Request For Budgetary Estimate of furniture work for Hospital and Academic Block at Dr. Radha Krishnan Govt. Medical College Hamirpur.

HSCC/Hospital & Academic Block Furniture GMC-Hamirpur/2025 Date: 13/01/2025

HSCC (India) Ltd. intends to invite on-line Budgetary Estimate from eligible bidders for Supply, Installation testing and commissioning of furniture work for Hospital & Academic Block at Dr. Radha Krishnan Govt. Medical College Hamirpur.

Technical Specifications and Bill of Quantity proposed for Furniture items are annexed herewith. It is requested to submit the Budgetary Quotation of the Furniture items with inclusive of all taxes & duties, 5 Years warranty and freight from warehouse to consignee location i.e. Dr. Radha Krishnan Govt. Medical College Hamirpur.

The quotation should be on Company Letter Head with sign and stamp as per the BOQ format enclosed and should be submitted in both Hard & Soft Copy within 15 days of issue of this Notice at the following address:

General Manager (Procurement)
Furniture Department
HSCC (India) Ltd.,
E-6(A), Sector-1,
Noida (U.P.) - 201301.
Soft copy may please be sent to: r_kumar@hsccltd.co.in , l_singh@hsccltd.co.in

General Manager (Procurement),
HSCC (India) Ltd.

Technical Specification for Hospital and Academic Block at Dr. Radha Krishnan Govt. Medical College Hamirpur

(ALL images are indicative only)

1. Fowler Bed with Mattress, Collapsible railings & Castors

Supply and Installation of Mechanical Fowler Bed with Mattress, Collapsible railings &Castors,Overalldimension:(L)2140x(W)912x(H)560mm ±2% tolerance.Thebedshouldhavetwofunctionswithadjustablebackrest70deg&upper legrest24deg.TheHeadboard&footboardshouldbemadeupof1.6mmthickSS202tubeof 25.4 mm dia. with 18 mm PLT board, Bed frame should be made of MS ERW tube of sizeof 1.6mm thick. It should have provision 4iv pole holders.It should bestrengthened by rectangular tube section of size 60mmx30 mm having 1.6 mm thickness, The leg Under Structure should be made up of ERWtubes with thickness of1.2mm with suitable section, lying surface should be made ofCRCAsheet of thickness of 1mm thick. This lying surface should have 4 sections for bed profiling i.e. backadjustment,fixedpelvicsection,upperandlowerlegadjustment.Lowerlegrestsectionisp rovidedwithRatchetforlegrestadjustment.Mattressplatformisstrengthenedby tubular frame of size 25.4mm dia. x 1.2mm thickness. It should be strengthened by trapezoidal contour (rounded corner) 14 nos, embossed cut out. All functions shouldbe operated with lead screw mechanism, ACME threaded EN8 made 6mm pitch for easy in movement.Castors should be High endurance, plastic injection mouldedcastorsof 125mm dia. having provision for diagonal locking with stem dia. 22mm should be provided for better stability.Bed should be powder coated with Anti rust, thermosettingepoxypolyesterpowdercoatingshouldbeused.Maximumweightcarryingcapa cityshouldbe135Kg.

Product should pass test like - loading test, cycle test, impact test, horizontal & vertical load tests for side rails, salt spray test, castor break test, pull test for head andfootboard.Validtestreportshouldbesubmitted.

SideRailMS

ThebedshouldbeprovidedwithonepairSiderailspulltoturndowncollapsibletype.Siderailssh ouldbemadeofMSERWtubehaving25.4mmdia.and1.6mmthick.The side rails should get locked when raised.The knob should be made out of Injection moulded Nylon for ease of operation.

The lockingof side rail pin should be fittedwithSSlinertopreventrustingandwearandtear.
Siderailjointsshouldhaveplasticbushesandcouplings.
Mattress: 4-sectionmattressforfowlerbed, size-(W)1965mm*(W)830mm*(H)100mm, Thematttressshouldbeprovidedwith40density100mmthickPUfoammattress 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 beconcealed.
Chart/DocumentHolder
OverallSizes(L)464mmX(W)137mmX(H)344mm ±2% tolerance.
WiremeshmadeofMSrodofdia.6mm&frontcoverMSsheetofthickness0.6mm.
Productshouldbepre-treated andpowdercoatedwithepoxypolyesterpowdercoating.
IVPoleAdjustableHeightonBed-SSMake
Overall dimension should be 250 mm PCD with height adjustable from 743 mm to 1150 mm.
It should be fully SS made used on bed with telescopic rod for heightadjustment.
The bottom adapted should be 12 mm dia., fixed tube should be 15.9 mm dia. , 1.6 mm thick ERW Tube.
Telescopic rod should be 12 mm dia. ERW tube.
Thereshouldbe2nos.6mmdia. hookstohangsalinebags.
Maximumloadbearingcapacityshouldbe2kgperhook.
Mechanical Fowler Bed with Mattress As approved by engineer in-charge/employer.

2. Bed side Locker

Supply and Installation of bedside locker has two drawer and cabinet without lock and with plastic moulded handle. Cabinet is Provided without lock to keep the items for the safety. overall dimensions is 490mmW x 410mm D x 941mm H±2% tolerance, Corner tube made of ERW round tube with section 25.4 mm diameter of 1.2 mm thickness
Cabinet made of CRCA sheet of 0.8 mm thick (470 mm x 410 mm x 382 mm), Top made of ABS of 2.2 mm thick. Top has recessed and contoured shape for better aesthetic and usability. Plastic moulded knob is Provisioned with Matt finish and dome shaped for better grip. Plastic moulded castors with 50 mm diameter placed in diagonal locking arrangement. RAL white, plastic parts in Grey. 5 kg UDL on both the tops and 20 kg in the cabinet.

All metal components are pretreated with zinc phosphating in 7 tank process and then powder coated with anti-microbial epoxy polyester powder coating to fulfil the requirements for bacterial protection against at least 2 commonly found bacteria in Hospital environment [Gram positive and Gram Negative].
goods are supplied in knocked down construction to reduce carbon emission. **Locker as approved by engineer in-charge/employer.**

3. OVER BED TABLE

Supply Installation of fixed type Over Bed Table with overall dimension (L) 1080 mm X500 mm (W) X (H) 964 mm±2% tolerance. Base frame is made of stainless steel 304 grade round tube 25 mm diameterwith 1.6 mm thickness,It has members of 19mm diameter with 1.2 mm thickness stainless steel 304 grade round tube (2 nos on each side) for rigidity. Base frame shall be adjacent jointed by 25 mm diameter with, plain top shall be made of 1.2 mm thick stainless steel 304 grade sheet with moulded corner size of table top shall be 450 mm x 750 mm. Castors: 50 mm diameter High endurance anti-static,Plastic injection moulded castors are Provided for smooth functioning of table.Safe Working Load: 40 kgUDL. goods are supplied in knocked down construction to reduce carbon emission. the product performs proof loading test, cycle tests, impact test, castor break test, Over Bed Table as approved by engineer in-charge/employer.

4. SS top revolving Stool

Supply and installation of stool as per technical specification. STOOL: Overall Sizes Diagonal Leg Diameter 538 mm, minimum height 470mm - maximum height :655mm±2% tolerance,

Top base shall be made of Stainless steel 304grade sheet with spin section of thickness 1.2 mm & should be non-corrosive. It should have a diameter of 305mm, seat base is made of MS ring and rectangular tube. EN8 Screw having diameter of 22mm should be used for height adjustment of the seat base. The hub should be made of MS ERW tube having diameter of 38mm and thickness 2.0mm. The Hub should be welded with the legs and it should accommodate and cover the lead screw mechanism. The under structure should consist of 4 legs made up of MS ERW tube of diameter 25.4 mm and 1.6mm 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 fulfil 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 or above. **Stools approved by engineer in-charge/employer.**

5. Stainless steel Saline stand

Supply and installation of saline stand, Telescopic height adjustable saline stand mounted on castor. Over all dimension is 652 mm diameter base circle with height adjustable from 1655 mm to 2365 mm±2% tolerance.
The 5-prong bottom frame is made of 1.6 mm thick stainless steel and the lower basement made of 31.75 mm diameter with 1.6 mm thick stainless-steel tube. Five nos.high endurance anti-static plastic molded 50 mm castors are Provided with dual locking.
The telescopic rod is 19 mm diameter with 1.6 mm thick stainless-steel 304 grade tube with locking knob. 4 nos. hooks are provided for hanging saline bags. The telescopic tube have plastic bush at the bottom which Provided smooth linear motion during height adjustable.the product performs proof loading test, cycle tests, impact test, castor break test, Saline stands as approved by engineer in-charge/employer.

6. Wheel Chair

Supply and Installation of wheel chair with overall dimension: 650mmWidth x 1120mmDepth x 920mm Height±2% tolerancethe cushion leatherette folding wheel chair hasHand Rim Outside Dia. (mm) 16 X 1.2 mm withlowvoltagealarmandaluminumdiecastfootrest. TheDensityofCushionmaterialonarmrest,seatandBackrest(Kg/m3)is30Kg/m3andwidth of the leg guard is 600 mm. Cross bar, armrest and handgrip is made of A3 carbon steelwith section 25.4 x 1.2mm. RearWheel:24 inch. The diameterofthe front wheel is200 mm and seatarewithcushion.ThelegguardisSwinginganddetachable.TheOverall Width inunfoldedcondition of wheel chair is 600 mm and 190 mm when folded. The wheel hub is of steel. Frame tube thicknessis 1.2 mm andthe cushion ismade of PUfoam. The Clearance of frame from floors 8 mm.Loading Capacity is of 100 kgs andoverallheight is 920 mm. The thickness of the cushion material is 40 mm. The depth of the seat is 400mm.TheDistancebetweenseatandfootrestis400mmandclearanceoffootrestfromthe floor is 150mm. TheAluminum castors are anodized and Slope of the backrest with respecttoflooris90degrees.Theheightofarmrestfromseatis105mmandSeatheightfromfloorat the front is of 520 mm. The all components are Stainless Steel should be 304 grade, the product performs proof loading test, cycle tests, impact test, castor break testwheel chair **as approved by engineer in-charge/employer.**

7. Instrument Trolley

Supply and Installation of Instrument trolley overall dimension: 902mm (L) X 532mm(B) X 915(H) mm ±2% tolerance. Verticals legs made of 32 mm with 1.6 mm thick Stainless steel 304 Grade. Horizontal stays made of 25 mm with 1.6 mm thick Stainless steel 304 grade tube, Top shelf & bottom shelf should be made of Stainless steel 304 sheet with 1.2 mm thickness and Stainless steel 304 grade protective railings shall be provided on all four sides of the shelf, railing shall be 10 mm diameter with 1.6 mm thick rod. The height of railing is 3" (75 mm). The distance between the two shelves is 460 mm and distance from ground to bottom shelf is 330 mm. Verticals mounted on 125 mm diameter non –rusting castor two with brakes and two without brakes. Castor made from high grade non-floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly. Handles made of Stainless steel 304 pipe having section of 16mm & thickness of 1.2mm should be used. The trolley shall be in matt finish. Load bearing capacity: 40kgs .the product performs proof loading test, cycle tests, impact test, castor break testInstrument Trolley as approved by engineer in-charge/employer.

8. Dressing Trolley with Bowl & Bucket

Overall Dimension must be 1156 mm L X 531mm WX 915mm H±2% tolerance. Verticals legs made of 32 mm with 1.6 mm thick Stainless steel 304. Horizontal stays made of 20 mm with 1.6 mm thick Stainless steel 304 tube, Top shelf & bottom shelf should be made of Stainless steel 304 sheet with 1.2 mm thickness and Stainless steel 304 protective railings shall be provided on all four sides of the shelf, railing shall be 10 mm diameter with 1.2 mm thickness rod. The height of railing is 3" (75 mm). The distance between the two shelves is 460 mm and distance from ground to bottom shelf is 330 mm. Handles made of Stainless steel 304 pipe having section of 16mm & thickness of 1.2mm, Verticals mounted on 125 mm diameter non –rusting castor two with brakes and two without brakes. Castor made from high grade non-floor-staining synthetic materials with integrated thread guards. Wheel centre having precision ball bearing to run smoothly. The trolley shall hold seamless stainless-steel bucket with S.S. lid at lower level and stainless-steel bowl at top level respectively. The size of bucket is 330 mm H x 280 mm (± 10 mm Engineering Variation) Outer diameter and size of bowl is 330 mm x 180 mm H (± 10 mm Engineering Variation). Both are made from SS 304 sheet 1.0 mm thickness, both removable bowl and bucket are mounted on the removable SS frame made from 12 mm diameter rod with 1.6 mm thickness. This SS 304 frame is assembled on SS 304 sleeve which is welded to vertical tube. Only 304 grade stainless steel should be used for tubular frame work & SS shelves of trolley. The trolley shall be in matt finish. Supplied in SKD condition. Load bearing capacity:40 kgs the product performs proof loading test, cycle tests, impact test, castor break test**Dressing Trolley with Bowl & Bucket as approved by engineer in-charge/employer.**

9. Crash Cart

Supply and installation of Cras Cart with 6 ABS Plastic Drawers and 6 colour medicine bin , overall dimension of L 1048mm W x 475mm H x 1555 mm±2% tolerance. SS 304 grade made top sheet with 2mm thickness is used. Middle & bottom sheet is used made of SS 304

grade with thickness 1mm. SS 304 grade frame bar with section of 25.4, 19, 1.2 & 16mm is used. SS Cylinder case is 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 is used to mount IV rod. High endurance anti-static, plastic injected moulded 4 swivel castors of diameter 125mm is used & have Provision for diagonal locking. SS 304 handle pipe have section of 25.4mm with length of 365mm & have thickness of 1.2mm giving a glossy finish. SS 304 tubular frame have six different coloured removable bins mounted on top shelf and two polystyrene lockable storage units with three drawers each. The top drawers have containers of different sizes. . Safe working load is 40kgs.the product performs proof loading test, cycle tests, impact test, castor break test

10. **MAYO TROLLEY**

MAYO TROLLEY: overall size: 531mm WX775mmD Xadjustable from 814mm to 1340 mm±2% tolerance, bottom frame made of SS 304 grade tube of section 38mmX38mm and 1.2 mm thick. top frame of 30mmX30mm and thickness 1.2 mm fixed tube of section 38mmX38mm of thickness 1.6 mm for providing guide way to telescopic tube it should be buffed finish to provide smooth operation without wear and corrosion. Locking knob mechanism should be used to lock SS telescopic tube at desired height. SS 304 tube 30 X 30 mm and thickness 1.2 mm for tray mounting and supporting the top frame and welded with telescopic tube. Aesthetically designed flange section for uses as a tray. Top shelf should be made of Stainless steel 304 grade sheet with 1.2 mm thickness, Castor shall be50 mm dimeter high endurance, anti-static durable castors making it easy to move around in the emergency area with ease. Castors have the provision of locking them.glossy mirror finish. maximum working load 20 Kgs.the product performs proof loading test, cycle tests, impact test, castor break test MAYO TROLLEY **as approved by engineer in-charge/employer**

11. Examination Couch with mattress

Supply and installation of examination couch with overall dimension of Overall Sizes (L)1830mm X (W)625 mm X (H)850mm. The backrest has ratchet mechanism for tilting the backrest. Leg frames & intermediate frames is made of ERW tubes having section of 32mm x 32mm square tubes with thickness of 1.6mm. Nylon 6 leg shoes is given to avoid wear & tear. MS sheet metal lying surface of thickness 1.2mm is used. Top sheet metal panel base frame of 25 x 25 ERW square tubes of thickness 1.6mm is used. Ratchet is of MS Strip with section 40 x 4 to Provision the backrest tilt. All MS part is pre-treated and powder coated with RAL white colour & all plastic parts in Grey. Safe working load is150kg or more.The couch shall be provided with 40 density 50 mm thick PU foam mattress which is covered by heavy helium material which is water proof, flame retardant, vapour & X-ray permeable. The zip & stitches for the mattress cover are concealed, the product performs proof loading test, cycle tests, impact test. **Examination couchas approved by engineer in-charge/employer.**

12. Patient Stretcher Trolley with mattress

Supply and installation of patient stretcher trolley overalldimensions2005mm(L)X666mm(W)X830mm(H)Thetrolleyshouldbemadeof31.75mmand 25.4 mm diameterwith1.6 mm thick ERW tube. holder for stretcher should be made

up of mild steelCastor should be of 200mm diameter, diagonal lockingcastor.stretchershouldbe made upofERW tube of diameter 25.4 mm and thickness 1.6 mm Top sheet should be made of CRCA sheet ofthickness1.2mmwithcontourshapetoaccommodatepatient.IVpoleholdershouldbemadeof MS,Maximumsafe work load shouldbe 135 kg, To ensure goodqualitywelding " Co2Argon" process should be adhered to. All metal components should be pretreated with zincphosphatingin9tankprocessandthenpowdercoatedwithanti-microbialepoxypolyesterpowder coating.goodsshouldbesuppliedinknockeddownconstructiontoreducecarbonemission.The trolley shall be provided with 40 density 35 mm thick PU foam mattress which is covered by heavy helium material which is water proof, flame retardant, vapour & X-ray permeable. The zip & stitches for the mattress cover is concealed,the product performs proof loading test, cycle tests, impact test, castor break test, **Stretcher Trolley as approved by engineer in-charge/employer.**

13. Emergency Recovery Trolley with mattress

The emergency trolley is height adjustable, back rest is adjustable and have Trendelenburg and reverse Trendelenburg functions.
Overall Size is in-between L 2139 X W 936mm X (H) Adjustable from 680 mm to 1055 mm Bed Frame is made of ERW 25X50 tube with thickness of 1.6 mm
Base frame is made of ERW 25X50 tube with thickness 0f 1.6mm
The bed should have smooth Trendelenburg and reverse Trendelenburg function with assist of 2 nos Gas Spring. the gas springs is of 530 mm length and 168 mm stoke.
The bed frame has height adjustable by assist of Hydraulic Pump stroke of 140mm.It is smooth functioning and consistent motion during operations is required.
The trolley is Provided with detachable stretcher which have x-ray permeable top made of high-pressure compact laminate of 6mm thick. The top is exceptional chemical and stain resistance. The fixed portion of the top is 1065 mm (L) x 590 mm (W) and tilted back portion is of 728 mm (l) x 590 mm (W).
There is MS made x-ray cassette holder which can move along with the top length to perform x-ray on the different position. The x-ray Cassette is top mounted.

Backrest is adjustable on ratchet for patient comfort from 0 to 70 Degree
The trolley is Provided with high end 125 mm non marking Steinco castors which is lockable diagonally.
The trolley is Safe working Load is of 135 Kg on flat top.
There should iv pole holder with height adjustable SS made telescopic iv pole with two hooks to mount saline bags.
The trolley is Provisioned with 8 mm diameterMS zinc plating urine bag holder on both the side.
The trolley is Provisioned with drop down SS made side rails which Provided shelter in more than half of the total bed length. the tube has 19 mm diameter and 1.2 mm thick SS 304 made.
The trolley has 4 nos. Neoprene made bumpers for Excellent Shock absorbing property.
The top frame has X ray Tray assembly made of MS CRCA sheet 1.2 thick X ray Tray can slide along the stretcher length. Provision given for changing the X ray cassette at the leg side , knob to be Provided for locking the assembly during TR operation .
Fail Safe Mechanism- the trolley has Fail Safe mechanism to avoid collapse of ERT during gas spring failure for TR & ATR Mechanism.
The trolley is Provided with 2 nos. U shaped head and foot bow at both the end to drag or push the trolley for movement. the bow is covered with neoprene material for better grip and avoid cold shock during patient handling.
MS Oxygen Cylinder Holder – Provision is given to mount B type Oxygen Cylinder at the head side of trolley.
The trolley has MS file holder at the bottom to carry file and other accessories during patient movement.
The trolley is Provided with two pair of patient safety belt.
The bed is Provided with 40 density 50 mm thick PU foam mattress (optional) which is covered by heavy helium material which is water proof, flame retardant, vapour & X-ray permeable. The zip & stitches for the mattress cover is concealed
All the MS parts is treated with nine tank pre-treatment procedure with zinc phosphate and powder coated with antimicrobial and thermosetting epoxy polyester.
The welding is done by co2-argon welding and there is Synergy coat on the welded areas to minimize early rusting.

14. 3-fold Screen

Supply and Installation of 3-fold screen with Overall dimension: Length: 2637mm X Width 640mm x height: 1720 MM. Frame is made of Stainless-steel (SS 304 Grade) tube with movable. The fix frame is made of 25.4 mm diameter 1.6 mm thick Stainless-steel (SS 304 Grade), the movable frame is made of 25 mm diameter 1.6 mm thick Stainless-steel (SS 304 Grade) and the leg frame is made of 32 mm square tube with 1.6 mm thick Stainless-steel (SS 304 Grade), Castor shall be provided 75mm diameter.Canvas: good quality canvas fabric attached with the help of spring on the edge. 3-fold screen **As approved by engineer in-charge/employer.**

15. U pattern fast track curtain with rail

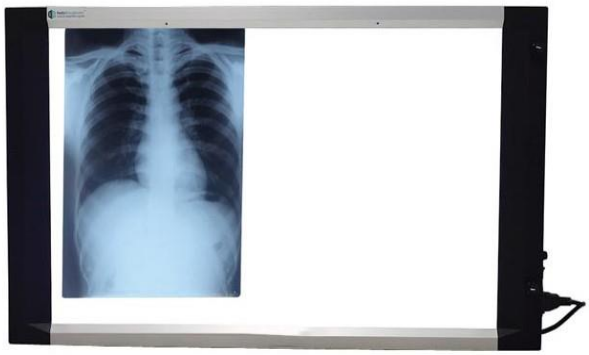
Providing and fixing/Installation of hospital cubicle track system with following specification: Track material shall in general be aluminium alloy 6063-T-6 having tensile strength 195 Mpa, shear tensile Strength 195 MPa, Shear Strength 150 Mpa. All materials shall be Corrosion resistance and shall have 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. raw 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 raw plug and screws.
Curtains track shall be made of aluminium alloy of minimum size 20.4 mm x 25 mm of thickness side 1.6 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 degrees to cover the length and width of bed. The bend shall be joint less.
Hospital cubical curtains (Overall Height: 7.5 Feet) 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. Sliding curtain facility for patient in "U" pattern Curtain: - anti microbial & flame resistant 100 % polyester fabric. White nylon mesh at top. Fabric length to be equal to track length plus 20 % added fullness. Fabric height equals floor to ceiling height minus a 10-inch gap at bottom. Fabric is hemmed at all sides and bottom. Install tracks level and plumb, according to manufacturer's written instructions. All MS parts should be Pre-treated & powder coated. Sliding curtain facility for patient in "U" pattern as approved by engineer in-charge/employer.

16. Blood Donor Couch

Supply and Installation of Height Adjustable revolving and reclining chair
should have ergonomically shaped backrest and seat. foam should be high resilience and comfortable. should have an electrically operated backrest, leg rest and height to be operated using a remote handset, backrest and leg rest should have capability to be used together or separate. Chair dimension: fixed height of at least 52 cm seat width should be minimum 58 cm without armrest total chair length of at least 210 cm in laying position backrest length of minimum 85 cm. chair should have two emergency buttons on base frame for one touch automatic welcome Trendelenburg position. should have an integrated movement of headrest with the backrest. self-lockable double running wheels for better usage and safety. should have comfortable armrest which can be adjusted. should have a holder for tablets. should come with an ABS basket. should have capability for Trendelenburg position. should have patient load capability of at least 200 kg, The manufacturer should have following certificates for quality purpose: ISO 13485:2016 from NABCB accredited certifying agency. Overall dimension - L 2100mm x W 750mm x H 1340mm in upright position. Movable (horizontal & vertical) fully padded, broad armrest with glass holder's Adjustable footrest with removable transparent plastic cover Anti-fungal, anti-bacterial, easy to clean leatherette upholstery. Chemotherapy chair **as approved by engineer in-charge/employer.**

17. Double X-ray View Box



Supply and installation of double X-Ray View Box 850mm W x 512mm H x 47mm D (± 10% Engineering Variation). Adopt LED light source with life of 100,000 hours. Maximum brightness can reach up to 5000cd/m2 which is suitable for different density medical films. Makes use of A-Cast viewing screen which make the light brighter and softer, the screen can be used for long time and not turn yellow and deform. The light frequency is above 50KHz, effectively relieves the fatigue of vision, Material of the Front viewing screen: High quality Polymethyl Methacrylate (PMMA), Power supply input: 220–240-volt AC, 50 Hz, Material of the Frame: Electrophoresis coated Aluminium alloy and ABS plastic, Easy insertion and removal of the films Through the X-ray film holders, On-Off function and fully electronic continuous adjustable separate brightness control provision for each panel on the illuminator. X-ray View Box as approved by engineer in-charge/employer.

18. Executive table with side unit and pedestal for OPD Room (1650mmW x 750mmD x 750mmH)

Providing & Fixing High end Table with Combination of Main Table with Extended Return Unit with Pedestal Storage Unit: -

MAIN TABLE of size 1650mmW x 750mmD x 750mmH with top made of 32 mm thick, MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200o C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.

The Gabel and Modesty panel is made of 25 mm MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200o C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board).Design / Shape of table**:** Rectangular and taper inside at both side ends.

Extended Return Unit

Extended Return Unit size 1050 mm L X 480mmD X 750mmH: The Side unit top is made up of 25mm thick MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200o C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. The side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1 CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made

from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent or as approved by engineer in-charge, MDF Board Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer) Table to be complete as per approved sample or as per direction of Engineer-in-charge/employer.

19. Main Chair for OPD Table

Supply and installation of Chair as per technical specification. Providing and Placing High Back Chair with overall size of 76.1 cm W x 76.1 cm D x 96.5 – 114 cm H x 43.1 – 53.1 cm Seat Height. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm. The armrest top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of Ø3.81±0.03cm x 0.2±0.01cm thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to 6.5±0.5 cm in 5 steps. The adjustable tilting mechanism is designed with following features: 360° revolving 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat

through a sliding mechanism. Seat depth adjustment range is of 6.0±0.5cm. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42±0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of 10.0±0.3cm. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is 65.0±0.5cm pitch centre dia. (75.0±1.0cm with castors). 5 nos. of twin wheel castors are injection moulded in plastic having 6.0±0.1cm wheel diameter and assembled to pedestal. Chair as approved by engineer in-charge/employer.

20. Visitor Chair for OPD Table (As common visitor chair at Ser No 24)

Supply and installation of visitor Chair, the overall dimensions of the chair shall be 609mm x 643mm x 996mm. The seat height shall be 448mm. The cushioned seat and back is made of injection moulded Plastic outer and Inner. Plaster inner is upholstered with stitched cover and moulded high Resilience 50 mm thick Polyurethane foam of density 45kg per meter cube. The stitched cover is made from spacer fabric and leatherette. Seat size shall be 470mm x 480mm. The Back size shall be 450mm x 605mm. The armrests top is moulded from PU and mounted on to a drop lift adjustment type tubular armrest support made of 38mm diameter x 2.0mm thick MS ERW tube. The tubular frame shall be powder coated DFT 40-60 microns and is cantilever type and made of 25.4mm X 2.0mm thick MS ERW tube. The back is connected to frame through powder coated high pressure die cast connector piece.**chair as approved by engineer in-charge/employer.**

21. Table for Associate professor/NTS office/Deputy Controller Finance/Deputy Medical Superintendent, Senior Resident/Assistant Prof/Examination Treatment (1800mm)

Providing & Fixing High end Table with Combination of Main Table with Extended Return Unit with Pedestal Storage Unit: -

MAIN TABLE of size 1800mmW x 750mmD x 750mmH with top made of 36mm thick, MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200o C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.

The Gabel and Modesty panel is made of 25 mm MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200o C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board).Design / Shape of table**:** Rectangular and taper inside at both side ends.

Extended Return Unit

Extended Return Unit size 1050 mm L X 480mmD X 750mmH: The Side unit top is made up of 25mm thick MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200o C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. The side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1 CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc. is make of Hettich/Ebco/or equivalent or as approved by engineer in-charge, MDF Board Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer) Table to be complete as per approved sample or as per direction of Engineer-in-charge/employer.

22. Staff Office Table (1200mm)

Supply and installation of table as per technical specification. Work table size: 1200mm Width x 600mm Depth x 750mm Height, The table top shall be made from 25 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, side panel made from 25 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, the side panels have 2 glide screws each for leveling of the desk and Modesty panel shall be made from 18 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, thickness of laminate is 1 mm thick, E1 grade Pre-laminated MDF Board and laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding on the user side and 0.8mm thick PVC edge-banding tape pressed on top and bottom side at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.
Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascias is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer are mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H, All Hardware (Handles, Slides, Hinges, locks, sliding channel etc) Hettich/Ebco Make or equivalent or as approved by engineer in-charge/employer. MDF Board/laminate Make: (Century/Action Tesa/Merino/Greenlam or equivalent or as approved by engineer in-charge/employer). **Table as approved by engineer in-charge/employer.**

23. Chair for Staff

Supply and installation of visitor Chair, with overall size of 609mmW x 642mmD x 982mm H, Seat Height: 448mm. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 470mmW x 480mmD. The back is cushioned made of PU foam with insitumoulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 477mmWx 764mmD. The tubular frame is cantilever type and made of 2.54±0.03cm x 0.2±0.016 cm thick Stainless Steel 202 grade tube. The back connected to frame through chrome plated high pressure die casted connector pipe.**chair as approved by engineer in-charge/employer.**

24. Visitor Chair for Staff Table

Supply and installation of visitor Chair, with overall size of 609mmW x 642mmD x 982mm H, Seat Height: 448mm. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 470mmW x 480mmD. The back is cushioned made of PU foam with insitumoulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 477mmWx 764mmD. The tubular frame is cantilever type and made of 2.54±0.03cm x 0.2±0.016 cm thick Stainless Steel 202 grade tube. The back connected to frame through chrome plated high pressure die casted connector pipe.**chair as approved by engineer in-charge/employer.**

25. 3-seater Waiting Chair

The seat and back to be made up of high-density self-skin 25-30mm thick PU Foam reinforced with 1.2 mm thick MSperforatedsheetinsert.ThePUFoamhavingdensityof680+/-10Kg/m3withhardnessof55 +/-5. Seat Size :52.0 cm (W) X 46.5 cm (D). Back Size: 52.0 cm (W) X 51.5 cm (H). Floor to seat height (front) minimum: 410mm, Overall length (minimum): 1680mm, Cross Beammade up of black powder coated MS ERW square tube of size 6.0+/- 0.05cm X 6.0+/- 0.05cm X0.4+/-0.016 cm thick fitted with polypropylene end caps. Thickness of the seat support and lumber support (minimum): 23mm, Legs & Armrest made up of powdercoated High pressure Aluminium Die cast Powder coated with minimum 70 microns. Number of armrests: 04 Nos. Thickness of material of Arms 1.8 mm, Thickness ofmaterial of Legs 2.0 mm,Legs are fitted with soft grip PVC level adjusting shoes. Main frame finish with Powder coated of minimum 50-70 microns, 3-seaterwaitingchairasapprovedbyengineerin-charge/employer.

26. 3-seater Sofa

Supply and Installation of Three-Seater Sofa • SEAT FOAM: The seat is made of PU foam with Density 28± 2 kg/cu. meter having an additional top layer of super soft PU foam in Density 32 ± 2 kg/cu. upholstered with fabric or leatherette. Seat Cushion Thickness ±3 (mm): 150mm

• 2) BACK FOAM: The back is made of PU foam with Density 28 ± 2 kg/cu. meter with two additional top layers of super soft foam of density 32±2 kg/cu. meter, upholstered with fabric or leatherette. Backrest Cushion Thickness ±3 (mm): 175mm
• 3) UNDERSTRUCTRE: Under structure 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 under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure 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) 2060mm (D) 905mm(H) 855 mm seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 40 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 120mm, Sofa: as approved by Engineer In-Charge/employer.

27. Two-seater Sofa

Supply and Installation of Two-Seater Sofa SEAT FOAM: The seat is made of PU foam with Density 28± 2 kg/cu. meter having an additional top layer of super soft PU foam in Density 32 ± 2 kg/cu. upholstered with fabric or leatherette. Seat Cushion Thickness ±3 (mm): 150mm
• 2) BACK FOAM: The back is made of PU foam with Density 28 ± 2 kg/cu. meter with two additional top layers of super soft foam of density 32±2 kg/cu. meter, upholstered with fabric or leatherette Backrest Cushion Thickness ±3 (mm): 175mm
• 3) UNDERSTRUCTRE: Under structure 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 under structure for cushioning purpose 6 nos. per seat

& 3.8 mm Dia zigzag spring assembly is mounted over under structure 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) 1460mm (D) 905mm(H) 855 mm seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 40 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 120mm, Sofa: as approved by Engineer In Charge/employer.

28. One Seater Sofa

Supply and Installation of single-Seater sofa, SEAT FOAM : The seat is made up of PU foam in Density 28 ±2 kg/cu. Mtr. with an additional top layer of super soft PU foam in Density 32 ± 2 kg/cu, upholstered with fabric or leatherette.

2) BACK FOAM : The back is made up of PU foam in Density 28 ± 2 kg/cu. meter with two additional top layer of super soft foam of density 32±2 kg/cu. meter, upholstered with fabric or leatherette.

3) UNDERSTRUCTRE: Under structure is made up of 1.2±0.1 cm. thick hot-pressed plywood [moisture resistance & termite proof as per IS:303] & pinewood of cross sections devoid of major knots & surface defects. 6 nos. per seat & 3.8mm Diameter zigzag spring assembly is mounted over under structure for cushioning purpose.

4) LEG ASSEMBLY : It is a welded Assembly made in Stainless steel (grade SS 202) tube & plate with plastic end cap. Size : Width (W): 910mm, Depth (D): 905 mm, Height (H): 855 mm Seat Height (SH): 450mm. Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 40 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 120mm Sofa: as approved by Engineer In Charge/employer.

29. CENTER TABLE (ANTE ROOM)

Supply and installation of centre table of size: 1200mmW X600mmD X400mmH, top made of 32 mm thickMDF board as per IS 12406 with veneer and PU finish having scratch resistance of 2H, all exposed edges sealed with 2mm thick edge banding tape and unexposed edges sealed with 0.8 mm thick edge banding tape pressed at 200o C with hot melt glue on special machines. Frame and Leg material: Stainless steel (SS 304), size of Frame and Leg material 55mm X 55mm with 1.6 mm thickness, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent/or as approved by engineer in-charge/employer, (MDF Board make: CENTURY/Action Tesa/GREEENPLY or equivalent/or as approved by engineer in-charge/employer)Centre Table: as approved by Engineer In-Charge/employer.

30. CORNER TABLE (ANTE ROOM).

Supply and installation of corner table of size: 500mmW X500mmD X400mmH, top made of 32 mm thick MDF board as per IS 12406 with veneer and PU finish having scratch resistance of 2H, all exposed edges sealed with 2mm thick edge banding tape and unexposed edges sealed with 0.8 mm thick edge banding tape pressed at 200o C with hot

melt glue on special machines. Frame and Leg material: Stainless steel (SS 304), size of Frame and Leg material 55mm X 55mm with 1.6 mm thickness, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent/or as approved by engineer in-charge/employer, (MDF Board make: CENTURY/Action Tesa/GREEENPLY or equivalent/or as approved by engineer in-charge/employer), Corner Table: as approved by Engineer In-Charge/employer.

31. Reception Table

Providing & placing of customized reception counter in rectangular shape with two tops. The under structure of table shall be made of 25 mm thick pre laminated Marine plywood, cladded with 12 mm thick Corian sheets with desired length thermoformed by using dyes and Molds and pasted and seamlessly finished over. MS pipe framework to be used for strengthening the structure. The item includes cost of 12mm thick CORIAN sheet, 25 mm Marine plywood & MS square pipe, hardware, drawer units, shutter doors with laminated mica or veneers, locking mechanism, foot rest etc. as per architect's drawing and finished as per guidelines of site in charge. The entire structure shall be made of 25 mm thick marine plywood with MS frame work with finish of 1 mm thick laminate, All the edges are sealed with 2 mm thick PVC edge band all around, All the inner surfaces shall be finished with 1mm thick white laminate or as approved by engineer in charge, 6 Nos. Computer key board tray and 6 nos. drawer cabinet shall be provided in reception counter with locking arrangement, Height of all three drawers shall be 150mm, 150mm and 350mm respectively. width: 450 mm , height: 680 mm, Drawer shall be made of 18 mm thick marine plywood with finish of 1 mm thick laminate, All the edges are sealed with 2 mm thick PVC edge band all around. Each drawer shall slide on a pair of telescopic drawer sliders (Approved make). The inside portion of drawer to be finished with white laminate. provided double Front panel to mount Electrical Switches and sockets, working Top height must be 750mm. Counter top height must be 1050 to 1200mm. Depth of working top must be 650mm to 750 mm,All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent/or as approved by engineer in-charge/employer, (Ply and Laminate Make: CENTURY/Action Tesa/GREEENPLY

or equivalent/or as approved by engineer in-charge/employer), Designee and colorof reception table as approved by engineer in-charge/employer.

32. Nurse Station

Providing & placing of customized reception counter in rectangular shape with two tops. The under structure of table shall be made of 25 mm thick pre laminated Marine plywood, cladded with 12 mm thick Corian sheets with desired length thermoformed by using dyes and Molds and pasted and seamlessly finished over. MS pipe framework to be used for strengthening the structure. The item includes cost of 12mm thick CORIAN sheet, 25 mm Marine plywood & MS square pipe, hardware, drawer units, shutter doors with laminated mica or veneers, locking mechanism, foot rest etc. as per architect's drawing and finished as per guidelines of site in charge. The entire structure shall be made of 25 mm thick marine plywood with MS frame work with finish of 1 mm thick laminate, All the edges are sealed with 2 mm thick PVC edge band all around, All the inner surfaces shall be finished with 1mm thick white laminate or as approved by engineer in charge, 6 Nos. Computer key board tray and 6 nos. drawer cabinet shall be provided in reception counter with locking arrangement, Height of all three drawers shall be 150mm, 150mm and 350mm respectively. width: 450 mm , height: 680 mm, Drawer shall be made of 18 mm thick marine plywood with finish of 1 mm thick laminate, All the edges are sealed with 2 mm thick PVC edge band all around. Each drawer shall slide on a pair of telescopic drawer sliders (Approved make). The inside portion of drawer to be finished with white laminate. provided double Front panel to mount Electrical Switches and sockets, working Top height must be 750mm. Counter top height must be 1050 to 1200mm. Depth of working top must be 650mm to 750 mm,All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent/or as approved by engineer in-charge/employer, (Ply and Laminate Make: CENTURY/Action

Tesa/GREEENPLY or equivalent/or as approved by engineer in-charge/employer), Designee and colorof reception table as approved by engineer in-charge/employer.

33. Chair for Nurse Station/Reception(change with office chair Non revolving).

Supply and installation of Chair as per technical specification. Providing and Placing High Back Chair with overall size of 76.1 cm W x 76.1 cm D x 96.5 – 114 cm H x 43.1 – 53.1 cm Seat Height. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm. The armrest top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of Ø3.81±0.03cm x 0.2±0.01cm thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to 6.5±0.5 cm in 5 steps. The adjustable tilting mechanism is designed with following features: 360° revolving 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of 6.0±0.5cm. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of

7.42±0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of 10.0±0.3cm. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is 65.0±0.5cm pitch centre dia. (75.0±1.0cm with castors). 5 nos. of twin wheel castors are injection moulded in plastic having 6.0±0.1cm wheel diameter and assembled to pedestal. Chair as approved by engineer in-charge/employer.

34. Desk let Chair without wheels for Demo Room

Supply and Installation of Desk-let chair, the seat sub-assembly shall be made up of 1.2+/-0.1cm thk plywood upholstered with moulded foam and polyester fabric and shall be covered with an injection moulded polypropylene outer cover. The seat should tip-up when not in use and this feature should be used while stacking the chairs horizontally. The back sub-assembly shall be made up of injection -moulded polypropylene inner upholstered with moulded foam and polyester fabric and shall be covered with an injection moulded polypropylene outer cover. The contoured back with width extension at the bottom area shall be designed to give comfort to lower back. The back flexing feature shall allow the back to tilt by 9+/-2 degree to aid the user in adopting a comfortable reclining posture. The dimensions of back shall be 45.2cm(W) X 44.6cm(H). and of seat shall be 47.0cm (W)X 50.0cm(D). The powder coated 4 leg structure shall be made of 2.2+/-0.03cm diameter X 0.25+/-0.02cm thick M.S.E.R.W. tube front and rear leg shall be welded along with connecting tube made of 1.9+/-0.02cm diameter X 0.2+/-0.016cm thick M.S.E.R.W tube to form the tubular frame assembly. The armrests structure shall be made up of 2.2+/-0.03 cm diameterX 0.25+/-0.02cm thick M.S.E.R.W. tube welded to the tubular frame structure and having a scratch-resistant ABS arm top. The chairs should be stacked horizontally when not in use. The full desk let assembly shall be flip-up type and shall be made up of extension tube of 1.9+/-0.02cm diameter X 0.2+/-0.016cm thick M.S.E.R.W. tube and a support tube on L.H. side of 1.6+/-0.02cm diameter X 0.2+/-0.016cm thick M.S.E.R.W. tube on which an scratch resistant ABS desk let top shall be fixed and covered on bottom side with a bottom cover. The polyurethane foam shall be moulded with density= 70.0+/-8.0kg/m3 and hardness=20+/-2 for seat and 16+/-2 for back at 25% compression. Overall Dimensions of Chair shall be Seat Height - 47.5 cm,

Height - 89.0cm, Width & Depth of Chair as measured from pedestal - Width-71.0cm and Depth-82.0 cm.Chair as approved by engineer in-charge/employer.

35. Dr. Locker for Change Room.

Supply and Installation of Z-style4 Door Personal Locker Unit as per image with size of 750mm(W)x480mm(D)x1900mm(H) (± 5 %), 1 door unit shall be provided with one locker, one coat hanger compartment, one Stainless steel (304 grade) hanger road and two nos. Stainless steel (304 grade) coat hanger, Locker pedestalheightshall be 75 mm, total Number of lockers:4 and total nos. of coat compartments: 4 nos.,Non-weldedhingeswithremovable hinge pins should be provided.Locking shall have 10 Lever cam lock with lock leverplusoptionofhasparrangementandduplicatekeyshouldbeprovided.construction features environmentally friendly, easy to clean sea water resistant aluminium. This high quality material is 100 % corrosion resistant, even on cut edges, the high quality door shall be provided with 12 mm solid grade laminate (HPL) with rounded edges for safety, finished in a special overlay for protection against scratching, damage, inalterable, rustproof, resistant to acid attack and impact. lockers are made from HPL stratified laminate, enhanced with anodised aluminium profiles and assembled with special joints.

Construction details:
Top quality 8 mm thick stratified laminate panelssurfaces with scratchproof finish rounded edges and corners, bottom and ceiling in 12 mm thick stratified laminate –

joint formed of an anodised aluminium profile, with a minimum thickness of 1.mm 6 door in 12 mm thick stratified laminate, stratified laminate shelves
extruded anodised aluminium hinge running the entire height equipped with a 90° stopping device and nylon pins, self-lubricating lock with nickel plated brass barrel, two keys, tilting handle.
coat-hanger rod in 20 mm diameter anodised aluminium with 2 sliding clothes hook.
rear slits to enable thorough washing, drainage of the liquids and excellent ventilation without affecting the strength of the structurefireproofor**Asapprovedbyengineerin-charge/employer.**

36. Staff Locker for Change Room

Supply and Installation of 4 Door Personal Locker Unit (Base) with size of 450mm(W)x480mm(D)x1900mm(H) (± 5 %) Stiffened pedestal height shall be 75 mm, Number of compartments shall be 4. Stack ability shall have add - on units that can be stacked width wise to form bank of locker shaving common side panel. Non-welded hinges with removable hinge pins should be provided. Locking shall have 10 Lever cam lock with lock lever plus option of hasp arrangement and duplicate key should be provided. Material shall be CRCA Sheet. sheet thickness of body, back, shelves, pedestal and door must be 0.8mm thick. Construction shall be Rigid Knockdown construction; the uniformly distributed load capacity of shelves shall be 40 Kg minimum. Finish shall be epoxy polyester powder coated with 50-60microns thickness.Handle/LabelholdershallbeElectroplatedMildSteelhandle/label.Ventilationsh allbe attractive punched pattern for ventilation. Or **As approved by engineering-charge/employer.**

37. Work Station (1200mm)

Supply Installation of linier workstation size 1500mmWX600mmD x1200-1250mmH Providing and placing of modular partitions system coated aluminium trims and supported on Legs for better air circulation and helps in keeping floor clean. Panels Construction - Each panel consists of Vertical extrusions 2Nos and Horizontal extrusions made of 1.2mm thick aluminium with duly powder coated at every division of tile/block. Each panel have Bottom frame fabricated for 52.4mm panel comprises of L-channels made of 2mm thick CRCA steel (IS: 513), formed plates of 3mm thick HR steel (IS: 2062) & ERW steel tube of size 35x15x1.6mm thick in oval cross section (IS: 7138) welded together. The complete bottom frame shall be powder coated with an average of 50-60 microns thickness of epoxy powder coating. The Bottom Frame is bolted with the Upright verticals. Each Panel is provided with 2Nos Legs of height 120mm are fixed at the bottom frame of the panel. Legs are fabricated by CO2 welded MS Tube of section 38mm x 25mm (IS: 7138 ERW Tube, 38mm x 25mm x 16bg) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5mm HR) over which an M8 Leveller is fitted which allows for adjustment of the height by 50mm. It will be coated with 45-50micron thickness of epoxy powder coating. Each Panel consists of 2Nos Intermediate blocks. In a 52.4mm Thick panel intermediate block shall comprise of 38mm thick paper honeycomb with 3mm MDF on each sides and 0.6mm decorative laminate on both sides. Particle board framing shall be used on outer boundary of these blocks as well as intermediately at certain locations forming conduit for passing cables. These blocks will be located in the middle bands of the panels made out of a composite construction of MDF and paper honeycomb. Each Panel consist of TOP TILES/SPLIT TILES. These tiles shall be slide in to the panels from top before fixing the top horizontal. These tiles shall be supported from top & bottom side with clips made from PP co polymer fitted in horizontal extrusion. In case of split tiles it shall be offered in Fabric magnetic tiles, Whiteboard tiles. Each Panel consists a BOTTOM TILE. These bottom tiles shall be press fitted on to the assembly frame of the panel with the help of snap-on clips made of nylon-66 and support clips made from Polypropylene

(PP). All partitions and side panels have levelling screws for adjustment in case of uneven floor to take care of +/- 40 mm of uneven flooring. TileFinishes:
a FABRIC MAGNETIC TILES: Fabric magnetic tiles shall be fabric upholstered metal tiles in 0.6 mm thick G.I. Grade O as per IS: 277. The fabrics shall be upholstered with adhesives.
• FABRIC TACK TILES: Fabric tackable tiles shall be upholstered metal tiles in 0.6mm thick G.I. grade O as per IS: 277, with Polyurethane foam in the tile for tackablity. The fabric shall be upholstered with adhesives.
• WHITE BOARD TILES : White board tiles shall be made of 8.0 mm thick particle board conforming to IS: 12823 laminated with 0.6mm thick white glossy high pressure laminate on outer side & 0.6mm backing laminate on inner surface and will be having all its edges with minimum 0.5 mm thick PVC edging. Aluminium Trims: The top trims and end trims for 52.4 mm shall be made from aluminium extrusion. All kinds of extrusions for 52.4mm shall have average wall thickness of 1.2 mm & having finish of powder coating.
Top trim in 52.4mm thick panel shall be press fitted on the horizontal extrusion, it shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade.
End trim for 52.4mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513.Wire Management - Wires shall be taken into the system through cable ducts from the junction boxes and it is carried upto the panels through concealed conduits inside the blocks. Wires runs through the system from Bottom tile and extended to the top at various locations by the help of 2 nos. vertical Cable Ducts in each panels.
Cable duct shall be made from 0.8 mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts; one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D. Telephone and Electric fitting materials for each work station:- Plate and frame 8M & 2M, 16 Amp switch 1M, 6A-3Pin socket, 6/16A Socket, Blanking plate 1M, RJ-45 CAT 6UTP, RJ-11 Telephone and wire 3x2.5 mm Square, Makes for copper wire: Havelles/Polycab/RR Cable or as approved by engineer in-charge/employer, Make for Modular switches and Sockets outlet: Legrand-Myrius or anti-bacterial/ABB (Tvisha)/ Panasonic/Schneider-Livia/Philips-sleek or as approved by engineer in-charge/employer, All electric/telephone fitting with materials shall be carried out by the supplier for each work station as per client requirement. Legs - System shall also have 120 mm high powder coated welded metal legs to give the system an elevated look. Single side legs are fabricated by CO2 welded MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube, 38 mm x 25 mm x 16bg) with the base plate of the MS plate of 35mm x 22mm x 5mm (IS: 2062, 5 mm HR) over which an M8 Leveller is fitted. End/Intermediate separator: partitions of 22.8mm thick including powder coated aluminium trims and supported on Legs for better air circulation and helps in keeping floor clean. The 22.8 mm panels are only to be used as Separator/End panels to provide additional privacy. These panels have various finishes and no cable management ability. Panel Construction: The 22.8mm End/Separator panels shall be made of horizontal and vertical uprights. These uprights and horizontals shall be made of aluminium extrusion having material AL96063-T6 & have average wall thickness of 1.2mm & powder coated with epoxy-polyester powder. The Blocks for the End/Separator panels shall be of 16mm to 18mm thickness in the selected finish. The top most block in the panel shall be the top block of the panel. It shall be available in fabric, laminate, whiteboard, fabric metal,

trackable and clear glass finishes. The 2Nos blocks in the intermediate bands shall be available in fabric or laminate finish and the lowermost block in the panel shall be the bottom block which shall be in fabric, metal or laminate finish. Tiles : Tile Finishes in End/Separator Partitions to be provided as per the site and layout approval. Finishes in these panels shall be

• LAMINATE FINISH BLOCKS:

Laminate finish blocks shall be made from 18mm thick MDF board, cladded with 1mm thick laminate of approved shade.

• FABRIC FINISH BLOCKS:

These shall be made from 18mm thick Pre-Laminated MDF Board upholstered with 1mm thick approved shade of fabric using adhesives.

• WHITEBOARD BLOCKS:

These shall be made of 16mm thick MDF board laminated with 0.6mm thick white glossy high pressure laminate on both sides and having all its edges with minimum 0.5 mm thick PVC edging.

• GLASS BLOCKS:

These shall be made of 4mm thick toughened plain glass having diamond polish edge finish.

• FABRIC TACKABLE BLOCKS:

These shall be made from 18mm thick Pre-Laminated MDF Board battens which hold 3mm MDF in between. 6mm thick Polyurethane foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive.

• METAL FINISH BLOCKS:

Metal finish blocks shall be made from two components of 0.8mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish. AluminiumTrims : The top trims and end trims for 22.8mm partition shall be made from aluminium extrusion having material AL96063-T6. Top trim in 22.8mm thick panel shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade. End trim for 52.4mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513. End trim for 22.8 mm thick panel shall slide with the help of end trim connector made from nylon-66. Work station Worktop as per the approved shape and site requirement made out of 25mm thick prelaminated MDF board. All the open edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The work surface shall be provided with circular cut out of Dia.65mm as per the requirement, for passing of wires. These cut outs shall be provided with ABS covers. Worksurfaces are fitted to the panels by worksurface brackets. Brackets are made of 2.0mm thick CRCA grade D steel as per IS : 513-19. Brackets are slide in between end trim and vertical extrusions. computer key board tray of 480mm (L) X 280mm (D) X 40mm(H) made out of CRCA steel as per IS : 513I made of 0.9mm thick powder coated with sliding channels and other fixtures/fittings. It should also have a sliding system for accommodating mouse. CPU Trolley of Size - 345mm(W) x 226(D) x 180mm(H) is made of 1.0 mm thick MS CRCA Sheet and Side support is made of 0.8 mm thick MS CRCA Sheet. It consists of 4Nos Non-lockable twin wheel castors are injection moulded in Black Nylon. Mobile Pedestal having 3 Drawers Unit having flat metal front

and top with Central locking. The Drawer Unit consists of 2Box and 1File Drawers. The Overall size of the Drawer Units is 450mm(W) X 435mm(D) X 646mm(H). Construction & Material of Drawer Unit : Welded Assembled of 0.8 thick CRCA for Body Shell, Drawer Front & tray, Front Side Stiffener, Rear Side Stiffener & Bottom, 1.2mm thick CRCA Top Stiffener & Bottom stiffener. Drawer Fronts & Metal Front Straight Edge. All Drawers with Double extension precision ball slide shall be provided. For Drawer pulling, side wise tapered recess provided in shell behind Drawer Fronts. Locking:10 lever Cam Lock & Central RH locking with actuator & lock channel mechanism. Top Panel : 0.8mm thick Metal Straight Edge Top. Castors :Swiveling non-lockable 4Nos Castors mounted below the body shell. The Total drawer unit is finished with Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10). **Work station as approved by engineer in-charge/employer**

38. Chair for Work Station

Providing and Placing High Back Chair with overall size of 76.1 cm W x 76.1 cm D x 96.5 – 114 cm H x 43.1 – 53.1 cm Seat Height. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm. The armrest top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of Ø3.81±0.03cm x 0.2±0.01cm thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to 6.5±0.5 cm in 5 steps. The

adjustable tilting mechanism is designed with following features: 360° revolving 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of 6.0±0.5cm. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42±0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of 10.0±0.3cm. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is 65.0±0.5cm pitch centre dia. (75.0±1.0cm with castors). 5 nos. of twin wheel castors are injection moulded in plastic having 6.0±0.1cm wheel diameter and assembled to pedestal.

39. 3-seater Sofa

Supply and Installation of Three-Seater Sofa, the sofa frame is made from Pinewood Frame that undergoes multi-step treatment for protection against termites and bugs. Back rest of the sofa is designed ergonomically to provide an additional lumbar support to keep back in its perfect position. The extended angular head cushion provides adequate headrest and enables correct body posture for long seated hours.

SEAT FOAM :The seat is made of PU foam with Density28± 2kg/cu meter having an . additional top layer of super soft PU foam in Density 32 ±2 kg/cu .upholstered with synthetic leatherSeat Cushion Thickness ±3 (mm): 150mm .

• 2) BACKFOAM: The back ismade of PU foam with Density 28 ±2 kg/cu. meter with two additional top layer of super soft foam of density 32± 2kg/cu. metre ,upholstered with synthetic leather. Backrest Cushion Thickness ±3 (mm): 175mm

- 3 (UNDERSTRUCTRE: Under structure is madeup 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 under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose.

4 (LEG ASSEMBLY :made of solid wood/teak wood, size of sofa; (W) 2060 mm (D) 950 mm(H) 860 mm, seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 60 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 150mm, . Sofa: as approved by Engineer In Charge/employer.

40. 1 Seater Sofa

Supply and Installation of one-Seater Sofa, the sofa frame is made from Pinewood Frame that undergoes multi-step treatment for protection against termites and bugs. Back rest of the sofa is designed ergonomically to provide an additional lumbar support to keep back in its perfect position. The extended angular head cushion provides adequate headrest and enables correct body posture for long seated hours.

SEAT FOAM :The seat is made of PU foam with Density28± 2kg/cu meter having an . additional top layer of super soft PU foam in Density 32 ±2 kg/cu .upholstered with synthetic leather. Seat Cushion Thickness ±3 (mm): 150mm

- 2) BACKFOAM: The back ismade of PU foam with Density 28± 2kg/cu . meter with two additionaltop layer of super soft foam of density 32±2 kg/cu . metre, upholsteredwith synthetic leather. Backrest Cushion Thickness ±3 (mm): 175mm

• 3 (UNDERSTRUCTRE: Under structure is madeup of 1.2±0. 1cm. thickhot-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 under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose.

4 (LEG ASSEMBLY :made of solid wood/teak wood, size of sofa; (W) 1000 mm (D) 950 mm(H) 860 mm, seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 60 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 150mm, . Sofa: as approved by Engineer In Charge/employer.

41. Revolving Stool for Pharmacy

Supply and installation of stool as per technical specification. The seat shall be made up of 1.2±0.1cm thick flat plywood measured as per QA method described in OCP-QLTA-P14-18 and with moulded Polyurethane foam and are upholstered with replaceable synthetic leather covers. The dimensions of Seat shall be Diameter 40.0 cm
and Adjustments are 360° Revolving type. The back foam shall be designed with contoured Lumbar support for extra comfort. The upholstery shall be available in synthetic leather. The dimensions of Back shall be 45.0 cm (W) covered with polyurethane foam. 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 manual height

adjustment shall be very easy to operate with a help of a knob. It should be easily locked at the most comfortable position. The five-prong pedestal shall be fabricated from 0.2 ± 0.02 cm thick HR sheet (IS : DD 1079/ HR), Powder coated (DFT 40-60 microns) and shall be fitted with an injection moulded black Polypropylene Hub Cap and 5 nos. twin wheel castors. The pedestal shall be 55.0±0.5cm pitch-circle diameter (65.0±1.0cm with castors). Circular-foot-ring ofDia 52.0±0.2cm shall be made up of 01.9±0.2 x 0.12±0.0096cm thk MS ERW Tube for foot support in High-base stool. The twin wheel castors shall be injection moulded in Black Nylon. Overall dimensions shall be Width-65.0cm, Depth- 65.0 cm, Seat Height- 45.0 to 56.5cm. **Stool as approved by engineer in-charge/employer.**

42. Table for Reporting Room (1500mm)

Work table size: 1500mm Width x 750mm Depth x 750mm Height, The table top shall be made from 25 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, side panel made from 25 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, the side panels have 2 glide screws each for levelling of the desk and Modesty panel shall be made from 18 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, thickness of laminate is 1 mm thick, E1 grade Pre-laminated MDF Board and laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding on the user side and 0.8mm thick PVC edge-banding tape pressed on top and bottom side at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled

by knockdown fittings such as Mini fix & dowels. The drawer are mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H, All Hardware (Handles, Slides, Hinges, locks, sliding channel etc) Hettich/Ebco Make or equivalent or as approved by engineer in-charge/employer. MDF Board/laminate Make: (Century/Action Tesa/Merino/Greenlam or equivalent or as approved by engineer in-charge/employer). Table as approved by engineer in-charge/employer.

43. Mid Back Visitor Chair

Providing and Placing High Back Chair with overall size of 76.1 cm W x 76.1 cm D x 96.5 – 114 cm H x 43.1 – 53.1 cm Seat Height. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with in situ moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm. The armrest top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of Ø3.81±0.03cm x 0.2±0.01cm thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to 6.5±0.5 cm in 5 steps. The adjustable tilting mechanism is designed with following features: 360° revolving 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of 6.0±0.5cm. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42±0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of

10.0±0.3cm. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is 65.0±0.5cm pitch centre dia. (75.0±1.0cm with castors). 5 nos. of twin wheel castors are injection moulded in plastic having 6.0±0.1cm wheel diameter and assembled to pedestal.

44. Single Bed with mattress for Doctor Duty Room

Providing and placing of single **bed with metal frame with headboard,** Overall Size: Width - 2050.0 mm Depth - 973.0 mm Height - 720.0 mm
Material: Headboard panels are made of 25 mm thick Pre-laminated MDF Board. All the exposed edges are edge banded with 2 mm thick PVC edge banding. Bed leg frame structure consist of metal frames made of M.S. 50 x 35 mm section in 1.2 thickness Internal Pipes made of 25 x 25 mm section with 1.2 mm thickness. Headboard pipes are made of 25 x 25 mm sectionwith1.2 mm thickness. Mattress holding bracket is made of 1.2 mm CRCA SHEET Mattress frame sheet metal top is made of 1.2 mm CRCASHEET. Hardware: The high-quality hardware used. Construction: Knock Down construction. Bed leg frame structure is powder coated in shade: MATT TAUPE WHITE. REF NO. 9001904 to thickness of 50 microns (+-10). Mattress frame structure is powder coated in shade: EPP FR TEX. MILKY WHITE 20K, REF NO. 9003456to thickness of 50 microns (+-10). Rest

all metals are powder coated in shade: S/G CHARBROWN to thickness of 50 microns (+-10).This product Should be Certified by GREENPRO.
All Metal frame is powder coated with thickness of 50-60 microns (±5%), All Hardware: The high-quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco or equivalent or as approved by engineer in-charge/employer, (MDF biard and Laminate Make: CENTURY/GREEENPLY/Action Tesa or equivalent or as approved by engineer in-charge/employer), Mattress: Supply and installation of Foam/Rubberised Coir mattress as per size of single bed, Thickness of Mattress is 125mm, Number of Layers : Two Layers, Thickness of Core Layer 1 (±2 mm) :100 mm, Thickness of Top Layer (±2 mm) 25 mm, Material of Core Layer 1 : PU Bonded Foam, Quilting: Both Side Quilting (Double Sided), Quilting Material: PU Foam, Density of Quilting Material (± 2 Kg/m3): 18 Kg/m3, Thickness of Quilting (±2 mm): 14 mm, Core Layer 1 Density: 80 Kg/m3, Top Layer Density: 28 Kg/m3, Compression Set for PU Foam (non quilting) as per IS 7888 1976 (Max): 10 %, Resistance to Ageing for PU Foam : Shall meet the requirement of IS 7933 Latest, Resistance to Ageing for Rubberised Coir Foam: Shall meet the requirement of IS 8391 Latest, Durability Test for PU Foam as per: IS 7933 Latest, Resistance to Flexing for Rubberised Coir Foam: Shall meet the requirement of IS 8391 Latest, Durability Test for Complete Mattress: loss of height not more than 13 mm (as per ASTM 1566), Brand of Mattress: sleep well/Kurlon or mattress as approved by engineer in-charge/employer. **The bed should be complete as per direction of Engineer-in-charge/employer.**

45. Rack for Museum

Supply and Installation of Slotted Angel Rack (Size: 910mmW x480mmDx 1850 mm H (OPEN RACK))
Rack with 5 nos. of shelves should be hanging arrangement (adjustable).
Racks shall be manufactured from Slotted M.S angle size 60mmx60mmx 5.0 mm.
Shelves shall be manufactured from 1.6 mm thick CRCA sheet with 40x40x3.0 mm with supporting Angels
The rack shall be assembled with G I bolt, nuts and washers.
Slotted angle and M.S sheet shall be made of cold rolled with anti-rust treated and shall be finished with powder coating with 7 tank treatment process on all parts (colour: as per buyer choice).
H/D Rubber bushes shall be provided to the bottom of legs of slotted angle racks. height of bottom shelves from ground is 100 mm. The quality of M.S sheet which is used for racks shall be free from any defects, Undulations, and old paints and surface corrosion, etc, Minimum Load bearing capacity of each shelf is 150 kgs. **Slotted Angel Rack as approved by engineer in-charge/employer.**

46. Steel Almirah For Store Room

Providing and placing of Steel Almirah overall size: 916mm(W)x486mm(D)x1980mm(H) with welded construction. Almirah shall be made of CRCA 'D' grade high yield strength, CRCA sheets conforming to grade as per CRI of IS 513 (part-1):2016, It should have 4 Nos. shelves with thickness of 0.6 mm, Back thickness of 1.0 mm, Door thickness of 0.6 mm (high yield strength) and stiffener shall be provided in door up to full height, Width of stiffener: 115 mm, Stiffener sheet thickness: 0.8 mm and all other components shall have thickness of 0.6 mm. The Steel Almirah 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 (UDL) for shelves: 80 Kg. Almirah also have a M10 Screw type Leveller with Hex plastic base, Number of hinges (for each door): 03 Nos. Hinges sheet thickness: 2 mm,Pedestal height (± 5 mm): 125 mm, The finishing shall include Epoxy powder coated with thickness of 50 microns (+/- 10%).Powder coating: Conforming to IS: 13871. . The product should be complete and as per sample approved & as per direction of Engineer-in-charge/employer.

47. HOD Room Table (2100mm)

Providing & Fixing High end office table with Main table, Side Unit, Mobile pedestal and Back unit: -
MAIN TABLE of size 2100mmW x 1080mmD x 750mmH with top made of 36mm thick, MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H, table shall be finished with approved shade. The table has provision with Aluminium Anodized Access Flap for better electric provision and key board shall be provided.
The Gabel and Modesty panel is made of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting

bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board).Design / Shape of table**:** Rectangular and taper inside at both side ends

Extended Return Unit: -

Extended Return Unit size 1200mmL X 480mmD X 750mmH: The Side unit top is made up of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H and other under structure is made up of 25 mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. The side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Back Unit/File Cabinet

Back Unit Of size 2100mmL X 480mmD X 750mm H: The top is made up of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H& under structure is made up of 18 mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H,All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Wooden Openable shutter storage with height of 750mm shall be provided in lower portion of File Cabinet and 8 mm thick Glass openable shutter shall be provided in upper portion of File Cabinet. All shutters and drawer shall be provided with proper SS handle, lock & Keys arrangement.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia's is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 650mm H, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw, lock etc is make of Hettich/Ebco/or equivalent or as approved by engineer in-charge, MDF Board,

laminate Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer) The high end office table shall be complete as per direction of Engineer-in-charge/employer.

48. High Back Chair-2

Supply and installation of Chair as per technical specification. Seat/ Back Assembly: The sear is made up of 1.2 ± 0.1cm. thick hot-pressed plywood upholstered with pure leather and moulded polyurethane foam. GSM/Thickness of fabric ±5% (Gram/Square meter): Genuine leather of 0.8-1.0 mm thickness, the back foam is designed with contoured lumber support for extra comfort. The chair should very High back Size: 53.0 cm(W) x95.4cm(H). High resilience (HR)Polyurethane foam: The HR Polyurethane foam is moulded with density =45 +/- Kg/m^3 and Hardness load 16±2 kgf as per IS :7888 for 25% compression. Seat- Back Connecting Spine: the seat back arrested together with spine made of 0.8± 0.05 cm thick steel and is black powder- coated (DET 40-60 microns). Armrest Assy: The armrest assy. Comprises of three parts viz. The armrest support tube and P.U. armrest and the armrest top. The armrest tube Assy is made of 2.54±0.03cm x 0.16±0.0128cm M.S. polyurethane with 50-70 shore 'A' hardness and reinforce with M.S insert. The arm rest top is made of ABS & upholstered with foam & leather. Front pivot synchro tilt Mech. The mechanism is designed with the following features: 360°revolving type. Front- pivot for tilt with feet resting on ground & continuous lumber support ensuring more comfort. Tilt tension adjustment can be operated in seating position.5 positions locking with anti-shock back mechanism, which prevents the backrest from impacting the user when the lock is released. Static seat depth adjustment= 5.0 ± 0.5 cm with position locking. Seat Base Assy. : The seat base assy is designed with following features : 360°revolving type without tilt. Pneumatic Height Adjustment: it has an adjustment stroke of 9.0 ± 0. 3cm.Pneumatic Height Adjustment: it has an adjustment

stroke of 9.0 ± 0. 3cm.Blow moulded bellow: The below is piece and blow moulded in black polypropylene. Pedestal Assy: The pedestal is made of die-cast Aluminium with buffing finish. It is fitted with 5 nos. Twin wheel castor. The pedestal is 67.0 ± 0.5cm pitch-centre dia. (77.0 ± 1.0 cm with castors).9Twin wheel castors: The twin wheel castors are injection moulded in black Nylon., Overall Chair Height ±15mm: 1280, Backrest Height ±15mm: 950-millimetre, Backrest Width ±10mm: 520 millimetre, Seat Height ±15 mm: 500, Seat Width ±10 mm: 550, Seat Depth ±10 mm: 500 millimetre, ,, **High back chair as approved by engineer in-charge/employer.**

49. HOD Room Visitor Chair

Supply and installation of visitor Chair, with overall size of 609mmW x 642mmD x 982mm H, Seat Height: 448mm. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 470mmW x 480mmD. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 477mmWx 764mmD. The tubular frame is cantilever type and made of 2.54±0.03cm x 0.2±0.016 cm thick Stainless Steel 202 grade tube. The back connected to frame through chrome plated high pressure die casted connector pipe.**chair as approved by engineer in-charge/employer.**

50. Seminar Room Chair without wheel

Supply and Installation of Desk-let chair, the seat sub-assembly shall be made up of 1.2+/-0.1cm thk plywood upholstered with moulded foam and polyester fabric and shall be covered with an injection moulded polypropylene outer cover. The seat should tip-up when not in use and this feature should be used while stacking the chairs horizontally. The back sub-assembly shall be made up of injection -moulded polypropylene inner upholstered with moulded foam and polyester fabric and shall be covered with an injection moulded polypropylene outer cover. The contoured back with width extension at the bottom area shall be designed to give comfort to lower back. The back flexing feature shall allow the back to tilt by 9+/-2 degree to aid the user in adopting a comfortable reclining posture. The dimensions of back shall be 45.2cm(W) X 44.6cm(H). and of seat shall be 47.0cm (W)X 50.0cm(D). The powder coated 4 leg structure shall be made of 2.2+/-0.03cm diameter X 0.25+/-0.02cm thick M.S.E.R.W. tube front and rear leg shall be welded along with connecting tube made of 1.9+/-0.02cm diameter X 0.2+/-0.016cm thick M.S.E.R.W tube to form the tubular frame assembly. The armrests structure shall be made up of 2.2+/-0.03 cm diameterX 0.25+/-0.02cm thick M.S.E.R.W. tube welded to the tubular frame structure and having a scratch-resistant ABS arm top. The chairs should be stacked horizontally when not in use. The full desk let assembly shall be flip-up type and shall be made up of extension tube of 1.9+/-0.02cm diameter X 0.2+/-0.016cm thick M.S.E.R.W. tube and a support tube on L.H. side of 1.6+/-0.02cm diameter X 0.2+/-0.016cm thick M.S.E.R.W. tube on which an scratch resistant ABS desk let top shall be fixed and covered on bottom side with a bottom cover. The polyurethane foam shall be moulded with density= 70.0+/-8.0kg/m3 and hardness=20+/-2 for seat and 16+/-2 for back at 25% compression. Overall Dimensions of Chair shall be Seat Height - 47.5 cm, Height - 89.0cm, Width & Depth of Chair as measured from pedestal - Width-71.0cm and Depth-82.0 cm.Chair as approved by engineer in-charge/employer.

51. 4-seater Dining Table (Not Required)

Supply and installation of Dining Table as per technical specification. 6-Seater Dining table size shall be 1734 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 colour chart. Combination colour graphics on the centre. Brown Laminate on bottom specially profiled edges for comfort. The Under structure 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 under structure and table top. Glide shall be of Plastic fixed at the under structure to prevent the damage of table top during stacking. All Hardware: The high-quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco or equivalent or as approved by engineer in-charge/employer, (MDF Board and Laminate Make: CENTURY/GREEENPLY/Action Tesa or equivalent or as approved by engineer in-charge/employer), Dining Table **as approved by engineer in-charge/employer**.

52. Dining Chair (Not Required)

Providing and placing of dining Chair, the seat and back are made up injection molded high impact strength polypropylene polymer compound with indoor grade UV Resistance. The welded Leg and tubular frame is made from stainless Steel 202 grade tube. The tube are buff polished to give shiny finish. size of stainless Steel 202 grade tube: 2.52 + 0.03 cm x 0.16 +/- 0.0128cm thickness and 3.5+/- 0.03 cm x 0.16 +/- 0.0128 cm The Shoes are made of high impact strength polypropylene polymer compound with indoor grad UV Resistance and pressed fitted with tubular frame. SIZE: over all height of chair: 900 mm, seat height of chair: 450mm, Seat Size: 525mm(W)x532 mm(D), Back Size: 516 mm (W)x455mm (H).**Dining Chair as approved by engineer in-charge/employer.**

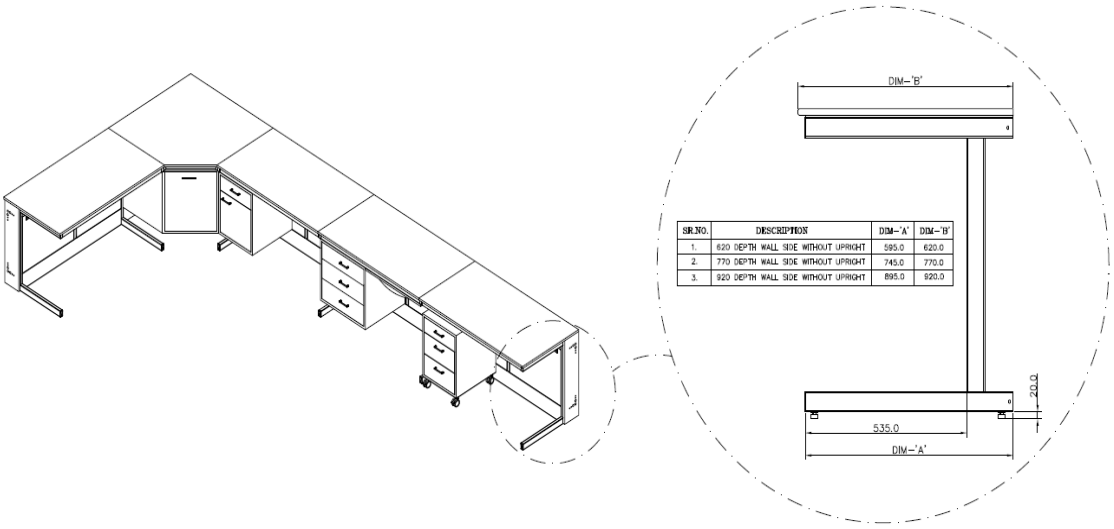
53. 6-seater Dining Table

Providing, supplying/ fabricating and placing/ Installation in position 6 SEATER dining table of Size: 1800mmLx 1200mmWx 750mmH with Table top and side shall be 32 mm Prelam ply veneer made of Scratch Resistance 0000 Steel Wool – 25 Double Rub, Pencil Hardness Test ISO 15184, Chemical Resistance DIN 68861, Stain Resistance DIN 68861, Antibacterial Properties JIS Z 2801:2010, Fire Retardant Properties BS476-Part 7, 100% Solid VOC free, Low Formaldehyde free, UV COATED with veneer edge banding. SHEESHAM Solid Wood legs to be made out of 100mm x 100mm, Under structure: 75mmx75mm. Table as approved by engineer in-charge/employer

54. Dining Chair

Providing, supplying/ fabricating and placing/ Installation in position Dining chair. Size of Dining Chair-Length: 45cm, Width: 45cm, Height: 95cm
Cushion Seat: Length: 45cm Width: 45cm, Height: 50cm. Frame work, seat and back rest to be made up of solid and well-seasoned teak wood with fixed wooden joinery . Seat made up of 12 mm thick ply with high density 60 mm thick cushion pasted on it upholstered with good quality fabric, anti-skid nylon buffers to be fitted at the bottom of the leg. Material: SHEESHAM SOLID Wood, Chair as approved by engineer in-charge/employer.

55. Wall Side Laboratory



SR.NO.	DESCRIPTION	DIM–'A'	DIM–'B'
1.	620 DEPTH WALL SIDE WITHOUT UPRIGHT	595.0	620.0
2.	770 DEPTH WALL SIDE WITHOUT UPRIGHT	745.0	770.0
3.	920 DEPTH WALL SIDE WITHOUT UPRIGHT	895.0	920.0

Supply and installation of C-FRAME SYSTEM laboratory furniture
All C-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. C-frame should be constructed from a rectangular pipe with a cross section of 60mm x 30mm and should be 2 mm thick and should be without a vertical front leg to give a clean look. This shall provide more knee space or leg space and would facilitate uninterrupted lateral movement of the under-bench units within the bench run. The C-frame legs should be supplied with adjustable feet (tolerance from -5mm to +20mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. The structure should have a removable back panel to provide access for maintenance throughout the length of table. The C-frame shall also have skirting at back bottom side. It should be suitable for sitting and standing nominal heights of 850-900 mm. (± 10% Engineering Variation) The nominal table depths for Wall side table 600mm-750mmand Island table depth shall be 1500mm (± 10% Engineering Variation). Length of wall side table shall be 750mm to 900mm and Island table length 1500mm to 1800mm with cabinet bench, leg space bench and Sink Unit (± 10% Engineering Variation), All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The C-Frames should be for suspended storage cabinets or for cabinets that can slide through-and-through from one end of the workbench to the other through C-Frames (configuration depends upon the Schedule of Quantities)

HORIZONTAL MEMBERS

These should be made from rectangular pipes of 2mm thickness. Cross-sectional dimensions of the pipe should be 60mmx30mmx2 mm. (± 10% Engineering Variation) They should be made of CRCA MS and coated with pure epoxy powder. These connect two C-Frames together as shown using C-clamps/Unclamps. Together with the C-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is

formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent C-Frames. The widths shall be following configuration 600mm,750mm, 900mm, 1500mm & 1800 mm 0r as required in wall side and island table (± 10% Engineering Variation).

Removable Back Panels
These cover panels cover the service lines that run behind them. These should be easily removable (unclipped) and the service line be accessed for maintenance. This allows the equipment on workbench to remain undisturbed They should be made of CRCA MS with pure epoxy powder coating and are of 1mm thickness

COVER PANELS
All side cover panels and back panels, filler panels should be made from CRCA MS panels of 1.2 mm thickness with pure epoxy powder coating
MASTER UPRIGHT
Master Upright should be of the dimensions: 300 x 150 x 1.2 mm. (± 10% Engineering Variation) It should be made from 1.2mm thick CRCA MS with pure epoxy powder coating. It should have an open-able door for easy service maintenance and should extend till the false ceiling
VERTICAL UPRIGHT
The Upright system will form the back-bone for internal distribution of GDS, Electrical supply systems Shelves and Top Units and should be constructed from 16-gauge CRCA formed steel panels with removable covers. Shelf height should be adjusted with an increment of 1inch / 25mm. Upright should also provide support to Top Units for hanging thus eliminating the danger of fixing the Top Units on non-rigid partition wall / panels. Uprights should be supplied with adjustable feet from -5mm to +20mm.

WELDED UNDER-BENCH STORAGE CABINETS

Welded cabinet body should be of flush face construction with intersection of vertical and horizontal members like LH and RH side panel along with front horizontal channel, back panel and bottom panel. It should be relocated anywhere easily as it is an independent unit. Cabinet should be of square non-sharp edge construction. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer. Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction. Drawer should be well supported on LH and RH ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside. Doors should be easily removable and hinges should be easily replaceable. Knee space panel should be in 22-gauge construction. Storage Units to be of the Suspended Type
Dimensions: W=1400-1500 mm, D = 600-750mm, H = 815 mm. (± 10% Engineering Variation) Configurations:
2 Shutters with 1 Drawer MOC: MS CRCA: IS – 513 (1994), Thickness: LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel should be of 1.2mm thick. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel should be of 1.2 mm thick. Finish: Powder coating pure epoxy, thickness 50-60 microns.

Handle:

Anodized Aluminium Recessed-Type, CTC: 160.0mm. Lock: Units have a locking facility with 180° and 10 lever cam lock mechanism (except for sink and corner unit). Hinge: Knuckle-butt type SS Hinge. Screw: SS 304. Shutter should be of twin-type construction with sound dampening effect using pro feel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter should have provision of roller catch.

SERVICE FITTINGS AND ACCESSORIES
Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the colour coding as per DIN 12920.

ELECTRICAL TRUNKING Used for housing electrical switches and sockets, data and voice points, its top panel, bottom panel of the trunking should be made from 1.2 mm thick CRCA MS panel. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope.

LABORATORY SINK AND ACCESSORIES.
LABORATORY SINK AND ACCESSORIES shall be fitted in laboratory as per direction of engineer in-charge/employer.
Ceramic Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Standard bowl size (L x W x D) is 500mm x 400mm x 350 mm. sink shall be provided with each distance of 1500mm

Faucet should be 3-way type brass materials, faucet of approved make.

Regent shelf: - Regent Shelves of Height 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to

pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with groves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns. Regent shelf size: 1000 mm W x415mm(D) x 750mmH.

Granite work: It should be 19mm (+/- 2mm) thick Jet Black Granite worktop. The exposed edges of the worktop should be chamfered and smoothened. The bottom of the worktop should be polished and there should be a V-groove throughout the length of the exposed edges to protect the cabinets from coming in contact with the spillages. The overhang on the storage cabinet is 25 mm at the front side and 30 mm at the sides. The backing material used is a neoprene mat of 6 mm thickness.

Scope of Work
-Supply and Installation of Laboratory Workbenches, Regent shelf, Storage units, Sink Unit, Corner unit, including granite worktops and other supporting structures/hardware's based on the specified Make List. - Supply & Installation of all utility service outlets and accessory fittings, electrical receptacles, switch, socket, wire electrical raceway etc. plumbing and electrical switches & fittings identified on drawings as mounted on the laboratory furniture or as per engineer in-charge/client direction.
-Supply & Installation of all laboratory sinks, bottle traps, drain troughs etc.
-Supply & Installation of service structures where specified and setting in place reagent shelves of the type shown in the drawings.
-Removal of debris, dirt and rubbish accumulated as a result of installation/commissioning of the laboratory furniture and accessories and leaving the premises broom clean and orderly.
List of approve makes: - Steel: TATA Steel, JINDAL Steel/Equivalent or better or As approved by engineer in-charge/employer.
Powder Coating Kansai Nerolac, Berger Paints, Asian Paints/ Equivalent or better or As approved by engineer in-charge/employer.
Water Faucets and Gas Valves: As approved by engineer in-charge/employer.
Switches and Sockets, Data and LAN points: As approved by engineer in-charge.

56. Pillow with cover

Supply of Pillow with Size of pillow: 43 cm x 68 cm, Shape: Rectangular, Weight: 750 Gram, Made from Finest Materials: 100% Combed Cotton Cover, Rich 235 Thread Count | Double-needle stitching with piping for durability. Easy washing and drying, Pillow as approved by engineer in-charge/employer.

57. Metal shelving Steel Rack for Pharmacy

Supply and Installation of Slotted Angel Rack (Size: 910mmW x480mmDx 2150 mm H (OPEN RACK))
Rack with 5 nos. of shelves should be hanging arrangement (adjustable).
Racks shall be manufactured from Slotted M.S angle size 60mmx60mmx 5.0 mm.
Shelves shall be manufactured from 1.6 mm thick CRCA sheet with 40x40x3.0 mm with supporting Angels
The rack shall be assembled with G I bolt, nuts and washers.
Slotted angle and M.S sheet shall be made of cold rolled with anti-rust treated and shall be finished with powder coating with 7 tank treatment process on all parts (colour: as per buyer choice).
H/D Rubber bushes shall be provided to the bottom of legs of slotted angle racks. height of bottom shelves from ground is 100 mm. The quality of M.S sheet which is used for racks shall be free from any defects, Undulations, and old paints and surface corrosion, etc, Minimum Load bearing capacity of each shelf is 150 kgs. **Slotted Angel Rack as approved by engineer in-charge/employer.**

58. Stainless Steel shelving rack for clean linen storage

Supply and Installation of stainless steel (SS 304 grade) Slotted Angel Rack (Size: 910mmW x480mmDx 2150 mm H (OPEN RACK))
Rack with 5 nos. of shelves should be hanging arrangement (adjustable).
Racks shall be manufactured from stainless-steelSS 304 gradeSlottedangle size 60mmx60mmx 5.0 mm.
Shelves shall be manufactured from 1.6 mm thick stainless-steelSS 304 sheet with 40x40x3.0 mm with supporting Angels
The rack shall be assembled with G I bolt, nuts and washers.
Slotted angle and sheet shall be made of stainless steel (SS 304 grade) with anti-rust treated and shall be finished with glossy finish.
H/D Rubber bushes shall be provided to the bottom of legs of slotted angle racks. height of bottom shelves from ground is 100 mm. The quality of stainless steel (SS 304 grade) which is used for racks shall be free from any defects, Undulations, and old paints and surface corrosion, etc, Minimum Load bearing capacity of each shelf is 150 kgs. **Slotted Angel Rack as approved by engineer in-charge/employer.**

59. Bio Waste Dustbin

Supply and Installation of Colour Dustbin with 1 set of combination of 1 Nos. Red, 1 Nos. Blue, 1 Nos. Green and yellow, Dustbin should be Heat resistant, UV stabilized, Made of High Density Polyethylene (HDPE) material Injection molded, 30 Litre Dustbin With Foot operated pedal bin or bucket for bio-medical waste collection, Can Be Used For (Wet, Dry, E Waste) Garbage Waste Management Bin With Strong And Durable Body, Useful load (kg/Litre)- 30, - Overall height (mm)- 580mm, - Overall width (mm) 450, Overall depth (mm)-450, Warranty; 1 Years Dustbin supply with Lid and Handel or **dustbin colour as approved by Engineer In Charge/employer**

60. Office Stainless steel Dustbin

Supply Installation of Stainless-steel Dustbin with Lid and Handel- Dimension of dustbin shall be 10 Inch X 14 Inch, capacity of dustbin: 15 Liter. Material Non-Magnetic stainless steel 202 Grade, Thickness of wall is 1.0 mm, Dustbin shall be Leg operated, Dustbin as approved by Engineer In-charge/Employer.

61. Dustbin Large (100 Litre)

Supply and installation of Large dustbin (100 Litre) with wheel and Lid , the dustbin shall be Heat resistant

UV stabilized

Made of High-Density Polyethylene (HDPE) material Injection moulded

- Leg Operated lid.
-Dead weight approx. (kg) -10.5
-Useful load (kg)- 60
- Overall height (mm)- 940
- Overall width (mm) 480
- Overall depth (mm)-550
- Upper edge comb (mm)-870
- Wheel diameter (mm)-200
Dustbin as approved by Engineer/Employer

62. Roller Blind Curtain.

Providing & fixing up of Window curtain (Roller blind) Black out/translucent type in required sizes having the following specification:

Mounting Bracket: Mounting hardware brackets, universal brackets including end plug bracket should come with lock down retainer device. Metal brackets provided should come in powder coated finish. All installation brackets made of stamped and hardened steel allowing a 46mm projection from the wall, ceiling and side fitting with screws and end cap covers.

Cassette: It is a cover for blinds installed outside the window frame to hide tube brackets and mechanism. This is aluminium extruded rail made up of high strength aluminium alloy, which is covered with matching fabric. For 38 mm grooved roller tube cassette size should be 100mm (Width)*100mm (Height) and having weight =1200gm/running meter (±5%).

Cassette Ceiling Bracket: This is made up of carbon Steel, DIN Standard Steel, Thickness: 1.0mm, Powder Coating Thickness: 0.15mm to 0.20mm. This provides near invisible fixing of the cassette.

Cassette system end caps: It should have minimum 2.5mm thickness plastic end cap and should be in coordination with the blind fabric colour.

Roller Tube: This is made up of High Strength Aluminium Alloy Extruded grooved tube having outer diameter 38mm(+/-1mm) & thickness 1.25mm (+/-5%) as per AA6063 Alloy. Tubes must come in natural anodized finish. To achieve greater reinforcement anodized tubes must have at least six internal ribs so that additional tensile strength can be achieved and allowing provision for secured placements of clutch and end plug.
Roller tube brackets: Spring steel metal brackets powder coated in matching finish to be used on both ends to support the roller system. Brackets can be top or face fixed.

Control Unit: Blinds mechanism must have the control clutch drive unit with engineered heavy duty chain drive pulley operating system consisting of gear clutch housing and locking plug containing at least 6 ribs and inserted into a minimum of 38mm dia. roller tube. Clutch has to be self-lubricating with safety pins for secure bracket installation and unlocking pin for quick manual removal. Provided clutch system must allow convenience in operation for large windows to the smallest windows. The control unit should be made up of polypropylene material using injection moulding method. Gearing Ratio: 1.75:1 to reduce operating force for larger blinds. 24nos Sprocket for 38mm diameter roller tube. Control unit is operated directionally by the use of beaded endless chain to raise and lower the blind smoothly.

Idler: Tube bearing plug idler should have the properties of self-lubricating spring-loaded plastic bearing end plug with positive locking wheel that allows for adjustment and provides a secure installation and removal of blinds. Tube bearing plug should contain at least 6 ribs and inserted a tube not less than 38mm roller tube. Idler is of high strength reinforced plastic, consisting of an outside sleeve and centre shaft. Sleeve provide bearing surface for centre shaft and rotate freely, providing smooth, quiet and long wearing operation. It is a Part of Control Unit Assembly.

Bottom Rail: This is made up of extruded aluminium bottom bar having powder coating of 55 microns and wall thickness of ±1.2mm (±0.1) and width of 26.5mm(±1mm) and height of 33.5mm(±1mm) and weight: 380gm/meter (±5%). All bottom rails should come with powder coated finish with an end cover perfectly in matching with the fabric.
Bottom bar also includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines and dimensions of concealed bottom bar rod specified as inner diameter: 10.8mm, outer diameter: 14.8mm, Weight: 219gm/meter, Thickness: 1mm (±5%) should be provided with matching cover.

Concealed bottom bar rod: Bottom bar includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines. Aluminium bottom bar rod made up of AA6063alloy having Rod I/D: 10.8mm, O/D:14.8mm, Weight: 219gm/meter, Thickness: 1mm (±5%) with the covered matching.

Bottom bar end caps: End caps of bottom bar should be made up of ABS material using Injection moulding method having perfect push fit with the bottom bar. The dimensions of end caps of bottom bar specified as length: 18mm, width: 27.5mm, height: 34.5mm, thickness 2mm and end caps of bottom bar should also have polyurethane bush to fit in bottom tube for smooth operation of blinds.

Operating chain: Blinds set is to be driven by a ball chain pulley and ball chain and can be positioned at Right hand or Left-hand side of the blinds set. This is made of 4.5 mm plastic beads moulded on 2.0 mm thick polyester cord. The chain drives the sprocket fixed in the end control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation. Average number of balls on chain should be 50 per foot length. Plastic chain should provide ease in operation with chain connector and polycarbonate stopper of O/D:6mm & I/D: 4mm to avoid reverse rolling of fabric over tube and protecting damages to blind fabric.

Cord Weight: It should have suitable acrylic clear cord weight to suit the operating chain. Thickness: 14mm, width: 30mm and height: 80mm.

Note: The control unit & cassettes shall be made with matching colour of blind with aesthetically pleasing matching look of room.

The fabric shall be selected from best quality fabric. The fabric shall have properties such as acoustic control, anti-fungal and anti-microbial. Sheer fabrics shall allow in maximum amount of light (20-100% light transmission), whilst still preserving privacy and dim out (Privacy fabrics) (1 – 19% light transmission) allow in restricted amount of light, whilst ensuring complete privacy, even in the evening. Blackout fabric shall completely block out sunlight, for complete privacy, room darkening and temperature regulation (0% light transmission).
The fabric colour as approved by employer The weighted composition of fabric shall be made of 100% Polyester woven fabric with a openness factor of 3%. The fabric shall have a weight of 168 GSM (±5 GSM). The solid depth of fabric shall be 75mm and sheer depth shall be 50mm. Light fastness shall be 4-5 Grade tested in accordance with BS EN ISO 105-B01:1999, **Roller Blind Curtain as approved by engineer in-charge/employer.**

63. Double foot step

Supply and Installation of Double foot Step under structure is made of MS square tube 19mm X 19mm with 1.2 mm thickness, In Top Textured and Rubber mat is provided, Thickness of Sheet for Top (mm): 1.2 mm and rubber is 3.2 mm thick Size:485mm(L) x Width of single step :335mm (W) X Height of Foot Step: 150 mm for first step and 355 mm for second step from the ground for Double Foot Step (±10% Engineering

Variation in dimension), Top is made of textured rubber offering firm grip for climbing. All metal parts shall be Powder coating is Bacteriostatic and thermosetting epoxy polyester, formulated to fulfil the requirements for bacterial protection. **Double Step stool as approved by engineer in-charge/employer.**

64. Stainless steel Double foot step for OT

Supply and Installation of Double foot Step under structure is made of Stainless steel 305 grade square tube 19mm X 19mm with 1.2 mm thickness, Thickness of top Sheet is made of 1.2 mmthick Stainless steel 304 grade sheet with rough surface, Size of foot step :485mm(L) x Width of single step :335mm (W) X Height of Foot Step: 150 mm for first step and 355 mm for second step from the ground for Double Foot Step (±10% Engineering Variation in dimension), All metal parts is Bacteriostatic and thermosetting to fulfil the requirements for bacterial protection. **Double Step stool as approved by engineer in-charge/employer.**

Technical Specification for Academic Bock at Dr. Radha Krishnan Govt. Medical College Hamirpur

(All images are indicative only)

1. High End office table with side unit, Back Unit and pedestal for (Principal)

Providing & Fixing High end office table with Main table, Side Unit, Mobile pedestal and Back unit: -
MAIN TABLE of size 2400mmW x 1050mmD x 750mmH with top made of 36mm thick, MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H, table shall be finished with approved shade. The table has provision with Aluminium Anodized Access Flap for better electric provision and key board shall be provided.
The Gabel and Modesty panel is made of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board).Design / Shape of table**:** Rectangular and taper inside at both side ends

Extended Return Unit: -

Extended Return Unit size 1200mmL X 480mmD X 750mmH: The Side unit top is made up of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H and other under structure is made up of 25 mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H All Exposed edges of pre-laminated MDF board to be sealed with

2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. The side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Back Unit/File Cabinet

Back Unit Of size 2400mmL X 480mmD X 2050mm H: The top is made up of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H& under structure is made up of 18 mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H,All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Wooden Openable shutter storage with height of 750mm shall be provided in lower portion of File Cabinet and 8 mm thick Glass openable shutter shall be provided in upper portion of File Cabinet. All shutters and drawer shall be provided with proper SS handle, lock & Keys arrangement.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia's is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 650mm H, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw, lock etc is make of Hettich/Ebco/or equivalent or as approved by engineer in-charge, MDF Board, laminate Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer) The high end office table shall be complete as per direction of Engineer-in-charge/employer.

2. High End Office Table for Additional Director (table size: 2100mmW x 1050mmD x 750mmH)

Providing & Fixing High end office table with Main table, Side Unit, Mobile pedestal and Back unit: -
MAIN TABLE of size 2100mmW x 900mmD x 750mmH with top made of 36mm thick, MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H, table shall be finished with approved shade. The table has provision with Aluminium Anodized Access Flap for better electric provision and key board shall be provided.
The Gabel and Modesty panel is made of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board).Design / Shape of table**:** Rectangular and taper inside at both side ends

Extended Return Unit: -

Extended Return Unit size 1200mmL X 480mmD X 750mmH: The Side unit top is made up of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H and other under structure is made up of 25 mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H All Exposed edges of pre-laminated MDF board to be sealed with

2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. The side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Back Unit/File Cabinet

Back Unit Of size 2100mmL X 480mmD X 750mm H: The top is made up of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H& under structure is made up of 18 mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H,All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Wooden Openable shutter storage with height of 750mm shall be provided in lower portion of File Cabinet and 8 mm thick Glass openable shutter shall be provided in upper portion of File Cabinet. All shutters and drawer shall be provided with proper SS handle, lock & Keys arrangement.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia's is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 650mm H, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw, lock etc is make of Hettich/Ebco/or equivalent or as approved by engineer in-charge, MDF Board, laminate Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer) The high end office table shall be complete as per direction of Engineer-in-charge/employer.

3. High End Office Table for Professor& Head Room (table size: 1800mmW x 750mmD x 750mmH)

Providing & Fixing High end office table with Main table, Side Unit, Mobile pedestal and Back unit: -
MAIN TABLE of size 1800mmW x 750mmD x 750mmH with top made of 36mm thick, MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H, table shall be finished with approved shade. The table has provision with Aluminium Anodized Access Flap for better electric provision and key board shall be provided.
The Gabel and Modesty panel is made of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board).Design / Shape of table**:** Rectangular and taper inside at both side ends

Extended Return Unit: -

Extended Return Unit size 1200mmL X 480mmD X 750mmH: The Side unit top is made up of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H and other under structure is made up of 25 mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H All Exposed edges of pre-laminated MDF board to be sealed with

2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. The side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Back Unit/File Cabinet

Back Unit Of size 1800mmL X 480mmD X 750mm H: The top is made up of 25mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H& under structure is made up of 18 mm thick MDF board as per IS 12406 with duly finished with Veneer and final coating of PU having scratch resistance of 2H,All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Wooden Openable shutter storage with height of 750mm shall be provided in lower portion with combination of File Cabinet and 8 mm thick Glass openable shutter File Cabinet. All shutters and drawer shall be provided with proper SS handle, lock & Keys arrangement.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia's is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 650mm H, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw, lock etc is make of Hettich/Ebco/or equivalent or as approved by engineer in-charge, MDF Board, laminate Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer) The high end office table shall be complete as per direction of Engineer-in-charge/employer.

4. Executive table with side unit and pedestal for Associate Professor and Assistant Professor (1650mmW x 750mmD x 750mmH)

Providing & Fixing High end Table with Combination of Main Table with Extended Return Unit with Pedestal Storage Unit: -

MAIN TABLE of size 1650mmW x 750mmD x 750mmH with top made of 32 mm thick, MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200o C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.

The Gabel and Modesty panel is made of 25 mm MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200o C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board).Design / Shape of table**:** Rectangular and taper inside at both side ends.

Extended Return Unit

Extended Return Unit size 1050 mm L X 480mmD X 750mmH: The Side unit top is made up of 25mm thick MDF board as per IS 12406 faced with 1.0 mm thick laminate on both sides of approved shade. E-1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All exposed edges sealed with 2mm thick PVC edge-band of REHAU make and 0.8mm thick PVC edge-banding tape to be applied on non-exposed edges pressed at 200 C with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. The side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1 CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent or as approved by engineer in-charge, MDF Board Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer) Table to be complete as per approved sample or as per direction of Engineer-in-charge/employer.

5. Staff Office table (size: 1200mm Width x 600mm Depth x 750mm Height)

Work table size: 1200mm Width x 600mm Depth x 750mm Height, The table top shall be made from 25 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, side panel made from 25 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, the side panels have 2 glide screws each for levelling of the desk and Modesty panel shall be made from 18 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, thickness of laminate is 1 mm thick, E1 grade Pre-laminated MDF Board and laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding on the user side and 0.8mm thick PVC edge-banding tape pressed on top and bottom side at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.
Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer are mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H, All Hardware (Handles, Slides, Hinges, locks, sliding channel etc) Hettich/Ebco Make or equivalent or as approved by engineer in-charge/employer. MDF Board/laminate Make: (Century/Action Tesa/Merino/Greenlam or equivalent or as approved by engineer in-charge/employer). Table as approved by engineer in-charge/employer. .
Work Table as approved by engineer in-charge/employer

6. Table for Demonstration room/Senior Resident Room/Tutor Room (size: 1500mm Width x 750mm Depth x 750mm Height)

Work table size: 1500mm Width x 750mm Depth x 750mm Height, The table top shall be made from 25 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, side panel made from 25 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, the side panels have 2 glide screws each for levelling of the desk and Modesty panel shall be made from 18 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, thickness of laminate is 1 mm thick, E1 grade Pre-laminated MDF Board and laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding on the user side and 0.8mm thick PVC edge-banding tape pressed on top and bottom side at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.
Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia is made out of 18mm thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer are mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H, All Hardware (Handles, Slides, Hinges, locks, sliding channel etc) Hettich/Ebco Make or equivalent or as approved by engineer in-charge/employer. MDF Board/laminate Make: (Century/Action Tesa/Merino/Greenlam or equivalent or as approved by engineer in-charge/employer). Table as approved by engineer in-charge/employer.
Office table **as approved by engineer in-charge/employer**

7. High back Chair for Principal

Supply and Installation of High back chair , The seat shall be made up of 1.2 +/- 0.1 cm thick hot pressed moulded reconstituted wood & upholstered with leather and moulded polyurethane foam. Size of back shall be (W)-46.0cm, (H)-57.0cm & size of seat shall be (W)-49.0cm x (D)-49.5cm. High Resilience (HR) foam should be used in making seat & back which shall be moulded with density 45 +/- 2 kg/m ^{3} and hardness load 16+/- 2 kgf as per IS: 7888 for 25% compression. The back rest should be connected to the mechanism with a drop-lift mechanism which can be adjusted in the range of 7.0+/-0.5cm for the comfortable back support to suitable individual need. Armrests should be pressure die casted in polished aluminium with PP arm tops. The mechanism of chair shall have following features:360-degree revolving type, Seat/Back tilt ratio of 1:3, Synchronized tilt, Back tilt with 4 position locking and Side tilt tension adjustment knob should be operated while taking back support for better adjustment of comfort. The chair shall be provided with pneumatic height adjustment which shall have stroke of 10.0 +/- 0.3 cm. The pedestal shall be made of die-cast polished aluminium. it shall be fitted with 5 nos twin wheel castor. The size of head rest shall be (W)26.0cm x 12.0cm(L). The size of the pedestal shall be 65.0 +/- 0.5 cm pitch-centre-dia (75.0 +/- 1.0 cm with castors). The twin wheel castors shall be injection moulded in black polypropylene. Overall dimensions of Chair shall be, Width of Chair - 75.0cm, Depth of Chair - 75.0 cm as measured from pedestal below. Height from ground - min 113.5 to max 138.0 cms. Seat height - min 41.0cm to max 51.0 cm. Dimensions tolerance / variations shall be within +/- 1 cm. Chair as approved by engineer in-charge/employer.

8. Visitor Chair for Executive Principal

Supply and installation of visitor Chair, with overall size of 609mmW x 642mmD x 982mm H, Seat Height: 448mm. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as

per IS:7888 for 25% compression. Seat Size is 470mmW x 480mmD. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 477mmWx 764mmD. The tubular frame is cantilever type and made of 2.54±0.03cm x 0.2±0.016 cm thick Stainless Steel 202 grade tube. The back connected to frame through chrome plated high pressure die casted connector pipe. **chair as approved by engineer in-charge/employer.**

9. High back executive chair for Professor & HOD and Additional Director

Supply and installation of Chair as per technical specification. The seat shall be made up of 1.2 +/- 0.1 cm thick hot pressed plywood & upholstered with leather and moulded polyurethane foam. The back shall be designed with contoured lumber support for extra comfort. Size of back shall be W-53cm, H-95.4cm & size of seat shall be W-54.6cm x D-49cm. High Resilience (HR) foam should be used in making seat & back which shall be moulded with density 45 +/- 2 kg/m ^{3} and hardness load 16+/- 2 kgf as per IS: 7888 for 25% compression. The seat and back should be arrested together with spine made of 0.8 +/- 0.05 cm thick HR steel and should be powder coated in black with 40–60-micron DFT (Dry film thickness). The armrest assembly should be made up of armrest tube, PU armrest and the armrest top. The armrest tube assy. shall be made of 2.54+/- 0.03cm x 0.16 +/- 0.0128 cm M.S E.R.W support tubes and chrome plated. The P.U armrest shall be made up of black integral skin polyurethane with 50-70 shore 'A' hardness reinforced with M.S insert. The armrest top shall be made up of ABS & upholstered with foam & leather. It shsall have front Pivot synchro tilt mechanism. The mechanism of the chair shall have following features : 360^{0} revolving type, Knee Tilt system, Seat & back tilting ration of 1: 1.5, Front pivot for tilt with feet resting on ground ensuring more comfort, Tilt tension adjustment, 5-position locking with antilock back mechanism which should prevent the backrest from impacting the user when the lock is released, Static seat depth adjustment 5.0 +/- 0.5cm with 5 position locking. The chair shall be provided with pneumatic height adjustment which shall have stroke of 9.0 +/- 0.3 cm. The bellow should be single piece duly blow moulded in black

polypropylene. The pedestal shall be made of die-cast aluminium with buffing finish. it shall be fitted with 5 nos twin wheel castor. The size of the pedestal shall be 67.0 +/- 0.5 cm pitch-centre-dia (77.0 +/- 1.0 cm with castors). The twin wheel castors shall be made of Nylon injection moulded in black color. Overall dimensions of Chair shall be, Width of Chair - 77cm, Depth of Chair - 77 cm as measured from pedestal below. Height of back from ground - min 128.0 to max 137.0 cms. Seat height - min 49.9cm to max 58.9 cm. Dimensions tolerance / variations shall be within +/- 1 cm. Chair as approved by engineer in-charge/employer.

10. Executive Visitor chair for Additional Director and HOD/Associate Professor/Assistant Professor

Supply and installation of visitor Chair, with overall size of 609mmW x 642mmD x 982mm H, Seat Height: 448mm. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 470mmW x 480mmD. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 477mmWx 764mmD. The tubular frame is cantilever type and made of 2.54±0.03cm x 0.2±0.016 cm thick Stainless Steel 202 grade tube. The back connected to frame through chrome plated high pressure die casted connector pipe.**chair as approved by engineer in-charge/employer.**

11. Executive chair revolving for Associate Professor/Assistant Professor

Supply and installation of High back Chair, Seat/ Back Assembly: The sear is made up of 1.2 ± 0.1cm. thick hot-pressed plywood upholstered with pure leather and moulded polyurethane foam. GSM/Thickness of fabric ±5% (Gram/Square meter): Genuine leather of 0.8-1.0 mm thickness, the back foam is designed with contoured lumber support for extra comfort. The chair overall dimension shall be (W) 650mm X (D) 620mm X (H) 1300mm. High resilience (HR)Polyurethane foam: The HR Polyurethane foam is moulded with density =45 +/- Kg/m^3 and Hardness load 16±2 kgf as per IS :7888 for 25% compression. Seat- Back Connecting Spine: the seat back arrested together with spine made of 0.8± 0.05 cm thick steel and is black powder- coated (DET 40-60 microns). Armrest Assy: The armrest comprises of three parts viz. The armrest support tube, P.U. armrest and the armrest top. The armrest is made of 4.54±0.03cm x 0.16±0.0128cm M.S. polyurethane with 50-70 shore 'A' hardness and reinforce with M.S insert. The arm rest top is made of ABS & upholstered with foam & leather. Front pivot synchro tilt Mech. The mechanism is designed with the following features: 360°revolving type. Front- pivot for tilt with feet resting on ground & continuous lumber support ensuring more comfort. Tilt tension adjustment can be operated in seating position.5 positions locking with anti-shock back mechanism, which prevents the backrest from impacting the user when the lock is released. Static seat depth adjustment= 5.0 ± 0.5 cm with position locking. Seat Base Assy: The seat base Assy is designed with following features: 360°revolving type without tilt. Pneumatic Height Adjustment: it has an adjustment stroke of 9.0 ± 0. 3cm. Pneumatic Height Adjustment: it has an adjustment stroke of 9.0 ± 0. 3cm. Blow moulded bellow: The below is piece and blow moulded in black polypropylene. Pedestal Assy: The pedestal is made of die-cast Aluminium with buffing finish. It is fitted with 5 nos. Twin wheel castor. The pedestal is 67.0 ± 0.5cm pitch- centre dia. (77.0 ± 1.0 cm with castors). Twin wheel castors: The twin wheel castors are injection moulded in black Nylon., Overall Chair Height ±15mm: 1300, Backrest Height ±10mm: 690mm, Backrest Width ±10mm: 550-millimetre, Seat Height: 490mm±10 mm, Seat Width ±10 mm: 550, Seat Depth ±10 mm: 580mm, **chair as approved by engineer in-charge/employer.**

12. Visitor Chair for OPD and boys &girls common room

Supply and installation of visitor Chair, with overall size of 609mmW x 642mmD x 982mm H, Seat Height: 448mm. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 470mmW x 480mmD. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 477mmWx 764mmD. The tubular frame is cantilever type and made of 2.54±0.03cm x 0.2±0.016 cm thick Stainless Steel 202 grade tube. The back connected to frame through chrome plated high pressure die casted connector pipe.**chair as approved by engineer in-charge/employer.**

13. Staff revolving chair for Conference room, office staff,

Providing and Placing High Back Chair with overall size of 76.1 cm W x 76.1 cm D x 96.5 – 114 cm H x 43.1 – 53.1 cm Seat Height. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with in situ moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm. The armrest top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of Ø3.81±0.03cm x 0.2±0.01cm thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to 6.5±0.5 cm in 5 steps. The adjustable tilting mechanism is designed with following features: 360° revolving 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of 6.0±0.5cm. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42±0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of 10.0±0.3cm. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is 65.0±0.5cm pitch centre dia. (75.0±1.0cm with

castors). 5 nos. of twin wheel castors are injection molded in plastic having 6.0±0.1cm wheel diameter and assembled to pedestal.

14. Office Staff visitor chair

Supply and installation of visitor Chair, with overall size of 609mmW x 642mmD x 982mm H, Seat Height: 448mm. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 470mmW x 480mmD. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 477mmWx 764mmD. The tubular frame is cantilever type and made of 2.54±0.03cm x 0.2±0.016 cm thick Stainless Steel 202 grade tube. The back connected to frame through chrome plated high pressure die casted connector pipe.**chair as approved by engineer in-charge/employer.**

15. 3-Seater Sofa

Supply and Installation of Three-Seater Sofa • SEAT FOAM: The seat is made of PU foam with Density 28± 2 kg/cu. meter having an additional top layer of super soft PU foam in Density 32 ± 2 kg/cu. upholstered with fabric or leatherette. Seat Cushion Thickness ±3 (mm): 150mm

• 2) BACK FOAM: The back is made of PU foam with Density 28 ± 2 kg/cu. meter with two additional top layers of super soft foam of density 32±2 kg/cu. meter, upholstered with fabric or leatherette. Backrest Cushion Thickness ±3 (mm): 175mm
• 3) UNDERSTRUCTRE: Under structure 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 under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure 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) 2060mm (D) 905mm(H) 855 mm seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 40 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 120mm, .Sofa: as approved by Engineer In-Charge/employer.

16. 2- Seater Sofa

Two Seater Sofa SEAT FOAM :The seat is made of PU foam with Density28± 2kg/cu . meter having anadditional top layer of super soft PU foam in Density 32 ±2 kg/cu . upholstered with fabric or leatherette. Seat Cushion Thickness ±3 (mm): 150mm

• 2) BACKFOAM: The back ismade of PU foam with Density 28 ±2 kg/cu. mtr with two additional top layer of super soft foam of density 32± 2kg/cu. mtr , upholstered with fabric orleatherette. Backrest Cushion Thickness ±3 (mm): 175mm

• 3 (UNDERSTRUCTRE:Under structure 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 under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure 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) 1460mm (D) 905mm(H) 855 mm seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 40 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 120mm Sofa: as approved by Engineer In Charge/employer.

17. 1- Seater Sofa

Supply and Installation of single-Seater sofa, 1) SEAT FOAM: The seat is made up of PU foam in Density 28 ±2 kg/cu.mtr with an additional top layer of super soft PU foam in Density 32 ± 2 kg/cu, upholstered with fabric or leatherette.
2) BACK FOAM: The back is made up of PU foam in Density 28 ± 2 kg/cu. meter with two additional top layers of super soft foam of density 32±2 kg/cu. meter, upholstered with fabric or leatherette.
3) UNDERSTRUCTRE: Under structure is made up of 1.2±0.1 cm. thick hot-pressed plywood [moisture resistance & termite proof as per IS:303] & pinewood of cross sections devoid of major knots & surface defects. 6 nos. per seat & 3.8mm Diameter zigzag spring assembly is mounted over under structure for cushioning purpose.
4) LEG ASSEMBLY : It is a welded Assembly made in Stainless steel (grade SS 202) tube & plate with plastic end cap. Size : Width (W): 910mm, Depth (D): 905 mm, Height (H): 855

mm Seat Height (SH): 450mm. Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 40 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 120mm, . Sofa: as approved by Engineer In Charge/employer.

18. 3-Seater Sofa

Supply and Installation ofThree-Seater Sofa, the sofa frame is made from Pinewood Frame that undergoes multi-step treatment for protection against termites and bugs. Back rest of the sofa is designed ergonomically to provide an additional lumbar support to keep back in its perfect position. The extended angular head cushion provides adequate headrest and enables correct body posture for long seated hours.

SEAT FOAM :The seat is made of PU foam with Density28± 2kg/cu meter having an . additional top layer of super soft PU foam in Density 32 ±2 kg/cu . upholstered with synthetic leatherSeat Cushion Thickness ±3 (mm): 150mm .

• 2) BACKFOAM: The back ismade of PU foam with Density 28 ±2 kg/cu .meter with two additional top layer of super soft foam of density 32±2 kg/cu .metre , upholstered withsynthetic leather. Backrest Cushion Thickness ±3 (mm): 175mm

• 3 (UNDERSTRUCTRE: Under structure is madeup 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 under structure for cushioning purpose .nos 6per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose.

4 (LEG ASSEMBLY :made of solid wood/teak wood, size of sofa; (W) 2060 mm (D) 950 mm(H) 860 mm, seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 60 mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 150mm, . Sofa: as approved by Engineer In Charge/employer.

19. 2 Seater Sofa

Supply and Installation of Three-Seater Sofa, the sofa frame is made from Pinewood Frame that undergoes multi-step treatment for protection against termites and bugs. Back rest of the sofa is designed ergonomically to provide an additional lumbar support to keep back in its perfect position. The extended angular head cushion provides adequate headrest and enables correct body posture for long seated hours.

SEAT FOAM :The seat is made of PU foam with Density28± 2kg/cu meter having an . additional top layer of super soft PU foam in Density 32 ±2 kg/cu .upholstered with synthetic leatherSeat Cushion Thickness ±3 (mm): 150mm .

- 2) BACKFOAM: The back ismade of PU foam with Density 28 ±2 kg/cu. meter with two additional top layers of super soft foam of density 32± 2kg/cu. metre , upholstered with synthetic leather. Backrest Cushion Thickness ±3 (mm): 175mm
- 3 (UNDERSTRUCTRE: Under structure is madeup of 1.2±0.1 cm .thick hot-pressed plywood(moisture resistance & termite proof as per IS: 303) & pinewood of crosssection devoid of major knots & surface defects 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose.

4 (LEG ASSEMBLY :made of solid wood/teak wood, size of sofa; (W) 1350 mm (D) 950 mm(H) 860 mm, seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 60 mm, Arm Height ±5 (mm): 710mm, Arm . ,Width ±5 (mm): 150mm Sofa: as approved by Engineer In Charge/employer.

20. 1- Seater Sofa

Supply and Installation of single-Seater Sofa, the sofa frame is made from Pinewood Frame that undergoes multi-step treatment for protection against termites and bugs. Back rest of the sofa is designed ergonomically to provide an additional lumbar support to keep back in its perfect position. The extended angular head cushion provides adequate headrest and enables correct body posture for long seated hours.

SEAT FOAM :The seat is made of PU foam with Density28± 2kg/cu meter having an . additional top layer of super soft PU foam in Density 32 ±2

kg/cu . upholstered withsynthetic leatherSeat Cushion Thickness ±3 (mm): . 150mm

• 2) BACKFOAM: The back ismade of PU foam with Density 28 ±2 kg/cu. mtr with two additional top layer of super soft foam of density 32± 2kg/cu. mtr , upholstered withsynthetic leather. Backrest Cushion Thickness ±3 (mm): 175mm

• 3 (UNDERSTRUCTRE: Under structure is madeup of 1.2±0.1 cm .thick hot-pressed plywood(moisture resistance & termite proof as per IS: 303) & pinewood of cross section devoid ofmajor knots & surface defects 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose.

4 (LEG ASSEMBLY :made of solid wood, size of sofa; (W) 920 mm (D) 830 mm(H) 860 mm, seat (H) 450 mm, Sofa Leg Height ±2(mm): 150 mm, Sofa Leg Width / Diameter ±2 (mm): 60

mm, Arm Height ±5 (mm): 710mm, Arm Width ±5 (mm): 150mm, . Sofa: as approved by Engineer In Charge/employer.

21. Centre Table

Supply and installation of centre table of size: 1200mmW X600mmD X400mmH, top made of 32 mm thick MDF board as per IS 12406 with veneer and PU finish having scratch resistance of 2H, all exposed edges sealed with 2mm thick edge banding tape and unexposed edges sealed with 0.8 mm thick edge banding tape pressed at 200 C with hot melt glue on special machines. Frame and Leg material: Stainless steel (SS 304), size of Frame and Leg material 55mm X 55mm with 1.6 mm thickness, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent/or as approved by engineer in-charge/employer, (MDF Board make: CENTURY/Action Tesa/GREEENPLY or equivalent/or as approved by engineer in-charge/employer)Centre Table: as approved by Engineer In-Charge/employer.

22. Corner Table

Supply and installation of corner table of size: 500mmW X500mmD X400mmH, top made of 32 mm thick MDF board as per IS 12406 with veneer and PU finish having scratch resistance of 2H, all exposed edges sealed with 2mm thick edge banding tape and unexposed edges

sealed with 0.8 mm thick edge banding tape pressed at 200o C with hot melt glue on special machines. Frame and Leg material: Stainless steel (SS 304), size of Frame and Leg material 55mm X 55mm with 1.6 mm thickness, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent/or as approved by engineer in-charge/employer, (MDF Board make: CENTURY/Action Tesa/GREEENPLY or equivalent/or as approved by engineer in-charge/employer), Corner Table: as approved by Engineer In-Charge/employer.

23. 3 seater Waiting chair

The seat and back to be made up of high-density self-skin 25-30mm thick PU Foam reinforced with 1.2 mm thick MS perforated sheet insert. The PU Foam having density of 680+/-10Kg/m3withhardnessof55 +/-5. Seat Size :52.0 cm (W) X 46.5 cm (D). Back Size: 52.0 cm (W) X 51.5 cm (H). Floor to seat height (front) minimum: 410mm, Overall length (minimum): 1680mm, Cross Beam made up of black powder coated MS ERW square tube of size 6.0+/- 0.05cm X 6.0+/- 0.05cm X0.4+/-0.016 cm thick fitted with polypropylene end caps. Thickness of the seat support and lumber support (minimum): 23mm, Legs & Armrest made up of powder coated High pressure Aluminium Die cast Powder coated with minimum 70 microns. Number of armrests: 04 Nos. Thickness of material of Arms 1.8 mm, Thickness of material of Legs 2.0 mm, Legs are fitted with soft grip PVC level adjusting shoes. Main frame finish with Powder coated of minimum 70 microns, 3-seaterwaitingchairasapprovedbyengineerin-charge/employer.

24. Teaching Room chair

Supply and Installation of Desk-let chair, the seat sub-assembly shall be made up of 1.2+/-0.1cm thk plywood upholstered with moulded foam and polyester fabric and shall be covered with an injection moulded polypropylene outer cover. The seat should tip-up when not in use and this feature should be used while stacking the chairs horizontally. The back sub-assembly shall be made up of injection -moulded polypropylene inner upholstered with moulded foam and polyester fabric and shall be covered with an injection moulded polypropylene outer cover. The contoured back with width extension at the bottom area shall be designed to give comfort to lower back. The back flexing feature shall allow the back to tilt by 9+/-2 degree to aid the user in adopting a comfortable reclining posture. The dimensions of back shall be 45.2cm(W) X 44.6cm(H). and of seat shall be 47.0cm (W)X 50.0cm(D). The powder coated 4 leg structure shall be made of 2.2+/-0.03cm dia X 0.25+/-0.02cm thick M.S.E.R.W. tube front and rear leg shall be welded along with connecting tube made of 1.9+/-0.02cm dia X 0.2+/-0.016cm thick M.S.E.R.W tube to form the tubular frame assembly. The armrests structure shall be made up of 2.2+/-0.03 cm dia X 0.25+/-0.02cm thick M.S.E.R.W. tube welded to the tubular frame structure and having a scratch-resistant ABS arm top. The chairs should be stacked horizontally when not in use. The full desk let assembly shall be flip-up type and shall be made up of extension tube of 1.9+/-0.02cm diameter X 0.2+/-0.016cm thick M.S.E.R.W. tube and a support tube on L.H. side of 1.6+/-0.02cm diameter X 0.2+/-0.016cm thick M.S.E.R.W. tube on which an scratch resistant ABS desk let top shall be fixed and covered on bottom side with a bottom cover. The polyurethane foam shall be moulded with density= 70.0+/-8.0kg/m3 and hardness=20+/-2 for seat and 16+/-2 for back at 25% compression. Overall Dimensions of Chair shall be Seat Height - 47.5 cm, Height - 89.0cm, Width & Depth of Chair as measured from pedestal - Width-71.0cm and Depth-82.0 cm. Chair as approved by engineer in-charge/employer.

25. Steel Almirah

Providing and placing of Steel Almirah overall size: 916mm(W)x486mm(D)x1980mm(H) with welded construction. Almirah shall be made of CRCA 'D' grade high yield strength, CRCA sheets conforming to grade as per CRI of IS 513 (part-1):2016, It should have 4 Nos. shelves with thickness of 1 mm, Back thickness of 1.0 mm, Door thickness of 1 mm (high yield strength) and stiffener shall be provided in door up to full height, Width of stiffener: 115 mm, Stiffener sheet thickness: 0.8 mm and all other components shall have thickness of 1.0 mm. The Steel Almirah 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 (UDL) for shelves: 80 Kg. Almirah also have a M10 Screw type Leveller with Hex plastic base, Number of hinges (for each door): 03 Nos. Hinges sheet thickness: 2 mm,Pedestal height (± 5 mm): 125 mm, The finishing shall include Epoxy powder coated with thickness of 50 microns (+/- 10%).Powder coating: Conforming to IS: 13871. The product should be complete and as per sample approved & as per direction of Engineer-in-charge/employer.

26. 4- drawer book case

Supply and Installation of 4 Door Book Case shall have configuration of 914mm(W)x320mm(D)x1880mm(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 Panel, Back Panel and Side Panel are made from 1.0 mm thick high yield CRCA sheet and other Shelves made from 1.0 mm CRCA, Shelves provided with stiffener. Each door shall have a 6 Lever Cam Lock with Common Key. 5 mm thick glass should be used in each door for clear inside vision with 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 4 Door Book Case shall have metal inside top panel. The finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10). .4 Door Book Case **as approved by engineer in-charge/employer.**

27. Journal Storage and Display Rack

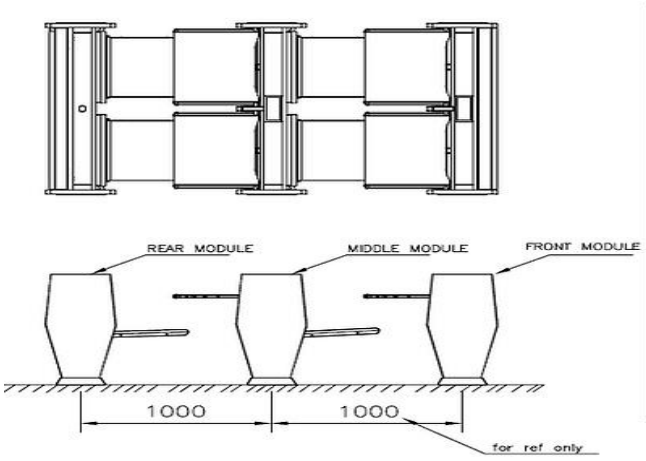
a) Type and application –Free standing, Inclined type for Journals display and storage, with each rack to provide display of 20-25 Journals.
b) Box type with horizontal shelves with each box covered with wooden /MDF planks with an inclination to the shelves.
c) Shelves be portioned into 20-25 pigeon holes type compartments; each hole being provided with a support for current Journals.

d) Each compartment be of size 26 -28 cm * 34-36 cms. Each compartment fitted with slating shelf of roll- in type display of current Journal with provision for storage of back volumes at the rear of each display.
e) Material – Wooden / High density MDF environmentally safe
f) Size Height -76-80 inches; Breadth -52 to 57 inch; Depth – 16-18 inches with total weight of 40-50kg.

28. 2-seater Lecture theatre desk cum Bench

Supply and Installation of 2-seater with desk for front module, 2-seater with seat & desk for middle module and 2-seater with seat for rear module

- Desk with its unique form, offers foldable desks and seats that are easy to operate.
- Foldable desks and seats are designed for space saving by creating walking aisle space when folded in. Ergonomic design maintains the correct distance between desk and seat that ensures correct posture while writing or using a laptop etc.
- Easy plug and play feature built into the product enables use of laptops, LCDs, audio visual equipment more easily, facilitating interactive learning.
- Dual desk is offered as a set of fronts, middle & rear units. Middle unit can be offered in multiples as per seating capacity requirements. The Front Unit comes with a modesty panel for a uniform look. The Middle Unit is a combination of desk and seat with a common panel that helps optimize space. Also, the rear unit sports a back support for additional comfort.
- Available in two trendy and lively colour combinations to give the seminar room or lecture hall a youthful yet mature look.
- Available in 2-, 3- & 4-seater configurations.



Product Specifications:

A) Under structure:
-The under structure is made with steel ERW tube section (IS:228) of size 80x40x2.5mm thick
with powder coat finish.
-Under structure consists of two welded leg assemblies connected by means of welded seat side tube assy and welded desk side tube assy on both sides.
-Sturdy anchoring by anchor bolts on to base of 10mm thick plate for proper resting of structure**.
-Plastic clad & shoe main clad made of glass filled 30% nylon-6 for covering anchor bolts.

B)Side clads:

Two side clads made of 35 mm thick pre laminated MDF Board with All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-banding tape pressed at 200o C to be applied on non-exposed edges with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel

Desk side clad made of 18mm thick pre laminated MDF Board & seat side clad & connecting clad made of 25mm thick pre laminated MDF Board.

C) Desklet:

-Desk has opening & closing mechanism by means of desk slider and slider sleeve made of 30% glass filled nylon-6.
-Desk comprises of pre laminated MDF Board desk with aluminium section anodized finish on to sides and TPE rubber on to aluminium section outer side for cushioning effect for desk opening closing.
-Desk and under storage made of 18mm thick pre laminated MDF Board fixed with aluminium extrusion on sides for desk opening closing. pre laminated Board Make: (Century/Action Tesa/Merino/Greenlam or equivalent or as approved by engineer in-charge/employer)

D)Seat:
Seat has self closing mechanism which will operate by means of spring.
-Seat understructure is a combination of welded fabricated structure made of Ø 25 X2mmthk ERW tube with powder coated finish which is covered by 0.8mm thick sheet metal cover and upholsted with moulded foam inside and leatherite cover.
-Seat back comprises of ply with moulded foam upholested inside &leatherite cover. moulded foam 50 mm thickness and **Foam density** 55 kg/Cu.mtr **(± 5 kg/cubic meter)** upholster inside &leatherite cover.

E) Wire carrier:

Wire carrier made of 0.8mm thick CRCA metal sheet for holding wire passing.

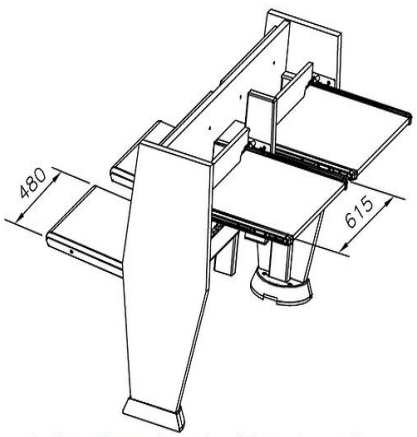
F) Switch box:

Switch box made of 1.2mm thick CRCA metal sheet for switch plate mounting suitable for anchor roma plates.

G) Front clad Mounting:

Front clad mounting made of 18 MM pre laminated MDF Board with sheet metal cover and bracket for holding on to top and mounting box for holding of clad with seat side clad.

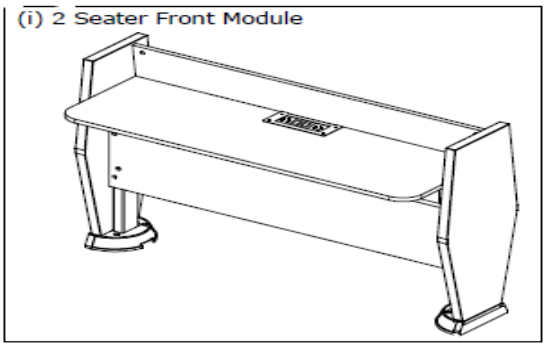
- Foldable Seat The unique design offers fixed desks and foldable seats that are easy to operate, have a neat open look and save aisle space when folded in.
- Plug and Play Easy in-built plug and play feature facilitates interactive learning, thus making the use of laptops, LCDs and audio-visual equipment easier.
- Grouted Under structure Grouted under structure assures you of sturdiness and fixed position thus ensuring organized lecture halls.
- Cushioned Seats Comfort is assured through long hours of information sharing with cushioned seats that keep fatigue at bay.
- Hooks For More Utility Hooks on the side of the desk allow for bags to be hung beside each desk for storage and easy access.

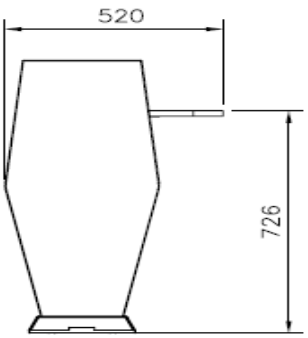


*The representative shown here is of 2 seater unit.
*Refer to DMX for further details of other modules.

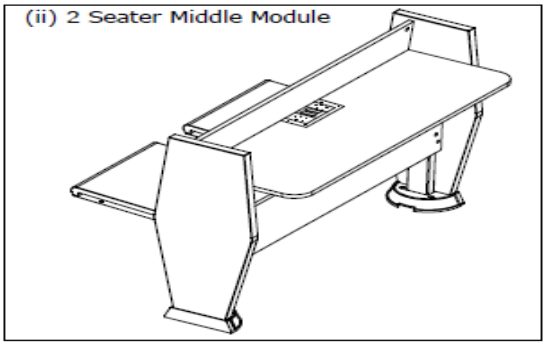
A platform-based design with user assisted closing seat &**fixed desk** system for lecture theatre rooms, auditoriums as well as corporate training rooms. The Seat will be Auto Tip up

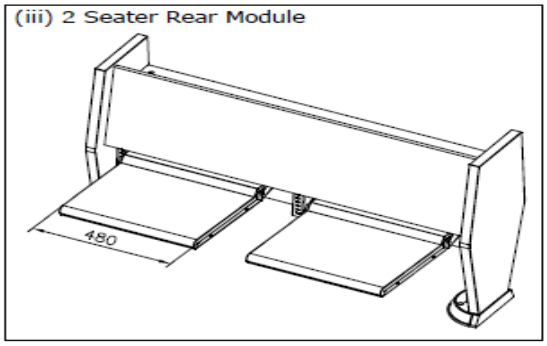
like the Namaste I



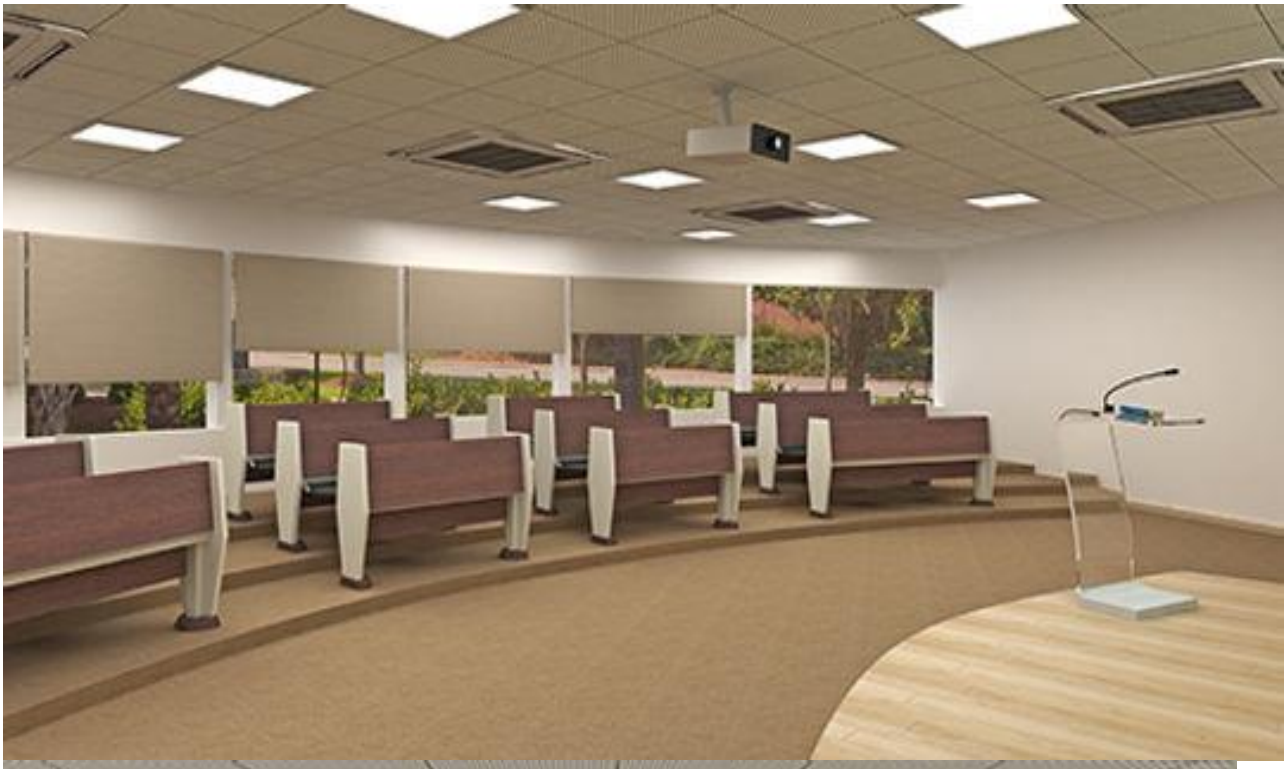


Front Module





Size of 2 Seater Desk Front type: Width: 1374mm, Depth: 698.5mm, Height: 890mm, Working Top Height : 726 mm, 2 Seater Middle type: Width: 1374mm, Depth: 1080 mm, Height: 890mm , 2 Seater Rear type: Width: 1378mm, Depth: 751 mm, Height: 890mm (± 5% Engineering Variation in dimension), Installation type: Grouted under structure (for sturdiness and fixed position). Shoe made up of: Polyamides based on PA6,Supplied as per seat in Choco Colour, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc. is make of Hettich/Ebco/ or equivalent or as approved by engineer in-charge/employer, MDF Board Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer), .



29. Staff work station (with 03 drawer & lock)

Supply and installation of work station as per technical specification. work station size (1200mWx1200mm Height 600mm Depth) Providing and placing of modular partitions system coated aluminium trims and supported on Legs for better air circulation and helps in keeping floor clean. Panels Construction - Each panel consists of Vertical extrusions 2Nos and Horizontal extrusions made of 1.2mm thick aluminium with duly powder coated at every division of tile/block. Each panel have Bottom frame fabricated for 52.4mm panel comprises of L-channels made of 2mm thick CRCA steel (IS: 513), formed plates of 3mm thick HR steel (IS: 2062) & ERW steel tube of size 35x15x1.6mm thick in oval cross section (IS: 7138) welded together. The complete bottom frame shall be powder coated with an average of 50-60 microns thickness of epoxy powder coating. The Bottom Frame is bolted with the Upright verticals. Each Panel is provided with 2Nos Legs of height 120mm are fixed at the bottom frame of the panel. Legs are fabricated by CO2 welded MS Tube of section 38mm x 25mm (IS: 7138 ERW Tube, 38mm x 25mm x 16bg) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5mm HR) over which an M8 Leveller is fitted which allows for adjustment of the height by 50mm. It will be coated with 45-50micron thickness of epoxy powder coating. Each Panel consists of 2Nos Intermediate blocks. In a 52.4mm Thick panel intermediate block shall comprise of 38mm thick paper honeycomb with 3mm MDF on each sides and 0.6mm decorative laminate on both sides. Particle board framing shall be used on outer boundary of these blocks as well as intermediately at certain locations forming conduit for passing cables. These blocks will be located in the middle bands of the panels made out of a composite construction of MDF and paper honeycomb. Each Panel consist of TOP TILES/SPLIT TILES. These tiles shall be slide in to the panels from top before fixing the top horizontal. These tiles shall be supported from top & bottom side with clips made from PP co polymer fitted in

horizontal extrusion. In case of split tiles, it shall be offered in Fabric magnetic tiles, Whiteboard tiles. Each Panel consists a BOTTOM TILE. These bottom tiles shall be press fitted on to the assembly frame of the panel with the help of snap on clips made of nylon-66 and support clips made from Polypropylene (PP). All partitions and side panels have levelling screws for adjustment in case of uneven floor to take care of +/- 40 mm of uneven flooring. Tile Finishes:

a FABRIC MAGNETIC TILES: Fabric magnetic tiles shall be fabric upholstered metal tiles in 0.6 mm thick G.I. Grade O as per IS: 277. The fabrics shall be upholstered with adhesives.

• FABRIC TACK TILES: Fabric tack able tiles shall be upholstered metal tiles in 0.6mm thick G.I. grade O as per IS: 277, with Polyurethane foam in the tile for tack-ability. The fabric shall be upholstered with adhesives.

• WHITE BOARD TILES: White board tiles shall be made of 8.0 mm thick particle board conforming to IS: 12823 laminated with 0.6mm thick white glossy high-pressure laminate on outer side & 0.6mm backing laminate on inner surface and will be having all its edges with minimum 0.5 mm thick PVC edging. Aluminium Trims: The top trims and end trims for 52.4 mm shall be made from aluminium extrusion. All kinds of extrusions for 52.4mm shall have average wall thickness of 1.2 mm & having finish of powder coating.

Top trim in 52.4mm thick panel shall be press fitted on the horizontal extrusion, it shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade.

End trim for 52.4mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513.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. Wires runs through the system from Bottom tile and extended to the top at various locations by the help of 2 nos. vertical Cable Ducts in each panel.

Cable duct shall be made from 0.8 mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts, one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D. Telephone and Electric fitting materials for each work station:- Plate and frame 8M & 2M, 16 Amp switch 1M, 6A-3Pin socket, 6/16A Socket, Blanking plate 1M, RJ-45 CAT 6UTP, RJ-11 Telephone and wire 3x2.5 mm Square, Makes for copper wire: Havelles/Polycab/RR Cable or as approved by engineer in-charge/employer, Make for Modular switches and Sockets outlet: Legrand-Myrius or anti bacterial/ABB (Tvisha)/ Panasonic/Schneider-Livia/Philips-sleek or as approved by engineer in-charge/employer, All electric/telephone fitting with materials shall be carried out by the supplier for each work station as per client requirement. Legs - System shall also have 120 mm high powder coated welded metal legs to give the system an elevated look. Single side legs are fabricated by CO2 welded MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube, 38 mm x 25 mm x 16bg) with the base plate of the MS plate of 35mm x 22mm x 5mm (IS: 2062, 5 mm HR) over which an M8 Leveller is fitted. End/Intermediate separator : partitions of 22.8mm thick including powder coated aluminium trims and supported on Legs for better air circulation and helps in keeping floor clean. The 22.8 mm panels are only to be used as Separator/End panels to provide additional privacy. These panels have various finishes and no cable management ability. Panel Construction: The 22.8mm End/Separator panels shall be made of horizontal and vertical uprights. These uprights and horizontals shall be made of aluminium extrusion having material AL96063-T6 & have average wall thickness

of 1.2mm & powder coated with epoxy-polyester powder. The Blocks for the End/Separator panels shall be of 16mm to 18mm thickness in the selected finish. The top most block in the panel shall be the top block of the panel. It shall be available in fabric, laminate, whiteboard, fabric metal, tack able and clear glass finishes. The 2Nos blocks in the intermediate bands shall be available in fabric or laminate finish and the lowermost block in the panel shall be the bottom block which shall be in fabric, metal or laminate finish. Tiles : Tile Finishes in End/Separator Partitions to be provided as per the site and layout approval. Finishes in these panels shall be

• LAMINATE FINISH BLOCKS:

Laminate finish blocks shall be made from 18mm thick particle board, cladded with 1mm thick laminate of approved shade.

• FABRIC FINISH BLOCKS:

These shall be made from 18mm thick Pre-Laminated Particle Board upholstered with 1mm thick approved shade of fabric using adhesives.

• WHITEBOARD BLOCKS:

These shall be made of 16mm thick particle board laminated with 0.6mm thick white glossy high-pressure laminate on both sides and having all its edges with minimum 0.5 mm thick PVC edging.

• GLASS BLOCKS:

These shall be made of 4mm thick toughened plain glass having diamond polish edge finish.

• FABRIC TACKABLE BLOCKS:

These shall be made from 18mm thick Pre-Laminated Board battens which hold 3mm MDF in between. 6mm thick Polyurethane foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive.

• METAL FINISH BLOCKS:

Metal finish blocks shall be made from two components of 0.8mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish. Aluminium Trims : The top trims and end trims for 22.8mm partition shall be made from aluminium extrusion having material AL96063-T6. Top trim in 22.8mm thick panel shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade. End trim for 52.4mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513. End trim for 22.8 mm thick panel shall slide with the help of end trim connector made from nylon-66. Worktop as per the approved shape and site requirement made out of 25mm thick prelam particle board. All the open edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The work surface shall be provided with circular cut out of Dia.65mm as per the requirement, for passing of wires. These cut outs shall be provided with ABS covers. Worksurfaces are fitted to the panels by worksurface brackets. Brackets are made of 2.0mm thick CRCA grade D steel as per IS: 513-19. Brackets are slide in between end trim and vertical extrusions. computer key board tray of 480mm (L) X 280mm (D) X 40mm(H) made out of CRCA steel as per IS : 513I made of 0.9mm thick powder coated with sliding channels and other fixtures/fittings. It should also have a sliding system for accommodating mouse. CPU Trolley of Size - 345mm(W) x 226(D) x 180mm(H) is made of 1.0 mm thick MS CRCA Sheet and Side support is made of 0.8 mm thick MS CRCA Sheet. It consists of 4Nos non-lockable twin wheel castors are injection moulded in Black Nylon. Mobile Pedestal having 3 Drawers Unit having flat metal front and top with Central locking. The Drawer Unit consists of 2Box and 1File

Drawers. The Overall size of the Drawer Units is 450mm(W) X 435mm(D) X 646mm(H). Construction & Material of Drawer Unit : Welded Assembled of 0.8 thick CRCA for Body Shell, Drawer Front & tray, Front Side Stiffener, Rear Side Stiffener & Bottom, 1.2mm thick CRCA Top Stiffener & Bottom stiffener. Drawer Fronts & Metal Front Straight Edge. All Drawers with Double extension precision ball slide shall be provided. For Drawer pulling, side wise tapered recess provided in shell behind Drawer Fronts. Locking:10 lever Cam Lock & Central RH locking with actuator & lock channel mechanism. Top Panel: 0.8mm thick Metal Straight Edge Top. Castors: Swivelling non-lockable 4Nos Castors mounted below the body shell. The Total drawer unit is finished with Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10).All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc. is make of Hettich/Ebco/ or equivalent or as approved by engineer in-charge/employer, MDF Board Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer),

30. Staff work station (1500mmW1 x 1500mm W2x1200mm Height 600mm Depth) (with 3 drawer & lock)

Supply and installation of work station as per technical specification. work station size (1500mmW1 x 1500mm W2x1200mm Height 600mm Depth) Providing and placing of modular partitions system coated aluminium trims and supported on Legs for better air circulation and helps in keeping floor clean. Panels Construction - Each panel consists of Vertical extrusions 2Nos and Horizontal extrusions made of 1.2mm thick aluminium with duly powder coated at every division of tile/block. Each panel have Bottom frame fabricated for 52.4mm panel comprises of L-channels made of 2mm thick CRCA steel (IS: 513), formed plates of 3mm thick HR steel (IS: 2062) & ERW steel tube of size 35x15x1.6mm thick in oval cross section (IS: 7138) welded together. The complete bottom frame shall be powder coated with an average of 50-60 microns thickness of epoxy powder coating. The Bottom Frame is

bolted with the Upright verticals. Each Panel is provided with 2Nos Legs of height 120mm are fixed at the bottom frame of the panel. Legs are fabricated by CO2 welded MS Tube of section 38mm x 25mm (IS: 7138 ERW Tube, 38mm x 25mm x 16bg) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5mm HR) over which an M8 Leveller is fitted which allows for adjustment of the height by 50mm. It will be coated with 45-50micron thickness of epoxy powder coating. Each Panel consists of 2Nos Intermediate blocks. In a 52.4mm Thick panel intermediate block shall comprise of 38mm thick paper honeycomb with 3mm MDF on each sides and 0.6mm decorative laminate on both sides. Particle board framing shall be used on outer boundary of these blocks as well as intermediately at certain locations forming conduit for passing cables. These blocks will be located in the middle bands of the panels made out of a composite construction of MDF and paper honeycomb. Each Panel consist of TOP TILES/SPLIT TILES. These tiles shall be slide in to the panels from top before fixing the top horizontal. These tiles shall be supported from top & bottom side with clips made from PP co polymer fitted in horizontal extrusion. In case of split tiles it shall be offered in Fabric magnetic tiles, Whiteboard tiles. Each Panel consists a BOTTOM TILE. These bottom tiles shall be press fitted on to the assembly frame of the panel with the help of snap on clips made of nylon-66 and support clips made from Polypropylene (PP). All partitions and side panels have levelling screws for adjustment in case of uneven floor to take care of +/- 40 mm of uneven flooring. Tile Finishes :

a FABRIC MAGNETIC TILES: Fabric magnetic tiles shall be fabric upholstered metal tiles in 0.6 mm thick G.I. Grade O as per IS: 277. The fabrics shall be upholstered with adhesives.

• FABRIC TACK TILES: Fabric tack-able tiles shall be upholstered metal tiles in 0.6mm thick G.I. grade O as per IS: 277, with Polyurethane foam in the tile for tack-ability. The fabric shall be upholstered with adhesives.

• WHITE BOARD TILES: White board tiles shall be made of 8.0 mm thick particle board conforming to IS: 12823 laminated with 0.6mm thick white glossy high-pressure laminate on outer side & 0.6mm backing laminate on inner surface and will be having all its edges with minimum 0.5 mm thick PVC edging. Aluminium Trims: The top trims and end trims for 52.4 mm shall be made from aluminium extrusion. All kinds of extrusions for 52.4mm shall have average wall thickness of 1.2 mm & having finish of powder coating.

Top trim in 52.4mm thick panel shall be press fitted on the horizontal extrusion, it shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade.

End trim for 52.4mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513.Wire Management - Wires shall be taken into the system through cable ducts from the junction boxes and it is carried upto the panels through concealed conduits inside the blocks. Wires runs through the system from Bottom tile and extended to the top at various locations by the help of 2 nos. vertical Cable Ducts in each panel.

Cable duct shall be made from 0.8 mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts, one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D. Telephone and Electric fitting materials for each work station:- Plate and frame 8M & 2M, 16 Amp switch 1M, 6A-3Pin socket, 6/16A Socket, Blanking plate 1M, RJ-45 CAT 6UTP, RJ-11 Telephone and wire 3x2.5 mm Square, Makes for copper wire: Havelles/Polycab/RR Cable or as approved by engineer in-charge/employer, Make for Modular switches and Sockets outlet: Legrand-Myrius or anti-

bacterial/ABB (Tvisha)/ Panasonic/Schneider-Livia/Philips-sleek or as approved by engineer in-charge/employer, All electric/telephone fitting with materials shall be carried out by the supplier for each work station as per client requirement. Legs - System shall also have 120 mm high powder coated welded metal legs to give the system an elevated look. Single side legs are fabricated by CO2 welded MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube, 38 mm x 25 mm x 16bg) with the base plate of the MS plate of 35mm x 22mm x 5mm (IS: 2062, 5 mm HR) over which an M8 Leveller is fitted. End/Intermediate separator: partitions of 22.8mm thick including powder coated aluminium trims and supported on Legs for better air circulation and helps in keeping floor clean. The 22.8 mm panels are only to be used as Separator/End panels to provide additional privacy. These panels have various finishes and no cable management ability. Panel Construction: The 22.8mm End/Separator panels shall be made of horizontal and vertical uprights. These uprights and horizontals shall be made of aluminium extrusion having material AL96063-T6 & have average wall thickness of 1.2mm & powder coated with epoxy-polyester powder. The Blocks for the End/Separator panels shall be of 16mm to 18mm thickness in the selected finish. The top most block in the panel shall be the top block of the panel. It shall be available in fabric, laminate, whiteboard, fabric metal, tackable and clear glass finishes. The 2Nos blocks in the intermediate bands shall be available in fabric or laminate finish and the lowermost block in the panel shall be the bottom block which shall be in fabric, metal or laminate finish. Tiles: Tile Finishes in End/Separator Partitions to be provided as per the site and layout approval. Finishes in these panels shall be

• LAMINATE FINISH BLOCKS:

Laminate finish blocks shall be made from 18mm thick particle board, cladded with 1mm thick laminate of approved shade.

• FABRIC FINISH BLOCKS:

These shall be made from 18mm thick Pre-Laminated Particle Board upholstered with 1mm thick approved shade of fabric using adhesives.

• WHITEBOARD BLOCKS:

These shall be made of 16mm thick particle board laminated with 0.6mm thick white glossy high-pressure laminate on both sides and having all its edges with minimum 0.5 mm thick PVC edging.

• GLASS BLOCKS:

These shall be made of 4mm thick toughened plain glass having diamond polish edge finish.

• FABRIC TACKABLE BLOCKS:

These shall be made from 18mm thick Pre-Laminated Board battens which hold 3mm MDF in between. 6mm thick Polyurethane foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive.

• METAL FINISH BLOCKS:

Metal finish blocks shall be made from two components of 0.8mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish. Aluminium Trims : The top trims and end trims for 22.8mm partition shall be made from aluminium extrusion having material AL96063-T6. Top trim in 22.8mm thick panel shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade. End trim for 52.4mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513. End trim for 22.8 mm thick panel shall slide with the help of end trim connector made from nylon-66. Workstation Worktop as per the approved shape and site requirement

made out of 25mm thick prelam particle board. All the open edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The work surface shall be provided with circular cut out of Dia.65mm as per the requirement, for passing of wires. These cut outs shall be provided with ABS covers. Worksurfaces are fitted to the panels by worksurface brackets. Brackets are made of 2.0mm thick CRCA grade D steel as per IS : 513-19. Brackets are slide in between end trim and vertical extrusions. Computer key board tray of 480mm (L) X 280mm (D) X 40mm(H) made out of CRCA steel as per IS : 513I made of 0.9mm thick powder coated with sliding channels and other fixtures/fittings. It should also have a sliding system for accommodatingmouse. CPU Trolley of Size - 345mm(W) x 226(D) x 180mm(H) is made of 1.0 mm thick MS CRCA Sheet and Side support is made of 0.8 mm thick MS CRCA Sheet. It consists of 4Nos Non-lockable twin wheel castors are injection moulded in Black Nylon. Mobile Pedestal having 3 Drawers Unit having flat metal front and top with Central locking. The Drawer Unit consists of 2Box and 1File Drawers. The Overall size of the Drawer Units is 450mm(W) X 435mm(D) X 646mm(H). Construction & Material of Drawer Unit : Welded Assembled of 0.8 thick CRCA for Body Shell, Drawer Front & tray, Front Side Stiffener, Rear Side Stiffener & Bottom, 1.2mm thick CRCA Top Stiffener & Bottom stiffener. Drawer Fronts & Metal Front Straight Edge. All Drawers with Double extension precision ball slide shall be provided. For Drawer pulling, side wise tapered recess provided in shell behind Drawer Fronts. Locking:10 lever Cam Lock & Central RH locking with actuator & lock channel mechanism. Top Panel : 0.8mm thick Metal Straight Edge Top. Castors: Swivelling non-lockable 4Nos Castors mounted below the body shell. The Total drawer unit is finished with Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10).All Hardware: The high-quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc. is make of Hettich/Ebco/ or equivalent or as approved by engineer in-charge/employer, MDF Board Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer).

31. Staff room work station chair

Providing and Placing High Back Chair with overall size of 76.1 cm W x 76.1 cm D x 96.5 – 114 cm H x 43.1 – 53.1 cm Seat Height. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded

high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm. The armrest top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of Ø3.81±0.03cm x 0.2±0.01cm thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to 6.5±0.5 cm in 5 steps. The adjustable tilting mechanism is designed with following features: 360° revolving 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of 6.0±0.5cm. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42±0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of 10.0±0.3cm. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is 65.0±0.5cm pitch centre dia. (75.0±1.0cm with castors). 5 nos. of twin wheel castors are injection molded in plastic having 6.0±0.1cm wheel diameter and assembled to pedestal.

32. 24 Sater Conference room Table

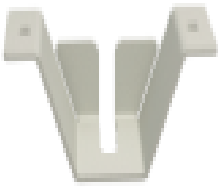
Scope: Supply, assembly and installation in-situof 24-seater Modular Conference Table as per technical specification.

Features

Cable holder for easy access of cable and keeping cables tangle free

Clutter free top with provision of Power Module at bottom

Unique module designed to give ample leg space



HDMI Holder

HDMI Wire Cover

Document Shelf

Two Way Name Plate

Supply and installation of 24-Seater Modular Meeting Table or as per size of seminar Room.

Modular 2-Seater Main Table: 1350mmx600mmx730mm+ Modular 2 Seater Shared Table: 1350mmx600mmx730mm + Modular 2 Seater End Left Hand Side: 1350mmx 600mmx730mm+ Modular 2 Seater End Right Hand Side: 1350mmx600mmx730mm+Modular 2350mm W St2350mm X 850mm X 730mm+Desk 2 Way Name Plate +Desk Mod Doc Shelf +Desk HDMI Wire Manger.

Work surface: Made of 36mm thick Pre-laminated MDF Board conforming toIS 14587: 1998, Grade II corresponding to IS 12406:2003, laminate shall be 1.0 mm thick E1 grade with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied on Non-exposed edges with the help of hot-melt glue through fit edge-banding machines, The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing , All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.

Under structure: It consists of 25 mm thick Pre-laminated MDF Board conforming toIS 14587: 1998, Grade II corresponding to IS 12406:2003). All Exposed edges of MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied on non-exposed edges with the help of hot-melt glue through fit edge-banding machines, The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. Aluminium alloy 63400 - WP profile is used for connecting panels together. The product has a knock-down construction. Plastic ABS access flap is provided for easy access to wires and cables. Work top is available in various shapes as shown above.
Modesty Panel: Made of 25 mm thick Pre-laminated MDF Board conforming toIS 14587: 1998, Grade II corresponding to IS 12406:2003,). All Exposed edges of pre laminated MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied on non-exposed edges with the help of hot-melt glue through fit edge-banding machines. Powder coated accent metal strip provided below work surface to enhance aesthetics. It is made of 0.8mm CRCA as per IS 513, epoxy polyester powder coated (DFT 40-60 microns)

Wire Management: An array of panels made of 0.8mm CRCA MS IS:513, epoxy polyester powder coated (DFT 40-60 microns) is used for flow of wires and cables. Provision of mount Anchor Roma 6 module plate is provided below worktop. Cutout on top with two-piece injection moulded plastic part polymer component is fitted to pull out audio, video cables onto worktop and connect devices charger to power socket below worktop. All, Hardware (Handles, Slides, Hinges, locks, sliding channel etc) Hettich/Ebco Make. Pre laminated MDF Board and Laminate Make: (Century/Action Tesa/Merino/Greenlam), Conference table Stool **as approved by engineer in-charge/employer.**

33. 8-seater Discussion Table for Research Lab/Boys and Girls common Room

Supply and Installation of discussion table with size: 1800 mmLx1200mmWX750mmH, Work Top-Made of Work top shall be made up of 32 mm thick E-1 grade (Environmentally Friendly) pre-laminated MDF board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003 with 1.0 mm thick laminate E1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house air quality. This should comply with (EN 120-1992), all the edges of worktop shall be provided with machine pressed 1.5-2 mm thick PVC edge banding tape pressed at 200o C with hot melt glue on special machines. Access panels provided with soft closing hinges.

Under structure-The Under-structure consists of mixture of 25mm thick E-1 grade (Environmental Friendly) pre-laminated MDF board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003 with 1.0 mm thick laminate E1 grade laminate. Anodised aluminium alloy 63400 - WP profile is added at bottom edges for improving the aesthetics. The product has a knock-down construction. Wire management: a Wire tray in with integrated power box made with a combination of 0.8 mm thick CRCA sheet and 0.8 mm thick CRCA switch plate, auto flip up electric box with dimension: 300mm x 158mm x 70 mm shall be provided at table top with includes unit: 2 Universal Power Socket, 2 USB Fast Charger (Type A + Type C) and 2 HDMI. Meeting table as approved by engineer in-charge/employer.

34. Museum Table

Supply and Installation of Wooden Museum table, the size of wooden museum table: 2400mmLx1200mmWx 1200mm H, under structure of table shall be made of Solid wood with size of 60mmx60mm, Leg shall be connected by H bracing, Table top shall be made up of 36 mm thick marine plywood with 0.8 mm thick High Gloss Laminate on both side of approved make and Colour. All the edges are sealed with 2 mm thick PVC edge band all around. Bottom shall also have same laminate. The edge of work surface shall be provided with machine pressed 2 mm thick ABS lipping glued with hot melt EVA glue.
Display table shall have under storage and partition made of 25mm thick marine plywood with 0.8 mm thick High Gloss Laminate on both side of approved make and Colour, to protect the wall from kicks, abrasion and serve as a decorative moulding, skirting shall be provided at bottom. Display area shall be made of 8 mm thick tampered glass with a frame-less, glass-to-glass construction, The tempered safety glass provides security and a dust-free airtight environment when locked. The locking mechanism is activated by a pneumatic system which is easy to operate, safe and reliable equipped with 8 LED light. The deck of the showcase is equipped with an easily removable fabric covered pad. Silica gel bags are stored in the accessible and lockable compartment. The case is constructed with a non-toxic silicone sealant between cabinetry and framing. Showcase comes equipped with a toe kick and levellers. Display table (with storage space) designee as approved by engineer in-charge/employer.

35. E-library work station for (Size: 1200mmLx600mmDepth x750mm Height)

Supply Installation of Rectangular Workstation of size: -1200mm (W) x 600mm (D) x 740mm (Worktop Height) x 1180-1220 mm (Height of panel from Ground) for each person.Frame Work, Partition and Cable management: Frame work shall consist of main spine and return spine of aluminium extruded section of minimum thickness of 1.2 mm. The overall thickness of Panel based System shall be minimum 40-50 mm. The thickness of main spine partition panel shall be minimum 40-50 mm & return spine. The panel will be hollow from inside to accommodate wiring for electrical/data and outer frame of panel should be made of extruded aluminium.The panel shall be made up of 3 mm thick MDF both sides of the wooden frame to create the hollow for the wire management. The panel outer aluminium frame is designed in such a way that it can be easily slide in to the columns/ Connectors by means of stacking one over the other. Horizontal race way shall be 150-170 mm height aluminium profile. There shall be complete cable management arrangement with openable raceway above/ below worktop with provision for fitting electrical/data switches and holes for passing cable.

Panel Finishes: Finishes of panel above the worktop can be fabric pinup/fabric/laminate + Glass/metal writable marker board or single finish tile with raceway on main spine. Finishes of main spine panel below the worktop the hollow panel should be made of MDF tile and 0.8mm thick steel sheet pasted on MDF, powder coated with EPC finish 50-60 microns for durability on the inside as well on the outside. Raceway can be provided above/below the worktop.

Connectors/ Brackets: Aluminium End Post, wow way, three-way, four ways post provided as per design. Brackets for top support and connectors made of 1-1.2mm thick metal with powder coating of desired colour.

Worktop: Worktop made up of 25mm thick prelaminated MDF board finished with 2mm ABS edge banding. The exposed edge of worktop shall be secured with 2mm thick PVC edge banding tape of approved colour. The height of Worktop shall be 740-760 mm from ground level. All Hardware: The high-quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc. is make of Hettich/Ebco/ or equivalent or as approved by engineer in-charge/employer, MDF Board Make: Century/Action Tesa/Greeen ply/ or equivalent or as approved by engineer in-charge/employer), **Work station as approved by engineer in-charge/employer.**

36. Staff Library/E- Library Chair

Providing and Placing High Back Chair with overall size of 76.1 cm W x 76.1 cm D x 96.5 – 114 cm H x 43.1 – 53.1 cm Seat Height. The seat is cushioned seat made of injection moulded plastic outer & inner. Plastic inner is upholstered with leatherette and moulded high resilience polyurethane foam of density 45±2 kg/m^3, & hardness load of 16±2 kgf as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size 1.9±0.03cm x 0.16±0.0128cm, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm. The armrest top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of Ø3.81±0.03cm x 0.2±0.01cm thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to 6.5±0.5 cm in 5 steps. The adjustable tilting mechanism is designed with following features: 360° revolving 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of 6.0±0.5cm. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42±0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of 10.0±0.3cm. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is 65.0±0.5cm pitch centre dia. (75.0±1.0cm with castors). 5 nos. of twin wheel castors are injection molded in plastic having 6.0±0.1cm wheel diameter and assembled to pedestal.

37. Central Library Table (4-seater) with front partition (1800mmL)

Providing and placing of Reading table size 1800mmLx1200mmWx750mmH/1200mmH, Worktop shall be made of 32 mm thick Pre-Laminated MDF Board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003, with E1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The height of Worktop shall be 750 mm from ground level. Under structure: Leg and under structure shall be made of MS square tube of size: 60mm x 50mm x 2.0 mm thickness with well supported MS beams under table top & connected leg to leg. Table side panel shall be cover with 1.2 mm thick CRCA sheet. all metal component shall be powder coated, Middle Partition will be made of 12 mm thick Acrylic Sheet of approved shade,Wiremanagement: Access Flap and Switch Mounting Tray is provided in the table top. It is Made from Matt silver Anodized Aluminium extrusion and plastic moulded components

to facilitate access of Electrical/Data/Voice sockets access from Top. Powder coated switch mounting tray made from 0.8mm and 1.2mm MS sheet (IS:513) which is powder coated 80-90micron. Switches to be mounted on tray as per requirement. Provision for mounting 8 Module Switch plate on switch mounting tray shall be provided. The product should be complete and as per approved sample and as per the direction of Engineer-In-charge. Completely consoled wire management with vertical wire uptake from floor via middle leg having removable cover one side and wire separator for data and wire separation, segregates to horizontal cable tray below Access Flap. All Hardware Make: Hettich (Handles, Slides, Hinges, Drawer Channel), MDF Board and Laminate Make: (Century/Action Tesa/Merino/Greenlam or Equivalent) Reading table as approved by engineer in-charge/employer

38. Central Library/Seminar Room Chair

Supply Installation of Study chair, under structure Frame: - Stainless steel(SS 304 grade) oval tube with 32 mm diameter with 2.0 mm thickness and provided with a base plate for seat fixing. Seat: The Seat shall be moulded with 12mm thick ISI marked hot-pressed commercial plywood upholstered with black colour Leatherette upholstery covers and moulded Polyurethane foam, The High Resilience polyurethane foam shall be moulded with density= 45±2 kg per meter cube and hardness load 16 ± 2 kgf as. per IS:7888 for 25% compression. The dimensions of seat shall be 51.0cm(W) x 48.0cm(D) (± 10% Engineering Variation). Thickness of seat foam shall be 60 mm.
Back: - The back shall be moulded with 12mm thick ISI marked hot-pressed commercial plywood upholstered with black colour Leatherette upholstery covers and moulded Polyurethane foam, The HR polyurethane foam shall be moulded with density= 45±2 kg per meter cube load 16 ± 2 kgf as. per IS:7888 for 25% compression. The Back size shall be 45cm W x 60.5cm H, The armrests top is moulded from PU and tubular armrest support made of Stainless steel(SS 304 grade) 32 mm diameter with 2.0 mm thickness tube, Thickness of foam shall be 50 mm, Over all dimensions of study Chair: Height from ground 92.5cm. Seat height- 45.0 cm. Dimensions tolerance/variations shall be within +/- 1 cm, **Study Chair as approved by engineer in-charge/employer.**

39. 6-Seater Table for Department library/seminar Room (2100mmL)

Providing and placing of Reading table size 2700mmLx1200mmWx750mmH/1200mmH, Worktop shall be made of 32 mm thick Pre-Laminated MDF Board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003, with E1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The height of Worktop shall be 750 mm from ground level. Under structure: Leg and under structure shall be made of MS square tube of size: 60mm x 50mm x 2.0 mm thickness with well supported MS beams under table top & connected leg to leg. Table side panel shall be cover with 1.2 mm thick CRCA sheet. all metal component shall be powder coated, Middle Partition will be made of 12 mm thick Acrylic Sheet of approved shade,Wire management: Access Flap and Switch Mounting Tray is provided in the table top. It is Made from Matt silver Anodized Aluminium extrusion and plastic moulded components to facilitate access of Electrical/Data/Voice sockets access from Top. Powder coated switch mounting tray made from 0.8mm and 1.2mm MS sheet (IS:513) which is powder coated 80-90micron. Switches to be mounted on tray as per requirement. Provision for mounting 8 Module Switch plate on switch mounting tray shall be provided. The product should be complete and as per approved sample and as per the direction of Engineer-In-charge. Completely consoled wire management with vertical wire uptake from floor via middle leg having removable cover one side and wire separator for data and wire separation, segregates to horizontal cable tray below Access Flap. All Hardware Make: Hettich (Handles, Slides,

Hinges, Drawer Channel), MDF Board and Laminate Make: (Century/Action Tesa/Merino/Greenlam or Equivalent) Reading table as approved by engineer in-charge/employer

40. 4-Seater Dining Table(Not Required)

Supply and installation of Dining Table as per technical specification. 6-Seater Dining table size shall be 1734 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 colour chart. Combination colour graphics on the centre. Brown Laminate on bottom specially profiled edges for comfort. The Under structure 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 under structure and table top. Glide shall be of Plastic fixed at the under structure to prevent the damage of table top during stacking. All Hardware: The high-quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco or equivalent or as approved by engineer in-charge/employer, (MDF Board and Laminate Make:

CENTURY/GREEENPLY/Action Tesa or equivalent or as approved by engineer in-charge/employer) ,, Dining Table **as approved by engineer in-charge/employer**.

41. Dining Chair(Not Required)

Providing and placing of dining Chair, the seat and back are made up injection moulded high impact strength polypropylene polymer compound with indoor grade UV Resistance. The welded Leg and tubular frame is made from stainless Steel 202 grade tube. The tube are buff polished to give shiny finish. size of stainless Steel 202 grade tube: 2.52 + 0.03 cm x 0.16 +/- 0.0128cm thickness and 3.5+/- 0.03 cm x 0.16 +/- 0.0128 cm The Shoes are made of high impact strength polypropylene polymer compound with indoor grad UV Resistance and pressed fitted with tubular frame. SIZE: over all height of chair: 900 mm, seat height of chair: 450mm, Seat Size: 525mm(W)x532 mm(D), Back Size: 516 mm (W)x455mm (H). Dining Chair as approved by engineer in-charge/employer.

42. Acrylic Podium

Supply and Installation of Acrylic Podium with institute Logo, Podium unrestructured is made of 12 mm thick good quality acrylicsheet, work top and bottom base of podium shall be made of 15 mm thick good quality acrylicsheet, Crystal Clear Acrylic: The acrylic pulpit has an incredible 95% brightness, making it crystal clear and can complement any style and decoration. the podium by decorating it with flowers, logos, crafts or pictures, to ensure that it turns the heads and attracts the attention, podium desk of the pulacher can accommodate your laptop, laptop and more. Its tilt angle protects your cervical spine, while the plug prevents paper from slipping down. There is also a pen on the top for easy access to writing utensils, an extra storage shelf shall be provided in middle to keep the coffee, drinks, water cups and other meeting material. In addition, the bottom of the podium is polished, making it smooth and gentle for floors. Overall size of podium: Top size shall be 685mmx340mm, Bottom base size shall be: 630mmx340mm, Height of Podium shall be 1198mm, Podium as approved by Engineer In-charge/Employer.

43. SS top revolving Stool for Lab

Supply and installation of stool as per technical specification. STOOL: Overall Sizes Diagonal Leg Diameter 538 mm, minimum height 470mm - maximum height :655mm±2% tolerance, Top base shall be made of Stainless steel 304grade sheet with spin section of thickness 1.2 mm & should be non-corrosive. It should have a diameter of 305mm, seat base is made of MS ring and rectangular tube. EN8 Screw having diameter of 22mm should be used for height adjustment of the seat base. The hub should be made of MS ERW tube having diameter of 38mm and thickness 2.0mm. The Hub should be welded with the legs and it should accommodate and cover the lead screw mechanism. The under structure should consist of 4 legs made up of MS ERW tube of diameter 25.4 mm and 1.6mm 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 fulfil 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 135kg.**Stoolas approved by engineer in-charge/employer.**

44. Examination Couch for demonstration room

Supply and installation of examination couch with overall dimension of Overall Sizes (L)1957mm X (W)625 mm X (H)850mm. The backrest has ratchet mechanism for tilting the backrest. Leg frames & intermediate frames is made of ERW tubes having section of 32mm x 32mm square tubes with thickness of 1.6mm. Nylon 6 leg shoes is given to avoid wear & tear. MS sheet metal lying surface of thickness 1.2mm is used. Top sheet metal panel base frame of 25 x 25 ERW square tubes of thickness 1.6mm is used. Ratchet is of MS Strip with section 40 x 4 to Provision the backrest tilt. All MS part is pre-treated and powder coated with RAL white colour & all plastic parts in Grey. Safe working load is 200 kg.The couch shall be provided with 40 density 50 mm thick PU foam mattress which is covered by heavy helium material which is water proof, flame retardant, vapour & X-ray permeable. The zip & stitches for the mattress cover are concealed, the product performs proof loading test, cycle tests, impact test. **Examination couchas approved by engineer in-charge/employer.**

45. **Museum Racks**

Supply and Installation of Slotted Angel Rack (Size: 910mmW x480mmDx 1850 mm H (OPEN RACK))
Rack with 5 nos. of shelves should be hanging arrangement (adjustable).
Racks shall be manufactured from Slotted M.S angle size 60mmx60mmx 5.0 mm.
Shelves shall be manufactured from 1.6 mm thick CRCA sheet with 40x40x3.0 mm with supporting Angels
The rack shall be assembled with G I bolt, nuts and washers.
Slotted angle and M.S sheet shall be made of cold rolled with anti-rust treated and shall be finished with powder coating with 7 tank treatment process on all parts (colour: as per buyer choice).
H/D Rubber bushes shall be provided to the bottom of legs of slotted angle racks. height of bottom shelves from ground is 100 mm. The quality of M.S sheet which is used for racks shall be free from any defects, Undulations, and old paints and surface corrosion, etc, Minimum Load bearing capacity of each shelf is 150 kgs. **Slotted Angel Rack as approved by engineer in-charge/employer.**

46. Reception/Book issue Counter

Providing & placing of customized reception counter in rectangular shape with two tops. The under structure of table shall be made of 25 mm thick pre laminated Marine plywood, cladded with 12 mm thick Corian sheets with desired length thermoformed by using dyes and Molds and pasted and seamlessly finished over. MS pipe framework to be used for strengthening the structure. The item includes cost of 12mm thick CORIAN sheet, 25 mm Marine plywood & MS square pipe, hardware, drawer units, shutter doors with laminated mica or veneers, locking mechanism, foot rest etc. as per architect's drawing and finished as per guidelines of site in charge. The entire structure shall be made of 25 mm thick marine plywood with MS frame work with finish of 1 mm thick laminate, All the edges are sealed with 2 mm thick PVC edge band all around, All the inner surfaces shall be finished with 1mm thick white laminate or as approved by engineer in charge, 6 Nos. Computer key board tray and 6 nos. drawer cabinet shall be provided in reception counter with locking arrangement, Height of all three drawers shall be 150mm, 150mm and 350mm respectively. width: 450 mm , height: 680 mm, Drawer shall be made of 18 mm thick marine plywood with finish of 1 mm thick laminate, All the edges are sealed with 2 mm thick PVC edge band all around. Each drawer shall slide on a pair of telescopic drawer sliders (Approved make). The inside portion of drawer to be finished with white laminate. provided double Front panel to mount Electrical Switches and sockets, working Top height must be 750mm. Counter top height must be 1050 to 1200mm. Depth of working top must be 650mm to 750 mm,All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent/or as approved by engineer in-charge/employer, (Ply and Laminate Make: CENTURY/Action Tesa/GREEENPLY or equivalent/or as approved by engineer in-charge/employer), Designee and colorof reception table as approved by engineer in-charge/employer.

Lab Furniture

Supply and installation of C-FRAME SYSTEM laboratory furniture
All C-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. C-frame should be constructed from a rectangular pipe with a cross section of 60mm x 30mm and should be 2 mm thick and should be without a vertical front leg to give a clean look. This shall provide more knee space or leg space and would facilitate uninterrupted lateral movement of the under-bench units within the bench run. The C-frame legs should be supplied with adjustable feet (tolerance from -5mm to +20mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. The structure should have a removable back panel to provide access for maintenance throughout the length of table. The C-frame shall also have skirting at back bottom side. It should be suitable for sitting and standing. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The C-Frames should be for suspended storage cabinets or for cabinets that can slide through-and-through from one end of the workbench to the other through C-Frames (configuration depends upon the Schedule of Quantities)

HORIZONTAL MEMBERS

These should be made from rectangular pipes of 2mm thickness. Cross-sectional dimensions of the pipe should be 60mmx30mmx2 mm. (± 10% Engineering Variation) They should be made of CRCA MS and coated with pure epoxy powder. These connect two C-Frames together as shown using C-clamps/Unclamps. Together with the C-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent C-Frames.

Removable Back Panels
These cover panels cover the service lines that run behind them. These should be easily removable (unclipped) and the service line be accessed for maintenance. This allows the equipment on workbench to remain undisturbed They should be made of CRCA MS with pure epoxy powder coating and are of 1mm thickness

COVER PANELS
All side cover panels and back panels, filler panels should be made from CRCA MS panels of 1.2 mm thickness with pure epoxy powder coating
MASTER UPRIGHT

Master Upright should be of the dimensions: 300 x 150 x 1.2 mm. (± 10% Engineering Variation) It should be made from 1.2mm thick CRCA MS with pure epoxy powder coating. It should have an open-able door for easy service maintenance and should extend till the false ceiling

VERTICAL UPRIGHT

The Upright system will form the back-bone for internal distribution of GDS, Electrical supply systems Shelves and Top Units and should be constructed from 16-gauge CRCA formed steel panels with removable covers. Shelf height should be adjusted with an increment of 1inch / 25mm. Upright should also provide support to Top Units for hanging thus eliminating the danger of fixing the Top Units on non-rigid partition wall / panels. Uprights should be supplied with adjustable feet from -5mm to +20mm.

WELDED UNDER-BENCH STORAGE CABINETS

Welded cabinet body should be of flush face construction with intersection of vertical and horizontal members like LH and RH side panel along with front horizontal channel, back panel and bottom panel. It should be relocated anywhere easily as it is an independent unit. Cabinet should be of square non-sharp edge construction. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer. Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction. Drawer should be well supported on LH and RH ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside. Doors should be easily removable and hinges should be easily replaceable. Knee space panel should be in 20-gauge construction.

Configurations:

2 Shutters with 1 Drawer MOC: MS CRCA: IS – 513 (1994), Thickness: LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel should be of 1.2mm thick. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel should be of 1.2 mm thick. Finish: Powder coating pure epoxy, thickness 50-60 microns.

Handle:

Anodized Aluminium Recessed-Type, CTC: 160.0mm. Lock: Units have a locking facility with 180° and 10 lever cam lock mechanism (except for sink and corner unit). Hinge: Knuckle-butt type SS Hinge. Screw: SS 304. Shutter should be of twin-type construction with sound dampening effect using pro feel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter should have provision of roller catch.

SERVICE FITTINGS AND ACCESSORIES

Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the colour coding as per DIN 12920.

ELECTRICAL TRUNKING Used for housing electrical switches and sockets, data and voice points, its top panel, bottom panel of the trunking should be made from 1.2 mm thick CRCA MS panel. It should be available in both, single sided and double-sided

configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope.

LABORATORY SINK AND ACCESSORIES.
LABORATORY SINK AND ACCESSORIES shall be fitted in laboratory as per direction of engineer in-charge/employer.
Ceramic Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Standard bowl size (L x W x D) is 500mm x 400mm x 350 mm. sink shall be provided with each distance of 1500mm

Faucet should be 3-way type brass materials, faucet of approved make.

Regent shelf: - Regent Shelves of Height 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with groves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns

Granite work: It should be 19mm (+/- 2mm) thick Jet Black Granite worktop. The exposed edges of the worktop should be chamfered and smoothened. The bottom of the worktop should be polished and there should be a V-groove throughout the length of the exposed edges to protect the cabinets from coming in contact with the spillages. The overhang on the storage cabinet is 25 mm at the front side and 30 mm at the sides. The backing material used is a neoprene mat of 6 mm thickness.

Scope of Work

-Supply and Installation of Laboratory Workbenches, Regent shelf, Storage units, Sink Unit, Corner unit, including granite worktops and other supporting structures/hardware's based on the specified Make List. - Supply & Installation of all utility service outlets and accessory fittings, electrical receptacles, switch, socket, wire electrical raceway etc. plumbing and electrical switches & fittings identified on drawings as mounted on the laboratory furniture or as per engineer in-charge/client direction.
-Supply & Installation of all laboratory sinks, bottle traps, drain troughs etc.
-Supply & Installation of service structures where specified and setting in place reagent shelves of the type shown in the drawings.
-Removal of debris, dirt and rubbish accumulated as a result of installation/commissioning of the laboratory furniture and accessories and leaving the premises broom clean and orderly.
List of approve makes: - Steel: TATA Steel, JINDAL Steel/Equivalent or As approved by engineer in-charge/employer.
Powder Coating Kansai Nerolac, Berger Paints, Asian Paints/ Equivalent or As approved by engineer in-charge/employer.
Water Faucets and Gas Valves: As approved by engineer in-charge/employer.
Switches and Sockets, Data and LAN points: As approved by engineer in-charge.

1. Welded cabinet body with plinth skirting (1000mm(W) x 485mm(H))

Supplying & in placing welded cabinet body of following specifications.

Overall size shall be 1000mm(W) x 485mm(H) or higher.
Cabinet edges should not be sharp. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer.
Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction.

Drawer should be well supported on ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside.
Doors should be easily removable, and hinges should be easily replaceable. Knee space panel should be in20 gaugeconstruction.
Storage Units can be any of the types like Suspended Type, Sliding Type, Castor-based, Mobile Type. It shall have 1 Shutter/ 2 Shutters + No Drawer/1 Drawer/2 Drawers/3 Drawers, MOC: MSCRCA: IS – 513 (1994).
Thickness of LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel shall be of minimum 1.2mm thick. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel shall be of minimum 1.2 mm thick. It hall have Powder coating pure epoxy finished, thickness 40-50 microns.
Handle shall be Anodized Aluminium Recessed-Type, CTC: 160.0mm. Units shall have a locking facility with 180° and 10 lever cam lock mechanism, Knuckle-butt type SS Hinge, Screw: SS304.
Shutter shall be of twin-type construction with sound dampening effect using profeel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter shall have provision of roller catch.

2. Welded cabinet body with metal skirting (1200mm(W) x 485mm(H))

Supplying & in placing welded cabinet body of following specifications.

Overall size shall be 1200mm(W) x 485mm(H) or higher.
Cabinet edges should not be sharp. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer.
Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction.

Drawer should be well supported on ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside.
Doors should be easily removable, and hinges should be easily replaceable. Knee space panel should be in 20-gauge construction.
Storage Units can be any of the types like Suspended Type, Sliding Type, Castor-based,MobileType. It shall have 1 Shutter/ 2 Shutters + No Drawer/1 Drawer/2 Drawers/3 Drawers, MOC: MSCRCA: IS – 513 (1994).
Thickness of LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel shall be of minimum 1.2mm thick. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel shall be of minimum 1.2 mm thick. It hall have Powder coating pure epoxy finished, thickness 40-50 microns.
Handle shall be Anodized Aluminium Recessed-Type, CTC: 160.0mm. Units shall have a locking facility with 180° and 10 lever cam lock mechanism, Knuckle-butt type SS Hinge, Screw: SS304.
Shutter shall be of twin-type construction with sound dampening effect using profeel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter shall have provision of roller catch.

3. Welded cabinet body with metal skirting (450mm(W) x 485mm(H))

Supplying & in placing welded cabinet body of following specifications.

Overall size shall be 450(W) x 485(H) or higher.
Cabinet edges should not be sharp. Doors should be assembled with SS-304 hinge assembly.
Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer.
Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction.
Drawer should be well supported on ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside.

Doors should be easily removable, and hinges should be easily replaceable. Knee space panel should be in 20-gauge construction.
Storage Units can be any of the types like Suspended Type, Sliding Type, Castor-based,MobileType. It shall have 1 Shutter/ 2 Shutters + No Drawer/1 Drawer/2 Drawers/3 Drawers, MOC: MSCRCA: IS – 513 (1994).
The product shall be Sefa 8M, Sefa 10, EN 13150, EN 14727 certified as approved by sefa approved Lab.
Thickness of LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel shall be of minimum 1.2mm thk. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel shall be of minimum 1.2 mm thk. It hall have Powder coating pure epoxy finished, thickness 40-50 microns.
Handle shall be Anodized Aluminium Recessed-Type, CTC: 160.0mm. Units shall have a locking facility with 180° and 10 lever cam lock mechanism, Knuckle-butt type SS Hinge, Screw: SS304.
Shutter shall be of twin-type construction with sound dampening effect using profeel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter shall have provision of roller catch.

4. Welded cabinet body with metal skirting (750mm(W) x 485mm(H)

Welded cabinet body with plinth skirting

Supplying & in placing welded cabinet body of following specifications.

Overall size shall be 750mmW x 485mmHor higher.
Cabinet edges should not be sharp. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer.
Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction.
Drawer should be well supported on ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside.

Doors should be easily removable, and hinges should be easily replaceable. Knee space panel should be in 20-gauge construction.
Storage Units can be any of the types like Suspended Type, Sliding Type, Castor-based,MobileType. It shall have 1 Shutter/ 2 Shutters + No Drawer/1 Drawer/2 Drawers/3 Drawers, MOC: MSCRCA: IS – 513 (1994).
Thickness of LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel shall be of minimum 1.2mm thk. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel shall be of minimum 1.2 mm thk. Its hall have Powder coating pure epoxy finished, thickness 40-50 microns.
Handle shall be Anodized Aluminium Recessed-Type, CTC: 160.0mm. Units shall have locking facility with 180° and 10 lever cam lock mechanism, Knuckle-butt type SS Hinge, Screw: SS304.
Shutter shall be of twin-type construction with sound dampening effect using profeel.
Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter shall have provision of roller catch.

5. Welded cabinet body with metal skirting (750mmW x 875mmH

Supplying & in placing welded cabinet body sink unit of following specifications:

Overall size shall be 750(W) x 875(H) or higher.
Cabinet edges should not be sharp. Doors should be assembled with SS-304 hinge assembly.
Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer.
Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction.
Drawer should be well supported on ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside.
Doors should be easily removable, and hinges should be easily replaceable. Knee space panel should be in 20-gauge construction.
Storage Units shall have 1 Shutter + 1 Drawer/4 Drawers/Leg Spaces/1 Shutter/2 Shutters/3 Drawers/2 Shutters + 1 Drawer/Sink Unit + 2 Shutters, **MOC:** MSCRCA: IS – 513 (1994)

Thickness of LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel shall be of minimum 1.2mm thk. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel shall be of minimum 1.2 mm thk. It hall have Powder coating pure epoxy finished, thickness 40-50 microns.
Handle shall be Anodized Aluminium Recessed-Type, CTC: 160.0mm. Units shall have a locking facility with 180° and 10 lever cam lock mechanism, Knuckle-butt type SS Hinge, Screw: SS304.
Shutter shall be of twin-type construction with sound dampening effect using profeel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter shall have provision of roller catch.

6. Welded cabinet body with metal skirting (600mmW x 875mmH)

Supplying & in placing welded cabinet body of following specifications:

Overall size shall be 600 (W) x 875(H) or higher.
Cabinet edges should not be sharp. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer.
Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction.
Drawer should be well supported on ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside.
Doors should be easily removable, and hinges should be easily replaceable. Knee space panel should be in 20-gauge construction.
Storage Units shall have 1 Shutter + 1 Drawer/4 Drawers/Leg Spaces/1 Shutter/2 Shutters/3 Drawers/2 Shutters + 1 Drawer/Sink Unit + 2 Shutters, **MOC:** MSCRCA: IS – 513 (1994)
Thickness of LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel shall be of minimum 1.2mm thk. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel shall be of minimum 1.2 mm thk. It hall have Powder coating pure epoxy finished, thickness 40-50 microns.

Handle shall be Anodized Aluminium Recessed-Type, CTC: 160.0mm. Units shall have a locking facility with 180° and 10 lever cam lock mechanism, Knuckle-butt type SS Hinge, Screw: SS304.
Shutter shall be of twin-type construction with sound dampening effect using profeel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter shall have provision of roller catch.

7. Welded cabinet body with metal skirting (580mm (W) x 875mm(H))

Supplying & in placing welded cabinet body of following specifications:

Overall size shall be 580 (W) x 875(H) or higher.
Cabinet edges should not be sharp. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer.
Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction.
Drawer should be well supported on ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside.
Doors should be easily removable, and hinges should be easily replaceable. Knee space panel should be in 20-gauge construction.
Storage Units shall have 1 Shutter + 1 Drawer/4 Drawers/Leg Spaces/1 Shutter/2 Shutters/3 Drawers/2 Shutters + 1 Drawer/Sink Unit + 2 Shutters, **MOC:** MSCRCA: IS – 513 (1994)
Thickness of LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel shall be of minimum 1.2mm thk. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel shall be of minimum 1.2 mm thk. It hall have Powder coating pure epoxy finished, thickness 40-50 microns.
Handle shall be Anodized Aluminium Recessed-Type, CTC: 160.0mm. Units shall have a locking facility with 180° and 10 lever cam lock mechanism, Knuckle-butt type SS Hinge, Screw: SS304.
Shutter shall be of twin-type construction with sound dampening effect using profeel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter shall have provision of roller catch.

8. Welded cabinet body with metal skirting (600mmW x 875mmH)

Supplying & in placing welded cabinet body of following specifications:
Overall size shall be 600mm(W) x 875mm(H) or higher.
Cabinet edges should not be sharp. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer.
Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction.
Drawer should be well supported on ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside.
Doors should be easily removable, and hinges should be easily replaceable. Knee space panel should be in 20-gauge construction.
Storage Units shall have 1 Shutter + 1 Drawer/4 Drawers/Leg Spaces/1 Shutter/2 Shutters/3 Drawers/2 Shutters + 1 Drawer/Sink Unit + 2 Shutters, **MOC:** MSCRCA: IS – 513 (1994)
Thickness of LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel shall be of minimum 1.2mm thick. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel shall be of minimum 1.2 mm thick. It hall have Powder coating pure epoxy finished, thickness 40-50 microns.
Handle shall be Anodized Aluminium Recessed-Type, CTC: 160.0mm. Units shall have a locking facility with 180° and 10 lever cam lock mechanism, Knuckle-butt type SS Hinge, Screw: SS304. Shutter shall be of twin-type construction with sound dampening effect using profeel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter shall have provision of roller catch.

9. Filler Panel

Supplying & in placing of Filler Panel for Wall Side Furniture Without Upright 770mm (W) X 875mm (H) - Accessories for along with welded unitsas approved by engineer in-charge/employer.

10. Sink for Laboratory

Providing & in placing ceramic sink of following specifications.
Overall size shall be 560 (W) mm X 355 (D) mm.
It should be Acid-Resistant Chemical Laboratory Sinkwith good resistance to organic solvents, the sink's sleek and minimalist design adds sophistication to any laboratory setting, while its smooth surface allows for effortless cleaning and maintenance, promoting a hygienic environment.

11. Single water faucet

Supplying & in placing Single Water Faucet, Deck Mounted, 8" Swing Gooseneck, Without Positioning Pins, faucet shall be approved make.

12. Back support bracket

Supplying & in placing Back Support Bracket Without Upright For 770mm Working Depth

13. Silicon sealant

Supplying & in placing Silicon Sealant - Black - Accessories for Granite

14. Jet black granite

Supply and installation of jet-blackGranite: It should be 20mm (+/- 2mm) thick Jet Black Granite worktop. The exposed edges of the worktop should be chamfered and smoothened. The bottom of the worktop should be polished and there should be a V-groove throughout the length of the exposed edges to protect the cabinets from coming in contact with the spillages. The overhang on the storage cabinet is 25 mm at the front side and 30 mm at the sides. The backing material used is a neoprene mat of 6 mm thickness.

15. Masking Tape

Supply and placing of masking tape bracket as approved by engineer in-charge/employer.

16. 6mm shelves adhesive natural rubber strip

Supply and installation of 6mm shelves adhesive natural rubber strip- Accessories for Granite as approved by engineer in-charge/employer.

17. Flexible/ F serrated connector

Supplying & in placing Flexible/F Serrate Connector - Accessories for Granite

18. Anti siphon bottle trap

Supplying & in Placing Anti-Siphon Bottle Trap - Accessories for Granite

.

19. Fixed type reagent ShelfMain(1200mm L)

Supply and installation of Fixed type Regent shelfmain type 1200mm L- Cutout: 6 Module + 6 Module, Height: 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with groves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns. Regent shelf size: 1200 mm W x415mm(D) x 750mmH.

20. Fixed type reagent ShelfMain(1050mm L)

Supply and installation of Fixed type Regent shelf main type 1050mm L- Cutout: 6 Module + 6 Module, Height 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with groves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns. Regent shelf size: 1050 mm W x415mm(D) x 750mmH.

21. Fixed type reagent Shelf Add-on (1200mm L)

Supply and installation of Fixed type Regent shelf add-on type 1200 mm L- Cutout: 6 Module + 6 Module, Height 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate

stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with groves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns. Regent shelf size: 1200 mm W x415mm(D) x 750mmH.

22. Fixed type reagent Shelf Add-on (1050mm L)

Supply and installation of Fixed type Regent shelf add-on type 1050mm L- Cutout: 6 Module + 6 Module, Height 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with groves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns. Regent shelf size: 1050 mm W x415mm(D) x 750mmH.

23. Fixed type reagent Shelf Add-on (1200mm L)

Supply and installation of Fixed type Regent shelf add on Type 1200mm L- Cutout: 3 Module + 3 Module, Height 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with groves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns. Regent shelf size: 1200 mm L x415mm(D) x 750mmH.

24. Welded overhead storage cabinets

Providing & Fixing of Modular over-head storage cabinet of 900mm (W) X 340mm (D) x 635mm (H), Wall mounted Storage Cabinets to be of complete modular design consisting of Cabinet Frame, metal shutters, and plastic recess handles. Cabinet frame to be of 0.8 mm CRCA MS sheet, with horizontal stiffeners of 1.2mm thick. Metal Shutters are of 0.8mm thick CRCA MS sheet with profile insert to provide rigidity to the doors. 1 Shelf is provided made from CRCA shelf is adjustable to have a load carrying capacity of 40 kg Uniformly Distributed Load (UDL). Plastic Recess Handles to provide extra corrosion resistance. Hinges to be spring loaded with CED coating with self-closing mechanism of Hettich/Hafelle or equivalent make. Complete Storage using to be Flush design with no protruding handles for better safety of the users to be provided. The complete M.S. material of cabinet to be pre-treated (degreased, Zinc phosphate) and epoxy powder coated for better corrosion resistance. The thickness of powder coat to be 45-50 microns as per Specification, which passes the test of Salt Spray for 1000 hours and having the Scratch Hardness of 3Kgs. Each unit should have a locking facility with 180°, cam lock mechanism as per approved make. Complete and as per approved sample and as per the direction of Engineer-In-charge.

25. Apparatus storage cabinet

Supply and installation of Apparatus storage cabinet, It shall be used to keep glassware, files, equipment, and other non-Apparatus components, the overall dimensions of 900mmWx 1800mmHx560mmD and should have transparent doors and sides with steel frame work. Transparent portion of this cupboard should be made of acrylic sheet of 5 mm 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 1.0 MM thick sheet and the cabinet is coated

with anti-microbial powder coating. To be provided with rubber shoes to prevent direct contact of cabinet and floor.

26. 6 pin shutter sockets

Supply and installation of 6 pin shutter sockets, Make: Havells/Anchor or equivalent or as per approved by engineer in-charge/employer.

27. 6 module plate

Supply and installation of 6 module plate, Make: Havells/Anchor or equivalent or as per approved by engineer in-charge/employer.

28. 6 A- One way switch

Supply and installation of 6 A- One way switch, Make: Havells/Anchor or equivalent or as per approved by engineer in-charge/employer.

29. Office Stainless steel Dustbin

Supply Installation of Stainless-steel Dustbin with Lid and Handel- Dimension of dustbin shall be 10 Inch X 14 Inch, capacity of dustbin: 15 Liter. Material Non-Magnetic stainless steel 202 Grade, Thickness of wall is 1.0 mm, Dustbin shall be Leg operated, Dustbin as approved by Engineer In-charge/Employer.

30. Dustbin Large (100 Litre)

Supply and installation of Large dustbin (100 Litre) with wheel and Lid , the dustbin shall be Heat resistant
UV stabilized
Made of High-Density Polyethylene (HDPE) material Injection moulded
- Leg Operated lid.
-Dead weight approx. (kg) -10.5
-Useful load (kg)- 60
- Overall height (mm)- 940
- Overall width (mm) 480
- Overall depth (mm)-550
- Upper edge comb (mm)-870
- Wheel diameter (mm)-200
Dustbin as approved by Engineer/Employer

31. Roller Blind Curtain for Window

Providing & fixing up of Window curtain (Roller blind) Black out/translucent type in required sizes having the following specification:

Mounting Bracket: Mounting hardware brackets, universal brackets including end plug bracket should come with lock down retainer device. Metal brackets provided should

come in powder coated finish. All installation brackets made of stamped and hardened steel allowing a 46mm projection from the wall, ceiling and side fitting with screws and end cap covers.

Cassette: It is a cover for blinds installed outside the window frame to hide tube brackets and mechanism. This is aluminium extruded rail made up of high strength aluminium alloy, which is covered with matching fabric. For 38 mm grooved roller tube cassette size should be 100mm (Width)*100mm (Height) and having weight =1200gm/running meter (±5%).

Cassette Ceiling Bracket: This is made up of carbon Steel, DIN Standard Steel, Thickness: 1.0mm, Powder Coating Thickness: 0.15mm to 0.20mm. This provides near invisible fixing of the cassette.
Cassette system end caps: It should have minimum 2.5mm thickness plastic end cap and should be in coordination with the blind fabric colour.

Roller Tube: This is made up of High Strength Aluminium Alloy Extruded grooved tube having outer diameter 38mm(+/-1mm) & thickness 1.25mm (+/-5%) as per AA6063 Alloy. Tubes must come in natural anodized finish. To achieve greater reinforcement anodized tubes must have at least six internal ribs so that additional tensile strength can be achieved and allowing provision for secured placements of clutch and end plug.
Roller tube brackets: Spring steel metal brackets powder coated in matching finish to be used on both ends to support the roller system. Brackets can be top or face fixed.

Control Unit: Blinds mechanism must have the control clutch drive unit with engineered heavy duty chain drive pulley operating system consisting of gear clutch housing and locking plug containing at least 6 ribs and inserted into a minimum of 38mm dia. roller tube. Clutch has to be self-lubricating with safety pins for secure bracket installation and unlocking pin for quick manual removal. Provided clutch system must allow convenience in operation for large windows to the smallest windows. The control unit should be made up of polypropylene material using injection moulding method. Gearing Ratio: 1.75:1 to reduce operating force for larger blinds. 24nos Sprocket for 38mm diameter roller tube. Control unit is operated directionally by the use of beaded endless chain to raise and lower the blind smoothly.

Idler: Tube bearing plug idler should have the properties of self-lubricating spring-loaded plastic bearing end plug with positive locking wheel that allows for adjustment and provides a secure installation and removal of blinds. Tube bearing plug should contain at least 6 ribs and inserted a tube not less than 38mm roller tube. Idler is of high strength reinforced plastic, consisting of an outside sleeve and centre shaft. Sleeve provide bearing surface for centre shaft and rotate freely, providing smooth, quiet and long wearing operation. It is a Part of Control Unit Assembly.

Bottom Rail: This is made up of extruded aluminium bottom bar having powder coating of 55 microns and wall thickness of ±1.2mm (±0.1) and width of 26.5mm(±1mm) and height of 33.5mm(±1mm) and weight: 380gm/meter (±5%). All bottom rails should come with powder coated finish with an end cover perfectly in matching with the fabric.
Bottom bar also includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines and dimensions of concealed bottom bar rod specified as inner diameter:

10.8mm, outer diameter: 14.8mm, Weight: 219gm/meter, Thickness: 1mm (±5%) should be provided with matching cover.

Concealed bottom bar rod: Bottom bar includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines. Aluminium bottom bar rod made up of AA6063alloy having Rod I/D: 10.8mm, O/D:14.8mm, Weight: 219gm/meter, Thickness: 1mm (±5%) with the covered matching.

Bottom bar end caps: End caps of bottom bar should be made up of ABS material using Injection moulding method having perfect push fit with the bottom bar. The dimensions of end caps of bottom bar specified as length: 18mm, width: 27.5mm, height: 34.5mm, thickness 2mm and end caps of bottom bar should also have polyurethane bush to fit in bottom tube for smooth operation of blinds.

Operating chain: Blinds set is to be driven by a ball chain pulley and ball chain and can be positioned at Right hand or Left-hand side of the blinds set. This is made of 4.5 mm plastic beads moulded on 2.0 mm thick polyester cord. The chain drives the sprocket fixed in the end control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation. Average number of balls on chain should be 50 per foot length. Plastic chain should provide ease in operation with chain connector and polycarbonate stopper of O/D:6mm & I/D: 4mm to avoid reverse rolling of fabric over tube and protecting damages to blind fabric.

Cord Weight: It should have suitable acrylic clear cord weight to suit the operating chain. Thickness: 14mm, width: 30mm and height: 80mm.

Note: The control unit & cassettes shall be made with matching colour of blind with aesthetically pleasing matching look of room.

The fabric shall be selected from best quality fabric. The fabric shall have properties such as acoustic control, anti-fungal and anti-microbial. Sheer fabrics shall allow in maximum amount of light (20-100% light transmission), whilst still preserving privacy and dim out (Privacy fabrics) (1 – 19% light transmission) allow in restricted amount of light, whilst ensuring complete privacy, even in the evening. Blackout fabric shall completely block out sunlight, for complete privacy, room darkening and temperature regulation (0% light transmission).
The fabric colour as approved by employer The weighted composition of fabric shall be made of 100% Polyester woven fabric with a openness factor of 3%. The fabric shall have a weight of 168 GSM (±5 GSM). The solid depth of fabric shall be 75mm and sheer depth shall be 50mm. Light fastness shall be 4-5 Grade tested in accordance with BS EN ISO 105-B01:1999, **Roller Blind Curtain as approved by engineer in-charge/employer.**

32. Key Cabinet with provision of 30 Keys

Key Board (30 Keys) shall be made up of 25mm thick commercial plywood (MR grade plywood) with 0.8 mm thick High Gloss Laminate of approved make and Colour, E1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of Ply board to be sealed with 2mm thick PVC edge banding on the user side and 0.8mm thick PVC edge-banding tape pressed on top and bottom side at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel, a Transparent door provided with 5 mm thick clear glass with provision of lock & key, key hook shall be made up of 5 mm diameter hook of Stainless steel 304 grade,**key board as per approved by client/ Engineer In charge**.

33. Periodical display Rack for Library

Providing and placing of Periodical Display Rack with overall size: 900mm(W)x450mm(D)x1830mm(H) with welded construction. The Periodical Display Rack is made of 0.8 mm thick CRCA sheets conforming to grade as per CRI of IS 513 (part-1):2016, CRCA steel that makes the rack sturdy and durable while also keeping it sleek and chic.The finishing shall include Epoxy powder coated with thickness of 50 microns (+/- 10%).Powder coating: Conforming to IS: 13871.

The Periodical Display Rack has five behind storage shelves, one at each display level, that offers a load capacity of 40 kg each self. The display trays have a receding facility that makes the storage space behind easily accessible.

Five-level Display Racks: The Periodical Display Rack has five levels that can display 3 periodicals each.

Angled Display Trays: The display trays of the rack, suitable for full-sized periodicals, are angled in a way to facilitate easy viewing and bring the journals, magazines and other periodicals in the spotlight

Leveller Screws: The Periodic Display Rack uses leveller screws with hex plastic base that protect the floor from scratches and help the rack balance even on uneven floors.

The product should be complete and as per sample approved & as per direction of Engineer-in-charge/employer.

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
1	Fowler Bed with Mattress, Collapsible railings & Castors	Each	296		
2	Bed side Locker	Each	296		
3	Over Bed Table	Each	296		
4	Patient Stool	Each	337		
5	Slaine Stand	Each	296		
6	Wheel Chair	Each	33		
7	Instrument Trolley	Each	33		
8	Dressing Trolley	Each	33		
9	Crash Cart	Each	33		
10	Mayo trolley	Each	33		
11	Examination Couch	Each	29		
12	Strecher Trolley	Each	20		
13	Emergency Recovery Trolley	Each	20		
14	3 fold Screen	Each	33		
15	U pattern fast track curtain with rail	sqmt	500		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
16	Blood Donor Couch	Each	5		
17	Double X-ray View Box		50		
18	OPD Room Table (1800mm L)	Each	13		
19	Main Chair for OPD Table	Each	59		
20	Visitor Chair for OPD Table	Each	144		
21	Table for Associate professor	Each	46		
22	Office Staff Table (1200mm)	Each	61		
23	Chair of Staff	Each	61		
24	Visitor Chair for Staff Table	Each	59		
25	3 seater Waiting Chair	Each	260		
26	3 seater Sofa	Each	22		
27	2 seater Sofa	Each	19		
28	1 Seater Sofa	Each	28		
29	Center Table	Each	34		
30	Corner Table	Each	54		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
31	Reception Table	Sqmt	100		
32	Nurse Station	Sqmt	150		
33	Chair fro Nurse Station/Reception	Each	81		
34	Desklet Chair for Demo Room	Each	661		
35	Dr. Locker For Change Room	Each	6		
36	Staff Locker For Change Room	Each	42		
37	Work Station (1200mm)	Sqmt	29		
38	Chair for Work Station	Each	29		
39	3 seater Sofa	Each	6		
40	1 Seater Sofa	Each	6		
41	Revolving Stool for Pharmacy	Each	12		
42	Table for Reporting Room (1500mm)	Each	34		
43	Revolving Chair	Each	34		
44	Single Bed For Doctor Duty Room	Each	56		
45	Display Rack for Museum	Each	17		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
46	Steel Almirah For Store Room	Each	185		
47	HOD Room Table (2100mm)	Each	13		
48	High Back Chair	Each	13		
49	Midback Visitor Chair	Each	39		
50	Seminar Room Chair	Each	35		
51	4 seater Dining Table	Each	20		
52	Dining Chair	Each	89		
53	6 seater Dining Table	Each	3		
54	Dining Chair	Each	18		
55	Wall Side Laboratry	Each	40		
56	Pillow	Each	56		
57	Metal shelving Steel Rack for Pharmacy	Each	35		
58	Stainless Steel shelving rack for clean linen storage	Each	10		
59	Bio Waste Dustbin	Each	40		
60	Office Stainless steel Dustbin	Each	151		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
61	Dustbin Large (100 Litre)	Each	20		
62	Roller Blind Curtain	Sqmt	2000		
63	Double Foot Step	Each	50		
64	Stainless Steel Double Foot Step for OT	Each	20		
Academic Block					
1	High End Office Table for Additional Director (table size: 2400mmW x 1050mmD x 750mmH)	Each	1		
2	High End Office Table for Principal Room/Prof. Head (table size: 2100mmW x 900mmD x 750mmH)	Each	9		
3	High End Office Table for Asso Professer (table size: 1800mmW x 750 mmD x 750mmH)	Each	15		
4	Executive table with side unit and pedestal (1650mmW x 750mmD x 750mmH)	Each	12		
5	Staff Office table (size: 1200mm Width x 600mm Depth x 750mm Height)	Each	7		
6	Office table for Asstt. Prof/Lecturers/Demnostartion Room (size: 1500mm Width x 750mm Depth x 750mm Height)	Each	100		
7	High back Chair for Executive Director	Each	2		
8	Visitor Chair for Executive Director	Each	3		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
9	High back executive chair Principle Room /Prof Head	Each	9		
10	Visitor chair for Principle Room /Prof Head	Each	27		
11	Revolving chair for Asso Professe/Office Table	Each	27		
12	Visitor chair for Asso Professe/Office Table	Each	69		
13	Confrence Roomn/ Office staff / Boys and Girsl Common Room/discussion table Chair	Each	227		
14	Office Staff visitor chair	Each	144		
15	3-Seater Sofa (Size: (W) 2060mm (L) 905mm, (H) 855 mm, seat (H) 450mm)	sqmt	7		
16	2 Seater Sofa	Each	28		
17	1- Seater Sofa (Size: (W): 910mm, Depth (D): 905 mm, Height (H): 855 mm)		4		
18	3-Seater Sofa (Size: 2060mm (L), 905mm Wodthx 855 mmHeight, seat (H) 450mm)	Each	5		
19	2 Seater Sofa	Each	3		
20	1- Seater Sofa (Size: 910mmLenght, Depth: 905 mm, Height: 855 mm)	Each	2		
21	Centre Table (Size; 1120 mmL, Depth:600 mm, height:349 mm)	Each	9		
22	Corner Table (Size; 600 mmL, Depth:600 mm, height:349 mm)	Each	14		
23	3 Seater Waiting Chair	Each	20		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
24	Teaching Room chair	Each	474		
25	Steel Almirah for Store (size: 916mm(W)x486mm(D)x1980mm(H)	Each	69		
26	4- drawer book case for Museum (Size: 914mm(W)x320mm(D)x1880mm(H).	Each	74		
27	Library Book Rack Double Sided	Each	66		
28	Lecture theatre desk cum Bench (Size: Width: 1374mm, Depth: 698.5mm, Height: 890mm, Working Top Height : 726 mm)	Each	360		
29	Staff work station Research/CRAC Lab and Office Staff (1200mm Widthx600mm Depthx 1200mm Height)	Each	187		
30	Work station for Office Staff (1500mmW1x1500mmW2x600mm Depthx 1200mm Height)	Each	12		
31	Staff room work station chair	Each	199		
32	24 Sater Conference room Table for Conference Room	Each	1		
33	8-seater Discussion Table for Research Lab/Boys and Girls common Room	Each	12		
34	Museum Table	Each	2		
35	work station for E-library (Size: 1200mmLx600mmDepth x750mm Height)	Each	38		
36	Staff Library/E- Library Chair	Each	38		
37	Central Library Table (4 seater) with front partition (1800mmL)	Sqmt	64		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
38	Central Library/Seminar Room Chair	Each	168		
39	6 Seater Table for Department library/seminor Room (2100mmL)	Each	18		
40	4 Seater Dining Table	Each	28		
41	Dining Chair	Each	112		
42	Wooden Podium	Each	6		
43	Skill Lab Stool	Each	530		
44	Examination Couch with mattress	Each	9		
45	Museum steel Racks	Each	75		
46	Reception/Book issued Counter	Sqmt	50		
Lab Furniture					
1	Welded cabinet body with plinth skirting (1000mm(W) x 485mm(H))	Each	67		
2	Welded cabinet body with metal skirting (1200mm(W) x 485mm(H))	Each	1		
3	Welded cabinet body with metal skirting (450mm(W) x 485mm(H))	Each	1		
4	Welded cabinet body with metal skirting (750mm(W) x 485mm(H))	Each	3		
5	Welded cabinet body with metal skirting (750mmW x 875mmH	Each	1		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
6	Welded cabinet body with metal skirting (600mmW x 875mmH)	Each	8		
7	Welded cabinet body with metal skirting (580mm (W) x 875mm(H))	Each	3		
8	Welded cabinet body with metal skirting (600mmW x 875mmH	Each	11		
9	Filler Panel	Each	6		
10	Sink for Laboratory	Each	125		
11	Single water faucet	Each	125		
12	Back support bracket	Each	9		
13	Silicon sealant	Each	2		
14	Jet black granite	SQMT	12		
15	Masking Tape	Each	2		
16	6 mmx1.2 meter Width shelves adhesive natural rubber strip	meter	50		
17	Flexible/ F serated connector	Each	1		
18	Anti siphon bottle trap	Each	1		

Budgetary Quotation for Hospital and Academic Block Dr. Radha Krishnan Govt. Medical College Hamirpur, (HP)					
S. No.	**Name of Items**	**Unit**	**Quantity**	**Rates per Unit including of all taxes with 5 years Warranty**	**Amount (In Rs.)**
19	Fixed type reagent Shelf Main (1200mm L)	Each	12		
20	Fixed type reagent Shelf Main (1050mm L)	Each	9		
21	Fixed type reagent Shelf Add-on (1200mm L)	Each	6		
22	Fixed type reagent Shelf Add-on (1050mm L)	Each	1		
23	Fixed type reagent Shelf Add-on (1200mm L)	Each	1		
24	Welded overhead storage cabinets	Each	36		
25	Apparatus storage cabinet	Each	12		
26	6 pin shutter sockets	Each	252		
27	6 module plate	Each	126		
28	6 A- One way switch	Each	252		
29	Office Stainless steel Dustbin	Each	150		
30	Dustbin Large (100 Litre)	Each	15		
31	Roller Blind Curtain for Window	Sqmt	1500		
32	Key Cabinet with provision of 30 Keys	Each	6		
33	Periodical display Rack for Library	Each	6		
	Total Amount in Rs.				