoid of major knots & surface defects 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over understructure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over understructure for cushioning purpose.

4) **LEG ASSEMBLY**: It is a welded assembly made in Stainless steel (grade SS 202) tube & plate with plastic end cap. (W) 206.0* (D) 90.5(H) 85.5 cm seat (H) 45.0 cm

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**19. Semi Motorised Bed**

Five function ICU bed should have height, Back rest, Knee rest & auto -contour chair position controlled through noise less electro mechanical 3 nos actuators operated by soft touch control panel(handset). 3 function motorized and 2 function manually operated Trendelenburg & Reverse Trendelenburg (manual operated) mechanism is made of linkages which are made by HR MS flat of size 40mmW x 10mm thick.

Overall Size should be L 2312 X W (900)mm to W1060mm X (H) Adjustable from 490mm to 770 mm. Back rest angular movement 70 deg, knee rest 25 deg, TR 10 deg and ATR 8 deg. Safe working load should be 200 kgs. Bed frame should be made of MS ERW oval shaped tube of size 30mmx60mm of 1.6mm thick. All corners of bed frame are provided with bumper mounting holders and it should have provision 4iv pole holders & 2 patient lifting pole holders. It is strengthened by rectangular pipe section of size 60mmx30 mm having 1.6 mm thickness. Lying surface should be made of CRCA sheet of thickness of 1.2mm thick. This lying surface should have 4 sections for bed profiling i.e. back adjustment, fixed pelvic section, upper and lower leg adjustment. Mattress platform is provided with 5 nos mattress retainers. Lower leg rest section is provided with Ratchet for leg rest adjustment.
platform is strengthened by tubular frame of size 25.4mm dia x 1.6mm thickness. It should be strengthened by trapezoidal contour (rounded corner), embossed cut out. All metal components should be pre-treated with zinc phosphate and then powder coated with antimicrobial epoxy powder coating. All mechanism should be operated with the help of lead screws and crank. Lead screws should be made from EN8 and ACME threads roll formed. It should be functioning on the basis of Synchronised Linear Roller Mechanism (SLRM). SLRM is assisted by tension spring covered with telescopic tube with plastic end gaps. The function is operated with the help of ergonomically designed dedicated handle, which are made of metal inserted PP co polymer; it should be snap locked when not in use. All the four handles should be provided operating guidance stickers Head & Foot board should be made of blow moulded Poly propylene with anti-microbial additives. Head board and foot board should be with metal inserts to mound it on bed frame. Removable PP head board and foot board should have cut out, for better gripping. The boards should have provision to paste colour stickers. The stickers should make of PP material and pasted with 3M adhesive. The side rails should be MS. Bed should be provided with high end 125 mm non-marking Steinco castors which should be lockable diagonally.

There should infusion pole holder with ht adjustable ss made telescopic infusion pole with two hooks to mount saline bags. The fixed pole should be 31.75 dia and the adjustable pole should be 16 mm dia with 1.6 mm thick. Bed should be provided with 8 mm diamsurine bag holder on both the side. Bed should have 4 nos Neoprene made bumpers for Excellent Shock absorbing property. There should be two nos of glass filled Nylon made CPR lever given to at the both side of the bed to make quick release of the back rest. The unit should work on 230v +/- 15%, with 30 time battery back up after fully charged. All the electronic devices should be as per IP X4 rating and class 1 type. The bed should be provided with 40 density 100 mm thick 4 sections PU foam mattress which should be covered by heavy helium material which is water proof, flame retardant, vapour & X-ray permeable. The zip & stiches for the mattress cover should be concealed. All the MS parts should be treated with nine tank pre-treatment procedure with zinc phosphate and powder coated with antimicrobial and thermostetting epoxy polyester to control the bacterial growth. The welding should be done by co2-argon welding and there should be Synergy coat on the welded areas to minimize early rusting.

20. Stretcher

overall dimensions 2005mm(L)X666mm(W)X827mm(H) The trolley should be made of 31.75 and 25.4 mm dia 1.6 mm thick ERW tube. holder for stretcher should be made up of mild steel. Castor should be made of 200 mm dia , diagonal locking castor. stretcher should be made up of ERW tube of dia 25.4 mm and thickness 1.6 mm Top sheet should be made of CRCA sheet of thickness 1.2 mm with contour shape to accommodate patient. IV pole holder should be made of MS. Maximum safe work load should be 135 kg. To ensure good quality welding "Co2 Argon" process should be adhered to. All metal components should be pre treated with zinc phosphating in 9 tank process and then powder coated with antimicrobial epoxy polyester powder coating. goods should be supplied in knocked down construction to reduce
carbon emission, proof loading test, cycle tests, impact test, salt spray test, castor break test. The manufacturer should comply with ISO 9001, 14001, 13485, OHSAS 1800 and CE certification.

21. Cafeteria Chair

The Seat and back are made up of injection moulded high impact strength polypropylene polymer compound with indoor grain UV resistance Seat Size: 52.5 cm (W) x 53.2 cm (D). Back Size: 51.6 cm (W) x 40.5 cm (H). MS powder coated understructure made from MS ERW tube. Shoe made of high strength polypropylene polymer compound with indoor grade UV resistance and pressed fitted with tubular frame.

22. Wheel Chair.

Wheel Chair: (L) 790 x (W) 600 x (H) 870 mm. Foldable frame structure should be made of section 22 dia x 1.2 mm A3 carbon steel with chrome finish. Cross bar should be made of A3 carbon steel with section 25.4 x 1.2 mm. Rear Wheel: 24 inch Solid mag wheels with alloy in the rim. Integrated hand rim provide to drive the wheel chair of section 16 x 1.2 mm A3 carbon steel with chrome finish. Front Wheel: 8 inch HUB made of PA polymer and outer with solid rubber. PU molded arm rest & base should be made of ABS for better arm support. Leatherite strap for calf rest & leatherite cushion for seat. Adjustable all minimum die cast foot rest with updown & swivel type mechanism. Handles should be made of moulded rubber grip to push the wheelchair. Hand brakes should be provided to lock the wheelchair at desired location. Foot Press Extended base with molded plastic for better grip. Anti rust chrome finish. Safe work load of 100 Kg.

23. Work Table
table size shall be 1200 Width x 600 Depth x 740 Height. The top shall be made from 25 mm thick pre-laminated board. All the edges are sealed with 2 mm thick PVC edge band all around. Side panels shall be made from 25 mm thick pre-laminated particle board. All the edges are sealed with 2 mm thick PVC edge band on the user side and 0.8 mm on the top and bottom side. The side panels have 2 glide screws each for levelling of the desk. Modesty panel shall be made from 18 mm thick pre-laminated particle board. All the edges are sealed with 0.8 mm thick PVC edge band all around. Freestanding Pedestal shall be made from 18 mm pre-laminated particle board with a combination of 2 mm and 0.8 mm PVC edge band on all the exposed surfaces as per requirement. The drawers are provided with suitable slides for smooth operation. All the pedestal drawers are centrally locked with a single key.

24 Work Station (1500mm x 1500mm)

WORKSTATIONS-1500 X 1500, Providing and placing panel & tile based modular workstation, with partition thickness as 52 mm to 55 mm thick and ht - 1200 including powder coated aluminum trims. Tiles: Top Tile to be Fabric and White Board. Bottom tiles - Plain metal. INTERMEDIATE BLOCKS Intermediate blocks are given in DL finish. Wire Management - Wires shall be taken into the system through cable ducts from the junction boxes and it is carried up to the panels through concealed conduits inside the blocks. Side panels or legs - out of 25 mm thick prelam particle board with flat pvc lipping edge banding considered only on the open end conditions or metal powder coated legs at the end and shared condition. System shall also have 120 mm high powder coated standalone panel legs to give the system an elevated look. Work surface - out of 25 mm thick prelam particle board with flat pvc lipping edge banding Pedestals with or without legs - pedestal flat metal front, full ht free standing central locking of size 390 mm w x 435 mm d x 646 mm ht 3dr = 2box+1file. CPU trolley - with castors. KBPT - plastic. Note: All partitions and side panels have levelling screws for adjustment in case of Uneven floor to take care of +/- 40 mm of uneven flooring.

25. Book Rack
Overall Dimensions of Single Sided Steel Book Rack Base Unit shall be 900mm(W)x316mm(D)x1850mm(H). Rigid Knockdown Construction, Material used shall be CRCA 0.8 mm thick. The Stackability shall be add-on units can be stacked width wise to form a bank of racks having common side panel. Number of adjustable shelf shall be five with six loading levels. Uniformly distributed load capacity per each shelf is 80 kg maximum. Shelf back stiffener at the rear end of the shelves shall be provided. These are to support books on the rear side. Label holder & range indicator on each main unit for inserting labels.

26. Book Case

4 Door Book Case shall have the configuration of 914mm(W)x320mm(D)x1742mm(H). The unique design provides the right rigidity to the Top hinged doors, which shall facilitate easy use. The Book Case shall be made from prime quality CRCA steel with anti-rusting treatment. It shall have a Rigid Knock Down Construction. The Top Pannel, Back Pannel and Side Pannel are made from 0.7mm high yield CRCA and other components from 0.8mm CRCA. Each door shall have a 6 Lever Cam Lock with Common Key. 3mm thick glass should be used in each door for clear inside vision which shall be secured in a metal frame through a rubber gasket. Scissor Mechanism should be provided in each door for receding inside the top of every
compartment and it shall ensure parallel and smooth movement. Each door should be provided with plastic side end caps as handle which is easy to grip. Each compartment shall have a storage shelf with a UDL capacity of max 80 Kg. The 2 Door Book Case shall have 18mm PLB Top straight edge with PVC lipping. The finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10).

27. Conference Table (20 Seater)

![Conference Table](image)

Conference Table With Wire Manager size shall be Single seater 760 Width mm x 600 Depth mm, Two seater 1360 Width mm x 600 Depth mm, Half Round (2 Seater) R 713 + Quarter Round (1 Seater) R 713. The top shall be 31.6 mm thick (18 mm + 12 mm + 0.6 mm DL (both sides) + 0.4 mm Membrane). Edge Profile shall be waterfall edge 10 mm radius on top edge and 5 mm at bottom. In Understructure the Legs shall be made from 25 mm PPB having a straight profile with half round edges and clad with 0.6 mm thick post Forming laminate. Overall thickness of leg shall be 26.2 mm. The modesty panel in understructure shall be mae from PLT (Pre laminated twin) boards of 18 mm thick. There shall be Wire Management wire carrier shall be made from 0.6 mm thick CRCA painted and carrier cover shall be made of 12 mm thick MDF painted all over.

28 MS. Table

![MS. Table](image)

The Main table shall be of size 1800 Width mm x 900 mm Depth x 750 mm height. Top surface of the table shall made up of MDF (Medium density fibre) board duly finished with Veneer and final coating of PU. The Main desk should contain in built key board pull out tray for keeping keyboard of computer. The front modesty panel of the table shall be made up of MDF board of size 1640 mm x 600 mm x 16mm which shall also be duly finished with Veener and PU coating. For personal storage one mobile pedestal (3 drawer unit) shall be provided of size 510 mm Width x 635 mm Height and 445 mm Depth. The storage pedestal shall also be made up of MDF duly finished with veener & final coating of PU. The Side shall be of size
1200mm Width x 445mm Depth x 660 mm Height. The side unit shall be made up of MDF board duly finished with Veneer and final finish by PU Coating. The design of the side unit shall be such that it can be placed on either side of the main table. The side unit shall contain open space for keeping cpu in extreme right side, one closed storage shutter at extreme left end & open space in the middle with one shelf for keeping files. The thickness of the top of the side unit shall be 25mm. The Size of the Back unit shall be 2215mm width x 410 mm Depth x 2000mm height. The back unit shall be made up of MDF board duly finished with veneer & final finish by PU coating. Below storage shall be provided with wooden shutters & the upper left & right side of the back unit shall also be provided with wooden shutters. The middle 3 door shutters should be of glass of minimum 5mm thick for display purpose. The hardness of the PU coating shall be 1.5H

29. Library Table

![Library Table Image]

Size shall be 1800 Width mm x 900 Depth mm x 740 Height mm. The top shall be 25 mm thick PLB with 2 mm thick PVC Edge Beading plus the Understructure shall be having C- Frames 1.6 mm thick MS supporting the top. The Legs shall be of dia. 38.1 x 1.6 mm thick MS ERW tube.

30. Instrument Cabinet

![Instrument Cabinet Image]

overall dimensions of 900mmWx 1990mmHx450mmD and should have transparent doors and sides with steel frame work. Transparent portion of this cupboard should be made of Acrylic of 4mm thick. This cabinet should have 5 adjustable acrylic shelves each of 6 mm thickness. Three way lock should be provided of 6 levers. In the front door there should be 4 acrylic sheets and 2 each on both the sides. Metal used should be of CRCA and powder coated for finish. To be provided with rubber shoes to prevent direct contact of cabinet and floor.

31. Conference Room Chair
The seat shall be made up of 1.2+/-0.1cm thick hot pressed plywood measured as per QA method described in OCP-QLTA-P14-18 and upholstered with fabric or synthetic leather and moulded polyurethane foam. The back shall be made up 1.2+/-0.1cm thick hot pressed plywood upholstered with replaceable fabric or synthetic leather upholstery covers and moulded polyurethane foam. The moulded polyurethane foam shall be of density 45+/-2kg/m³, and hardness load 16+/-2kgf as per IS:7888 for 25% compression. The dimensions of seat shall be 51.0cm(W) x 48.0cm(D) and of back shall be 48.0cm(W) x 76.0cm(H). The armrest top shall be made of moulded polyurethane and mounted on to a fixed type M.S tubular armrest support chrome plated. The Arm support has static vertical adjustment of +/-1.5+/-0.05cm. The mechanism of the chair shall have following features: 360° revolving type, Front pivot synchro mechanism, Tilt tension adjustment, Single point control, 4 position locking with anti shock feature, Seat/Back tilting ratio of 1:2. The backrest shall consist of a fixed type mechanism i.e no back up/down adjustment. The chair shall be provided with pneumatic height adjustment which shall have stroke of 9.0 +/- 0.3 cm. The pedestal shall be fabricated from 0.2+/-0.02cm thick HR sheet, chrome plated and assembled with injection moulded black polypropylene hub cap. The size of the pedestal shall be 66.0+/- 0.5 cm pitch-centre-dia (76.0 +/- 1.0 cm with castors). The twin wheel castors shall be made black nylon. Overall dimensions of Chair shall be, Width of Chair - 76.0cm, Depth of Chair - 76.0cm as measured from pedestal below. Height from ground - min 102.5 to max 111.5cm. Seat height - min 46.0 to max 55.0cm. Dimensions tolerance / variations shall be within +/- 1 cm.

32. Laboratory

LH /RH  900 Ht.C-Frame Assy. For Table Depths 770 Wall Side Without Upright , 1540 Island Without Upright & 920 Wall Side With Upright. Common 900 Ht. C-Frame Assy. For Table Depths 770 Wall Side Without Upright , 1540 Island Without Upright & 920 Wall Side With Upright 1500/1350/1200 Module Length Horizontal Members. Fixed Type Reagent Shelf (Main Type) 1350/1200 L- Cutout : 6M + 6M Hanging Storage 900/750/600Mm W, 535 Mm
D & 635 Mm H. Drop-In Sink ,Jet Black Granite ,silicon sealant ,masking tape etc should be used.

33. MS Chair

The cushioned seat should be made of injection molded plastic outer & inner. plastic inner should be upholstered with pure leather and moulded high resilience (hr) polyurethane foam of density 45±2 kg/m3, and hardness load 16 ± 2 kgf for 25% compression. the cushioned back should be made of pu foam with insitu molded ms e.r.w round tube of size 1.9±0.03cm x 0.16 ±0.0128cm. it upholstered with pure leather. seat size : 47.6 cm. (w) x 49.2 cm. (d).back size : 47.5 cm. (w) x 77 cm. (d).armrests: the armrest top should be moulded from polyurethane(pu), upholstered in pure leather and mounted on to a drop lift adjustable type tubular armrest support made of 03.81±0.03 cm x 0.2±0.01 cm thk m.s e.r.w tube having chrome plated finish. the armrest height adjustable up to 6.5±0.5cm in 5 steps. active bio-synchro mechanism: the adjustable tilting mechanism should be designed with the following features: 360° revoluring type, front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort. tilt tension adjustment can be operated in seating position. 5-position tilt limiter giving option of variable tilt angle to the chair. seat/back tilting ratio of 1:2. the mechanism housing should be made up of hpdc aluminium black powder coated. seat depth adjustment: seat depth adjustment should be integrated in the seat through a sliding mechanism. seat depth adjustment range should be of 6.0±0.5 cm. 5 adjustable back support: back frame should be connected to the up/dn mechanism housed in plastic t spine. it can be adjusted in the range of 7.42±0.5 cm for the comfortable back support to suit individual need. pneumatic ht. adjustment: the pneumatic height adjustment has an adjustment stroke of 10.0±0.3 cm. pedestal assembly the pedestal should be high pressure die cast polished aluminium and fitted with 5 nos. twin wheel castors. the pedestal should be 65.0 ± 0.5cm. pitch-center dia.(75.0 ± 1.0cm. with castors.). twin wheel castors: the twin wheel castors should be injection moulded in black polypropylene.

34. MS Visitor Chair
The cushioned seat should be made of injection molded plastic outer & inner. Plastic inner should be upholstered with pure leather and moulded high resilience (hr) polyurethane foam of density 45±2 kg/m³, and hardness load 16 ± 2 kgf for 25% compression. The cushioned back should be made of pu foam with insitu molded ms e.r.w round tube of size 1.9±0.03 cm x 0.16±0.0128 cm. It should be upholstered with pure leather. Seat size: 47.6 cm. (w) x 49.2 cm. (d) Back size: 46.5 cm. (w) x 59.5 cm. (d) Visitor tubular frame: the tubular frame should be cantilever type and made of ø2.54± 0.03 cm x 0.02 ± 0.016 cm thick ss 202 tube. The back should be connected to frame through chrome plated high pressure die case connector piece.

35. Center Table

Glass shall be 12+/-0.3 mm thick black tinted toughened glass UV glued with bushes made in SS 202 grade for fixing with understructure. It shall be a welded assembly made in SS202 grade having dia. 12+/-0.04 as per IS:1762. Overall dimensions of table shall be Width of table = 112.0 cm, Depth = 60.0 cm, height = 35.1 cm.

36 Corner Table

Glass shall be 12+/-0.3 mm thick black tinted toughened glass UV glued with bushes made in SS 202 grade for fixing with understructure. It shall be a welded assembly made in SS202 grade having dia. 12+/-0.04 as per IS:1762. Overall dimensions of table shall be Width of table = 60.0 cm, Depth = 60.0 cm, height = 35.1 cm.
37. Fast Track Curtain

- Track material shall in general be aluminium alloy 6063-T-6 having tensile strength 195 Mpa, shear tensile Strength 195 MPa, Shear Strength 150 Mpa. All materials shall be Corrosion resistant and shall have minimum 50 micron polyester powder coating of approved shade. The curtain track system shall have following components.

- Support units consisting of ceiling suspender system and wall support unit. Ceiling suspender system shall consist of upper aluminium plates of diameter 50.4 mm and thickness 1.8 mm. Each plate shall be fixed to ceiling with 3 No. rawl plugs and screws. Ceiling suspenders shall be made of Aluminium pipe of minimum dia 12.7 mm and of variable height in conformity with the ceiling height and curtain height. Minimum three suspenders shall be provided for each cubical. Wall support unit shall be made of aluminium and shall be fixed with the wall with rawl plug and screws.

- Curtains track shall be made of aluminium alloy of minimum size 20.4 mm x 25 mm of thickness side 1.5 mm and top 3.3 mm. It will have curtain removable point made of galvanized steel for simple loading and unloading of curtains.

- 7mm diameter wheel type Teflon coated plastic roller and provided with 1.8 mm dia stainless steel (302 grade) 30mm hooks.

- Bends: Track shall be bendable to a radius of 300 mm at 90 degree to cover the length and width of bed. The bend shall be jointless.

- Hospital cubical curtains consisting of polyester blended fabric with 450 mm nylon mesh (net) on the top of curtain. The fabric shall be wrinkle free, shrink proof, anti-odor, stain retardant and water-repellent. Curtains shall be fitted with stainless steel grommets at 150 mm centre to centre.

- Colour of curtains: sea green

38. LED TV 43"

Providing and fixing the TV of 43" of reputed brand-SONY/SAMSUNG

39 LED TV 50"

Providing and fixing the TV of 50" of reputed brand-SONY/SAMSUNG
END OF VOL-III