1. **SCOPE OF WORK**

1.1 SELECTION INCLUDES:

1.1.1 Based on approved make list and technical specifications- Furnish all items as per the BOQ. Include delivery to the building, set in place, level, scribe, provide and fix to walls and floors as required.

1.1.2 Supply & Install all office furniture and interior works with fittings identified on drawings of buildings (Administration, Guest House, Library, Auditorium & Hostel etc.). Supply & Installation of all listed items in BOQ as per the approved layouts.

1.1.3 Removal of all debris, dirt and rubbish accumulated as a result of the installation of the office furniture to an onsite container leaving the premises broom clean and orderly.

1.2 BASIS OF WORK

1.2.1 It is the intent of this specification to use specified make list as the standard of construction for items

1.2.2 EPI reserves the right to reject qualified or alternate proposals and to award based on product value where such action assure the owner (CDRI) greater integrity of product.

1.3 QUALITY ASSURANCE

1.3.1 The bidder shall provide items manufactured & shipped with proper packing & should take the full responsibility of the entire scope of works as specified in the tender.

1.3.2 General Performance: Furniture shall meet the performance requirements and should meet the test standards specified in the tender.

1.4 SUBMITTALS

1.4.1 Submit detailed item drawings and layout drawings of office furniture and interior works of buildings (Administration, Guest House, Library, Auditorium & Hostel etc.).

1.4.2 As built Drawings: Submit as built drawings for office furniture and interior works showing the required details.

1.4.3 Bidder will submit Quality Assurance Plan (QAP) for approval to EPI and pre-despatch inspection will be done accordingly.

1.5 PRODUCTS/MANUFACTURERS

1.5.1 The selected manufacturer must warrant for a period of one year starting (date of acceptance or occupancy, whichever comes first) that all products sold under the contract referenced above shall be free from defects in material and workmanship.

1.6 APPROVAL OF SAMPLES

1.6.1 Upon award of the work the party shall prepare samples of all BOQ items for factory inspection and approval prior to the commencement of bulk manufacturing against the award.

2.0 MATERIALS

2.1 MATERIALS OF OFFICE FURNITURE AND INTERIOR WORKS FOR BUILDINGS OF NEW CDRI CAMPUS.

2.1.1 General Requirements:

It is the intent of this specification to provide a high quality office furniture (Tables, chairs, sofa etc.) and interior works for lab and other buildings.

2.1.2 Modesty shall be pre-laminated on both side from 1mm thick DL.

2.1.3 MDF board drawer shall be mounted on Nylon double extension ball slides.

2.1.4 Plastic glide holder shall be having provision for electrical wire entry & glide fixing.

2.1.5 0.2mm thick PVC outer edge banding on veil and 0.8 mm thick PVC outer edge banding on cross member of matching colour as per approved shades & colour.

2.1.6 Legs:

- 16 mm thick matts silver anodized aluminium extrusion & assembled together with a plastic glide holder at bottom and 5 mm thick M.S. powder coated sheet at top.

2.2 Sheet:

- Cold rolled close annealed sheet steel shall be prime grade 2mm, 1.2mm, 1mm and 0.8mm; roller leveled, and shall be treated at the mill to be free of scale, ragged edges, deep scratches or other injurious effects. All raw steel have to be procured from TATA steel/SAIL. Certificates for the same to be provided.
2.2.3 Hinges:
Hinges shall be made of MS with Cathode electrode deposition for better corrosion resistance. The hinges should be spring loaded with 105 degree opening. Doors less than 36" in height shall be hung on one pair of hinges, and doors over 36" high shall be hung on 3 hinges in case of under storage cabinets. Hinges shall be fixed from inside so that it should not protrude outside.

2.2.4 Locks:
Locks, where shown or called for, shall be cam locks as approved makes

2.2.5 Positive Catch:
All units to be with self closing type spring loaded hinges. The hinge should close the doors once left at certain angles. An additional catch will be allowed in the units.

2.3 Paint Test Specification

2.3.1 Steel Paint System Finish and Performance Specification
All steel coated surfaces to follow the testing standards as specified

2.3.2 Powder Coating Test: all steel coated surfaces to follow the following testing standards

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>CHARACTERISTIC</th>
<th>SPECIFICATION</th>
<th>METHOD USED</th>
<th>STANDARDS REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DFT (DRY FILM THICKNESS)</td>
<td>35 MICRON (min)</td>
<td>ELCOMETER OR DFT METER</td>
<td>ASTM-D 1186-93, IS 13871:1993, IS 101</td>
</tr>
<tr>
<td>3</td>
<td>SCRATCH HARDNESS</td>
<td>3 Kgs</td>
<td>SCRATCH HARDNESS TESTER</td>
<td>BS-3900(PART E2) 1979, IS 101 (PART 5, SEC 2) 1998, ASTM 3359, JISK 5400 1979, IS 13871:1993</td>
</tr>
<tr>
<td>4</td>
<td>IMPACT RESISTANCE</td>
<td>275 Kg.cm</td>
<td>IMPACT TESTER</td>
<td>ASTM-D2794-93 (ASTM-D1186-93), BS-3900 PART E3 1979, IS 101, JISK 5400-1979, IS 13871:1993</td>
</tr>
<tr>
<td>5</td>
<td>CROSS CUT ADHESION</td>
<td>1x1 mm or GT=0</td>
<td></td>
<td>DIN 53151 ISO 2406, ASTM 3002, JISK 5400-1979, IS 13871:1993</td>
</tr>
<tr>
<td>8</td>
<td>SALT SPRAY</td>
<td>100 HOURS</td>
<td>SALT SPRAY CHAMBER</td>
<td>IS 101 (PART 6, SEC 1) 1998, ASTM B 117-96, IS 13871:1993</td>
</tr>
</tbody>
</table>

Zinc phosphated deposition rate: 1.1 gm / m2, IS-3618 1966 REAFFIRMED IN 1991 AND IS- 6005 1998
Mild steel (CRC): IS-513 1994 (REAFFIRMED IN 1998), GRADE 'D' OR 'DD'QUALITY

2.4 CHAIRS

2.4.1 Director's Chair:
Providing and fixing the chair for the director as per the drawing. The seat and back shall be made up of 1.2cm.thick hot pressed plywood upholstered with leather and moulded Polyurethane foam. The back foam shall be designed with Contoured lumber support for extra comfort. Size of the chair shall be – Back: 53.0cm. (W) x 79.0cm. (H) and Seat: 49.0cm. (W) x 48.0cm. (D). Polyurethane foam shall be moulded with density = 45+/-2kg/m3 and Hardness = 20+/-2 On Hampden machine at 25% compression. The seat and back shall be arrested together with a 9.0cm. (w) spine made of 0.8cm thk. HR steel and spine shall be black powder-coated. The armrest assembly shall comprise of three parts viz. the armrest support tube and P.U. armrest and the armrest top. The armrest tube assembly shall be made of 2.54cm (1") x 14 BG. M.S. E.R.W. support tubes and Chrome plated. P.U. armrest shall be made of black integral skin polyurethane with 50-70 Shore `A' Hardness and reinforced with M.S. insert and armrest top shall be made of ABS & upholstered with foam & leather. Chair shall have pivot synchro tilt mechanism with 12 deg. Seat tilt and 19 deg. back tilt and 360 deg. revolving. The seat base assembly shall be designed with the features 360 degrees revolving type without back tilt, pneumatic height adjustment with adjustment stroke of 8.0cm. The pedestal shall be made of die-cast aluminum with buffing finished. It shall be fitted with 5 nos. twin wheel castors. The pedestal shall be 67.0cm pitch-center diameter (77.0cm with castors). The twin wheel castors shall be injection moulded in 30% Glass filled black Nylon complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.4.2 Visitor's and Discussion Chair for the Director's Room:
Providing and fixing the position of the visitor's chairs as per the drawing. The seat and back shall be made up of 1.2cm.thick hot pressed plywood upholstered with leather and moulded Polyurethane foam. The back foam shall be designed with Contoured lumber support for extra comfort. Size of the chair shall be – Back: 53.0cm. (W) x 52.0cm. (H) and Seat: 49.0cm. (W) x 48.0cm. (D). Polyurethane foam shall be moulded with density = 45+/-2kg/m3 and Hardness = 20+/-2 On Hampden machine at 25% compression. The seat and back shall be arrested together with a 9.0cm. (w) spine made of 0.8cm thk. HR steel and spine shall be black powder-coated. The armrest assembly shall comprise of three parts viz. the armrest support tube and P.U. armrest and the armrest top. The armrest tube assembly shall be made of 2.54cm (1") x 14 BG. M.S. E.R.W. support tubes and Chrome plated. Armrests shall be fitted to the seat with powder coated arm rest brackets made of 5 mm thick HR steel.
Main Chair for Hod's, COFA room, COSP Room and Librarian:
Providing and fixing the in position of the chairs as per the drawing. The seat and back shall be made up of 1.2 cm thick hot pressed plywood upholstered with leather and moulded Polyurethane foam. The back foam shall be designed with Contoured lumber support for extra comfort. The seat and back shall be made up of 1.2 cm thick hot pressed plywood, upholstered with fabric and moulded Polyurethane foam together with moulded seat and back covers. The back foam must be designed with contoured lumber support for extra comfort. Size of the chair shall be – Back: 50.0 cm. (W) X 49.0 cm. (H) and Seat: 50.0 cm. (W) X 46.0 cm. (D). Polyurethane foam shall be moulded with density = 45 +/-2 kg/m³ and Hardness = 20 +/- 2 on Hampden machine at 25% compression. The backrest shall consists of a Drop-lift mechanism which can be adjusted in the range of 7.0 cm and can be locked in 7 positions for better lumbar support. The pedestal shall be injection moulded in black 30% glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal shall be 60.0 cm. pitch-center diameter (70.0 cm with castors) complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

Visitor's Chairs for the HOD's cabins, COFA Rooms, COSP and Librarian's Cabin:
Providing and fixing in position of the chairs as per the drawing. The seat and back shall be made up of 1.2 cm thick hot pressed plywood upholstered with fabric and moulded Polyurethane foam together with moulded seat and back covers. The back foam must be designed with contoured lumber support for extra comfort. Size of the chair shall be – Back: 50.0 cm. (W) X 49.0 cm. (H) and Seat: 50.0 cm. (W) X 46.0 cm. (D). Polyurethane foam shall be moulded with density = 45 +/-2 kg/m³ and Hardness = 20 +/- 2 on Hampden machine at 25% compression. The seat and back covers are injection moulded in black co-polymer polypropylene. The one-piece armrests shall be made of black integral skin polyurethane with 50-70 Shore Hardness and reinforced with M.S. insert. The armrests shall be scratch and weather resistant. The armrests shall be fitted to the seat with powder-coated armrest brackets made of 5.0 cm. thick black Nylon and fitted with 5 nos. twin wheel castors. The pedestal shall be 60.0 cm. pitch-center diameter (70.0 cm with castors) complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

Chairs for Asst. Librarian, F & AG Cabin and other Managerial cabins:
Providing and fixing in position of the chairs as per the drawing. The seat and back shall be made up of 1.2 cm thick hot pressed plywood upholstered with fabric and moulded Polyurethane foam together with moulded seat and back covers. The back foam must be designed with contoured lumber support for extra comfort. Size of the chair shall be – Back: 50.0 cm. (W) X 49.0 cm. (H) and Seat: 50.0 cm. (W) X 46.0 cm. (D). Polyurethane foam shall be moulded with density = 45 +/-2 kg/m³ and Hardness = 20 +/- 2 on Hampden machine at 25% compression. The seat and back covers are injection moulded in black co-polymer polypropylene. The tubular frame shall be cantilever type & made of Dia 2.54cm. (1”) x 14 guage (2.0mm) M.S. E.R.W. tube and black powder coated complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

Main Chair for the Scientists in the lab area and managers in the hostel:
Providing and fixing in position of the chairs as per the drawing. The seat / back shall be made up of 1.2 cm thick hot pressed plywood, upholstered with fabric and moulded Polyurethane foam. The back shall be made up of 1.2 cm thick hot pressed plywood upholstered with replaceable fabric upholstery covers and moulded polyurethane foam. The back cover shall be made up of 1.2 cm thick hot pressed plywood upholstered with leather and moulded Polyurethane foam. The back foam shall be designed with Contoured lumber support for extra comfort. Size of the chair shall be – Back: 50.0 cm. (W) X 49.0 cm. (H) and Seat: 50.0 cm. (W) X 46.0 cm. (D). Polyurethane foam shall be moulded with density = 45 +/-2 kg/m³ and Hardness = 20 +/- 2 on Hampden machine at 25% compression. The seat and back covers are injection moulded in black co-polymer polypropylene. The tubular frame shall be cantilever type & made of Dia 2.54cm. (1”) x 14 guage (2.0mm) M.S. E.R.W. tube and black powder coated complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

Visitor's Chair for the Scientist's Cabin:
Providing and fixing in position of the chairs as per the drawing. The seat / back shall be made up of 1.2 cm thick hot pressed plywood, upholstered with fabric and moulded Polyurethane foam. The back shall be made up of 1.2 cm thick hot pressed plywood upholstered with replaceable fabric upholstery covers and moulded polyurethane foam. The back cover shall be made up of 1.2 cm thick hot pressed plywood upholstered with leather and moulded Polyurethane foam. The back foam shall be designed with Contoured lumber support for extra comfort. Size of the chair shall be – Back: 48.0 cm. (W) X 74.0 cm. (H) and Seat: 50.0 cm. (W) X 49.5 cm. (D). Polyurethane foam shall be moulded with density = 45 +/-2 kg/m³ and Hardness = 20 +/- 2 on Hampden machine at 25% compression. The armrests shall be made of moulded polyurethane (P.U) and mounted on to a fixed type M.S. tubular armrest support. The armrest top shall be injection moulded in black Nylon (30% glass filled) complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.
2.4.10 Conference room Chairs for the Lab Area and Admin Building:
Providing and fixing in position of the chairs as per the drawing. The seat/back shall be made up of 1.2 cm thick hot pressed plywood, upholstered with fabric and moulded Polyurethane foam. The back shall be made up 1.2 cm. thick hot pressed plywood upholstered with replaceable fabric with many covers and moulded polyurethane foam. The back ply and foam shall be designed with contoured lumbar support for comfortable seating posture. Size of the chair shall be – Back: 48.0cm. (W) X 66.0cm. (H) and Seat: 50.0cm. (W) X 49.5cm. (D). Polyurethane foam shall be moulded with density = 45 +/-2 kg/m3 and Hardness = 20 +/-2 on Hampden machine at 25% compression. The armrest top shall be moulded in black co-polymer polypropylene. The armrest shall have four ranges of adjustment height, swivel, front & back, width. Height adjustment shall be in armrest structure & all other adjustment shall be provided in pad which is fixed to armrest structure. Armrest Top shall be made up of PU moulded over plastic inner. It shall have Bio-Syncho Mechanism with the features 360 degrees revolving, single point control, front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort, side 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 of 1: 2 (110 seat tilt / 220 back tilt) and seat glides in tandem with back to ensure full contact and support of user’s lumbar area. Seat depth adjustment shall be integrated in the seat through a sliding mechanism with the seat depth range is of 6.0 cm. Backrest shall be connected to the mechanism with a drop-lift mechanism which can be adjusted in the range of 7.0 cm and held in 7 positions for the better lumbar support. It must have pneumatic height adjustment has an adjustment stroke of 10.0 cm. The pedestal shall be injection moulded in black 30% glass-filled Nylon and fitted with 5 nos. twin wheel castors. The twin wheel castors shall be injection moulded in black Nylon complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.4.11 Chairs for the Lab area, Guest House and Hostel rooms, workstations and for the reception desks:
Providing and fixing in position of the chairs as per the drawing. The seat shall be made of Injection moulded Plastic outer & inner. Plastic Inner shall be upholstered with fabric and moulded Polyurethane foam and back shall be made of 1.2mm hot-pressed plywood & upholstered with fabric and moulded Polyurethane foam and back covers. The back foam must be designed with contoured lumbar support for extra comfort. Size of the chair shall be – Back: 48.0cm. (W) X 66.0cm. (H) and Seat: 46.0cm. (W) X 49.0cm. (D). Polyurethane foam shall be moulded with density = 45 +/-2 kg/m3 and Hardness = 20 +/-2 on Hampden machine at 25% compression. The seat and back covers shall be injection moulded in black co-polymer polypropylene. The armrest shall have four ranges of adjustment height, swivel, front & back, width.

Chairs for the Library:
The seat shall be made from 1.2cm. thick hot pressed plywood and back injection moulded from black Co-polymer Polypropylene are upholstered with fabric and moulded Polyurethane foam together with seat and back covers. The back foam shall be designed with contoured lumbar support for extra comfort. It shall have dimensions seat size: 45 cm (W) x 42 cm (D) and back size 39 cm (W) x 38 cm (H). The seat and back covers shall be injection moulded in black Co-polymer Polypropylene. The polyurethane foam shall be moulded with density = 45 +/- 2 kg/m3 and Hardness = 20 +/- 2 on Hampden machine at 25% compression. The one-piece armrests shall be injection moulded from black Nylon. The armrests shall be fitted to the seat with armrest connecting brackets made of 0.5cm thick HR steel. It shall have fixed type mechanism which enables it 360 D revolving type without back tilt. The frame shall be made up of diameter 2.54 cm. (1") X 14 lb. M.S. E.R.W. tube which is black powder coated complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

Chairs for the Library:
The seat shall be made from 1.2cm. thick hot pressed plywood and back injection moulded from black Co-polymer Polypropylene are upholstered with fabric and moulded Polyurethane foam together with seat and back covers. The back foam shall be designed with contoured lumbar support for extra comfort. It shall have dimensions seat size: 45 cm (W) x 42 cm (D) and back size 39 cm (W) x 38 cm (H). The seat and back covers shall be injection moulded in black Co-polymer Polypropylene. The polyurethane foam shall be moulded with density = 45 +/- 2 kg/m3 and Hardness = 20 +/- 2 on Hampden machine at 25% compression. The one-piece armrests shall be injection moulded from black Nylon. The armrests shall be fitted to the seat with armrest connecting brackets made of 0.5cm thick HR steel. It shall have fixed type mechanism which enables it 360 D revolving type without back tilt. The frame shall be made up of diameter 2.54 cm. (1") X 14 lb. M.S. E.R.W. tube which is black powder coated complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

3 Seater Sofa for the Director's Room, Head Engineering, COSP, Visitor's Room and Librarian:
Providing and fixing 3 Seater sofa of size 1915 W x 920D x 945H of Synthetic Leather with Polyester fiber wadding 175 GSM (18 mm). The back and seat shall be PU foam of 32d, 28d, 23d in various positions with expanded PF sheet for load distribution in seats. Durable rubber webbings of 50 mm & 70 mm shall be used and. Cotton webbing on wooden surface to prevent sharp edges shall be used. Pinewood of various thickness and length, duly dried as base structure shall be used complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

1 Seater Sofa for the VIP room in the Guest House and for the common room in the hostel, Director's Room, COSP Cabin, Head Engineering and Librarian's Cabin:
Providing and fixing 1 Seater sofa of size 990 W x 850D x 890H of Made of Synthetic Leather with Polyester fiber wadding 175 GSM (18 mm). The back and seat shall be PU foam of 32d, 28d, 23d in various positions with expanded PF sheet for load distribution in seats. Durable rubber webbings of 50 mm & 70 mm shall be used and. Cotton webbing on wooden surface to prevent sharp edges shall be used. Pinewood of various thickness and length, duly dried as base structure shall be used complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

Two seater sofa for the HOD's Cabins:
Providing and fixing in position of the 2 seater sofas as per the drawing. It shall be made up of synthetic leather with the rubber wood frame. Seat form shall be urethane form with silicon fill and form shall have density of 31-33 kg/cubic cm and webbing material shall be s-spring. It shall have dimensions 1400W X 920D X 820H in mm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

Sofas for waiting Area:
Providing and fixing the 3 seater sofas for the waiting area as per the drawing. It shall be standing on beam with side frame assemblies. The LH/RH side frame shall be fitted to the two ends of the ST/BK mounting frame to form the leg assembly. It shall be made of MS. E.R.W. tube dia. 44 cm. (1.75") x 14 KG thick and chrome plated. The ST/BK mounting frameassy. holds the two side frames together. The mounting frames, 2nos shall be used to connect the side frames. The mounting frame shall be made of MS. E.R.W. tube dia.5.06cm. (2") x 10BG thick black painted. The ST/BK shall be mounted on 14 KG thick 2cm x 4cm Recta tube which shall be welded on the beam of ST/BK mounting frame. The ST/BK assembly shall consist of 12mm thick plywood insert with Polyurethane foam having density = 45 +/- 2 Kg/m3 and hardness of the P.U. foam = 18 to 22 Kg on Hampden machine for 25% compression of the foam. The complete moulded ST/BK assembly shall be covered with
replaceable fabric upholstery cover. Seat/Back shall have dimensions 54.4cm (W) x 46.7cm (D) x 12.5cm (T). The side frames shall be fitted with front and rear bottom shoes made of injection moulded polypropylene. All external surfaces shall be chrome-plated and withstands min of 100hrs in salt spray test. Fabric used shall be velvetine plus a stain repellent fabric. The velvet fabric can be vacuum cleaned in order to remove dirt & grit from the fabric surface. Upholstery covers shall be made from velvetine fabric should not be soap washed or dry cleaned. 

The complete moulded ST/BK assembly shall be covered with a replaceable fabric upholstery cover. The side frames shall be fitted with front and rear bottom shoes made of injection moulded polypropylene. All external surfaces shall be chrome-plated and withstands min of 100hrs in salt spray test. Fabric used shall be velvetine plus a stain repellent fabric. 

The velvet fabric can be vacuum cleaned in order to remove dirt & grit from the fabric surface. Upholstery covers shall be made from velvetine fabric should not be soap washed or dry cleaned complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge. These shall have dimensions as per given below:

<table>
<thead>
<tr>
<th>Seater</th>
<th>Sofa Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>3 Seater Sofa:</td>
<td>1830W x 783D x 750H</td>
</tr>
<tr>
<td>b</td>
<td>2 Seater Sofa:</td>
<td>1257W x 783D x 750H</td>
</tr>
<tr>
<td>c</td>
<td>1 Seater Sofa:</td>
<td>685W x 783D x 750H</td>
</tr>
</tbody>
</table>

2.4.17 Desklet Chairs for Lecture Hall:

Providing and fixing the desk let chairs as per the drawing. The seat and back shall be made up of 1.2 cm. thick hot-pressed plywood, upholstered with leather-coth (PVC coated cloth) or fabric and moulded Polyurethane foam. The back foam must be designed with contoured lumbar support for extra comfort. It shall have dimensions: back size 46.0cm. (W) X 47.0cm. (H) and seat size 46.0cm. (W) X 46.0cm. (D). The Polyurethane foam shall be moulded with density = 45 +/-2 kg/m3 and Hardness = 20 +/- 2 kg. on Hampden machine at 25% compression. The assembly shall be a welded understructure made of M.S. oval tube 3.5cm x 1.5cm x 16BG thick and connecting supports made of dia.1.9cm. (3/4") x 14 BG M.S. E.R.W. tube. The understructure shall have an armrest support made of M.S. oval tube 3.5cm x 1.5cm x 16BG thick on the RH side with provision for mounting a folding desklet.

The complete understructure shall be powder coated. The L-shaped desklet shall be made of 1.8cm. thick MDF and membrane formed with 0.04cm. thick PVC foil of size approx 26.0cm (W) x 54.0cm.(D). It must be fitted to L-shaped desklet tube fabricated from 10BG thick MS sheet and diameter 1.9cm. (3/4") x 18 BG M.S. E.R.W. tube and black powder coated complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.4.18 Corner Table for the HOD's Cabins and waiting area:

Providing and fixing in position of the corner tables as per the drawing. The understructure shall be an assembly of tubular frames of M.S. E.R.W. tube dia.1.9cm. (3/4") x 18BG thick held together with a tubular sleeve and m/c. screws. Rubber grommets fitted glass-top mounting brackets made of 0.25thk. CR steel shall be fitted to the tubular frames. The tubular frames must be black powder coated. It shall have dimensions 44X44X40.0cm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.4.19 Chairs for the VIP rooms:

Providing and fixing in position of the chair in the rooms of the guest house as per the drawing. It shall be made of solid rubber wood with the dimensions 530W x 630D x 980H in mm. It shall be cushioned with the 1.2” foam and shall have normal fabric. Metal hardware shall be zinc coated. It shall have cappuccino (80174) D-13 AC finish. It shall have knock down construction complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.4.20 Dining Chairs for the VIP rooms: Providing and fixing dining chair of size 450mm x 450mm x 750mm made out of teak wood stud and frame work with ply finished and combined. All exposed wood work shall be duly finished with melamine polish. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5 TABLES

2.5.1 Table for the Director's Room:

Providing and fixing in position of the main table in the director's cabin as per the drawing. Work surface shall be of 40 mm thickness. It shall consist of 18mm MDF batons and 4mm natural veneer of approved shade and colour. Veneered portion of work surface shall be finished in high gloss polyester. Legs shall be made of 1.6mm thick MS clad with strips of MDF. Legs shall be hollow in order to provide the wire management. Modesty and side panel shall be made of 18mm thick MDF, pigmented black and coated with melamine. Drawer unit shall be made from 18mm thick MDF board and shall have a combination of 2 box drawer and 1 filing drawer. Drawer shall be mounted on double extension ball slides. And fronts shall be of natural veneer coated with high gloss polyester. Tentative size (2400X104X740 mm) complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.2 14/12/10/8/22/20 Seater conference table

2.5.2.1 14 Seater Conference Table for the conference rooms in the labs

Providing and fixing in position 14 seater conference table as per the drawing. Work Surface shall be 32mm Thick (±1mm) with Base Material MDF and Natural Veneer - 0.5mm on Top surface. There shall be 0.6mm balancing laminate on bottom surface and Chaffner edges shall be PU Matt painted. Veneer portion of work surface shall be finished in PU Matt paint. Veil and Cross Member shall be 18mm Thick (±1mm) with Base material - 16mm Plain particle board andPost-laminated with 0.6mm Top laminate on either side. 2mm Thk and 0.8mm Thk PVC edge banding of matching colour on outer edges of Veil. There shall be 0.8mm Thk PVC edge banding of matching colour on outer edges of cross member. Legs shall be made of 1.6mm Matt silver Anodized Aluminium extrusion. Legs shall be assembled together with a plastic glide holder at bottom and 5mm thick MS powder coated sheet at top. Size (4200 X 1200 X 750 mm)

2.5.2.2 The Plastic glide holder shall be having provision for wire entry and glide fixing. The wire carrying shall be facilitated through the hollow space between two leg extensions and the wires shall be concealed between removable rigid PVC extrusion in the leg. Access Flap and Switch Mounting Tray shall be Made from Matt silver Anodized Aluminium extrusion and plastic moulded components to facilitate access of Electrical/Data/Voice sockets access from Top and shall have Powder coated switch mounting tray made from 1.2mm MS sheet. Switches shall be mounted on cable tray as per requirement complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.
2.5.2.3 12 Seater Conference Table for Conference Room in Lab.

Providing and fixing in position 12 seater conference table as per the drawing. Work Surface shall be 32mm Thick (±1mm) with Base Material - 18+12mm MDF board and Natural Veneer - 0.5mm on Top surface. There shall be 0.6mm balancing laminate on bottom surface and Chamfer edges shall be PU Matt painted.

Veneer portion of work surface shall be finished in PU Matt paint.

Veil and Cross Member shall be 18mm Thick (±1mm) with Base material - 16mm Plain particle board and Post-laminated with 0.6mm Top laminate on either side. 2mm Thk and 0.8mm Thk PVC edge banding of matching colour on outer edges of Veil. There shall be 0.8mm Thk PVC edge banding of matching colour on outer edges of cross member.

Legs shall be made of 1.6mm Matt silver Anodized Aluminium extrusion. Legs shall be assembled together with a plastic glide holder at bottom and 5mm thick MS powder coated sheet at top.

The Plastic glide holder shall be having provision for wire entry and glide fixing. The wire carrying shall be facilitated through the hollow space between two leg extrusions and the wires shall be concealed between removable rigid PVC edge extrusion in the leg. Access Flap and Switch Mounting Tray shall be Made from Matt silver Anodized Aluminium extrusion and plastic moulded components to facilitate access of Electrical/Data/Voice sockets access from Top and shall have Powder coated switch mounting tray made from 1.2mm MS sheet. Switches shall be mounted on cable tray as per requirement. Size (4200 X 1200 X 750 mm) complete as per design, drawing and as per specifications & additional specifications & as directed by Engineer-in-Charge.

2.5.2.4 10 Seater Table for the conference room in the Guest House and Hostel and for the Security:

Providing and fixing in position 10 seater conference table as per the drawing. Work Surface shall be 32mm Thick (±1mm) with Base Material 18+12mm MDF board and Natural Veneer - 0.5mm on Top surface. There shall be 0.6mm balancing laminate on bottom surface and Chamfer edges shall be PU Matt painted.

Veneer portion of work surface shall be finished in PU Matt paint.

Veil and Cross Member shall be 18mm Thick (±1mm) with Base material - 16mm Plain particle board and Post-laminated with 0.6mm Top laminate on either side. 2mm Thk and 0.8mm Thk PVC edge banding of matching colour on outer edges of Veil. There shall be 0.8mm Thk PVC edge banding of matching colour on outer edges of cross member.

Legs shall be made of 1.6mm Matt silver Anodized Aluminium extrusion. Legs shall be assembled together with a plastic glide holder at bottom and 5mm thick MS powder coated sheet at top.

The Plastic glide holder shall be having provision for wire entry and glide fixing. The wire carrying shall be facilitated through the hollow space between two leg extrusions and the wires shall be concealed between removable rigid PVC extrusion in the leg. Access Flap and Switch Mounting Tray shall be Made from Matt silver Anodized Aluminium extrusion and plastic moulded components to facilitate access of Electrical/Data/Voice sockets access from Top and shall have Powder coated switch mounting tray made from 1.2mm MS sheet. Switches shall be mounted on cable tray as per requirement. Size (3000 X 1200 X 750 mm) complete as per design, drawing and as per specifications & additional specifications & as directed by Engineer-in-Charge.

2.5.2.5 8 Seater Table for the meeting hall in the Guest House:

Providing and fixing in position 8 seater conference table as per the drawing. Work Surface shall be 32mm Thick (±1mm) with Base Material 18+12mm MDF board and Natural Veneer - 0.5mm on Top surface. There shall be 0.6mm balancing laminate on bottom surface and Chamfer edges shall be PU Matt painted.

Veneer portion of work surface shall be finished in PU Matt paint.

Veil and Cross Member shall be 18mm Thick (±1mm) with Base material - 16mm Plain particle board and Post-laminated with 0.6mm Top laminate on either side. 2mm Thk and 0.8mm Thk PVC edge banding of matching colour on outer edges of Veil. There shall be 0.8mm Thk PVC edge banding of matching colour on outer edges of cross member.

Legs shall be made of 1.6mm Matt silver Anodized Aluminium extrusion. Legs shall be assembled together with a plastic glide holder at bottom and 5mm thick MS powder coated sheet at top.

The Plastic glide holder shall be having provision for wire entry and glide fixing. The wire carrying shall be facilitated through the hollow space between two leg extrusions and the wires shall be concealed between removable rigid PVC extrusion in the leg. Access Flap and Switch Mounting Tray shall be Made from Matt silver Anodized Aluminium extrusion and plastic moulded components to facilitate access of Electrical/Data/Voice sockets access from Top and shall have Powder coated switch mounting tray made from 1.2mm MS sheet. Switches shall be mounted on cable tray as per requirement. Size (2400 X 1200 X 750 mm) complete as per design, drawing and as per specifications & additional specifications & as directed by Engineer-in-Charge.

2.5.2.6 22 Seater Conference Table for meeting / V.C in the Admin Building:

Providing and fixing the conference table for the meeting rooms as per the drawing. It shall be made of the 0.4mm thick PVC membrane foil clad on the substrate of MDF using PU glue for better adhesion. This foil shall be pre-coated with a layer of polyurethane for better scratch resistance. Work surface shall be 37.5mm thick (18mm + 19mm baton + 1mm DL + 0.4mm membrane). It shall have water fall edges with the radius of 18mm on the top edge.

Legs shall be made from 36mm Pre-Laminated Particle board (18+16) having a straight profile with half round edges and clad with 0.6mm thick Post-forming laminate. Overall thickness of the leg shall be 38mm. Modesty panel shall be made of Pre-Laminated Twin boards of 16mm thick. Each 2 seater module shall have dimensions 1360W x 600D complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.2.7 20 Seater Conference Table for Meeting Room in the Admin Building:

Providing and fixing the conference table for the meeting rooms as per the drawing. It shall be made of the 0.4mm thick PVC membrane foil clad on the substrate of MDF using PU glue for better adhesion. This foil shall be pre-coated with a layer of polyurethane for better scratch resistance. Work surface shall be 37.5mm thick (18mm + 18mm baton + 1mm DL + 0.4mm membrane). It shall have water fall edges with the radius of 18mm on the top edge.

Legs shall be made from 36mm Pre-Laminated Particle board (18+16) having a straight profile with half round edges and clad with 0.6mm thick Post-forming laminate. Overall thickness of the leg shall be 38mm. Modesty panel shall be made of Pre-Laminated Twin boards of 16mm thick. Each 2 seater module shall have dimensions 1360W x 600D complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.
2.5.3 Main table for F & AO and other cabins in Lab Engineering Services:
Providing and fixing in position executive main table as per the drawing. Top (1800 X 900 mm) shall be 25mm thick plain particle board clad with 0.6mm thick post formed laminate and 1mm thick backing laminate and flat edge duly sealed with 2mm thick PVC beading. Modesty shall be 18mm thick plain particle board clad with 1mm thick decorative laminate on both sides and edge sealed with 2mm thick PVC beading complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.4 Side Unit for the Director Table:
Providing and fixing in position of the side unit in the director's cabin as per the drawing. Work surface shall be of 40 mm thickness. It shall consist of 18mm MDF batons and 4mm natural veneer. Veneered portion of work surface shall be finished in high gloss polyester and black portion of the work surface shall have a base coat of polyester and top coat of polyurethane.

Modesty and side panel shall be made of 18mm thick MDF, pigmented black and coated with melamine. Drawer shall be made from 18mm thick MDF board and shall have a combination of 2 box drawer and 1 filing drawer. Drawer shall be mounted on double extension ball slides. And fronts shall be of natural veneer coated with high gloss polyester. Tentative Size (1400 X 580 X 690 mm) complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.5 Back Unit for the DirectorTable:
Providing and fixing in position of the back unit of the table in the director's cabin as per the drawing. Work surface shall be of 40 mm thickness. It shall consist of 18mm MDF batons and 4mm natural veneer. Veneered portion of work surface shall be finished in high gloss polyester and black portion of the work surface shall have a base coat of polyester and top coat of polyurethane.

Doors shall be 23mm thick. Doors shall consist of 18mm MDF, 4mm veneer and 1mm backcladding decorative laminate. Veneer doors shall be coated with high gloss polyester and pigmented doors coated with melamine and doors shall be mounted on concealed hinges. Shelves and partitions shall be made of 18mm thick MDF, pigmented black and coated with melamine complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.6 Reception Table for the reception/waiting area in the Guest House and Library in Hostel:
Providing and fixing in position of the reception table as per the drawing. Top of the table shall be made up of rubber wood with clean matt PU finish 18mm thick. Inside radius, outside radius and depth shall be 700, 1350 and 200mm respectively. It shall have frosted glass 10mm thick with diamond cut finish on the edges. Inside radius, outside radius and depth of glass shall be 1202.5, 1402.5 and 200mm respectively. Angles sustained with the arc must be 60 degrees. Modesty panel shall be made of MS perforated sheet and shall have dimensions 0.8mm (thick) x 66.5mm (height) below the work surface and 0.8mm (thick) x 260mm (height) above the work surface. Legs of the desk shall be made of 1.6mm thick MS tube of diameter 50.8mm and height 604mm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.7 Main Table for the Scientists (in the lab area) and Asst. Librarian:
Providing and fixing in position main table as per the drawing. Top (1500 X 750 X 740 mm) shall be 25mm thick plain particle board clad with 0.6mm thick approved post formed laminate and 1mm thick backing laminate and flat edge duly sealed with 2mm thick PVC beading.

Modesty shall be 18mm thick plain particle board clad with 1mm thick decorative laminate on both sides and edge sealed with 2mm thick PVC beading etc. complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.8 Side Table for the Scientist's and Librarian's Table:
Providing and fixing in position side table as per the drawing. Top (1050X520X705mm) & side panel shall be 25mm thick plain particle board clad with 0.6mm thick post formed laminate and 1mm thick backing laminate and flat edge duly sealed with 2mm thick PVC beading.

Modesty shall be 18mm thick plain particle board clad with 1mm thick decorative laminate on both sides and edge sealed with 2mm thick PVC beading etc. complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.9 Back Unit for the Scientist's and Librarian's tables:
Providing and fixing in position back table as per the drawing. Top (1280X520mm) & side panel shall be 25mm thick plain particle board clad with 0.6mm thick post formed laminate and 1mm thick backing laminate and flat edge duly sealed with 2mm thick PVC beading.

Modesty shall be 18mm thick plain particle board clad with 1mm thick decorative laminate on both sides and edge sealed with 2mm thick PVC beading complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.10 Drawer Units for the Scientist's and Assistant Librarian’s Table:
Providing and fixing in position free standing drawer units with the scientist’s tables as per the drawing. It shall have dimensions 646 H X 399 W X 440 D in mm. 0.8 thick CRCA shall be used for Body Shell, Drawer Front & tray, Front Side Stiffener, Rear Side Stiffener & Bottom and 1.2 thick CRCA for top Stiffener & Bottom stiffener. All Drawers shall be with Double extension precision ball slide, 390mm wide Pedestals File drawer. It shall have 585mm deep units. Drawer pulling, side wise tapered recess shall be provided in shell behind Drawer Fronts. It must have 10 lever Cam Lock & Central RH locking with actuator & lock channel mechanism for ‘Box-File’ & ‘3 Box’ Pedestals. It shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out. It shall have Epoxy Polyester Powder clad to the thickness of 50 microns (+/-10). complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.11 Main Table for the Head of the Departments, COFA, Head Engineering, COSP and Librarian:
Providing and fixing in position of the main table as per the drawing. Top & side panel shall be made up of 25mm thick pre-laminated board and modesty panel shall be made up 18mm pre-laminated board as shown in the drawing. Main table shall have dimensions 2000W X 1000D X 750H in mm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.
2.5.12 Side Table for the Head of the Departments, COFA, Head Engineering, COSP and Librarian:
Providing and fixing in position of the side table as per the drawing. Top & side panel shall be made up of 25mm thick pre-laminated board and modesty panel shall be made of the 18mm pre-laminated board as shown in the drawing. It shall have dimensions 1380W X 600D X 750H in mm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.13 Back unit for the Tables of the Head of the Departments, COFA, Head Engineering, COSP and Librarian:
Providing and fixing in position of the back unit for the tables as per the drawing. Top (1380WX515DX610H) & side panel shall be made up of 25mm thick pre-laminated board and modesty panel shall be made of the 18mm pre-laminated board as shown in the drawing complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.14 Drawer Units for the Head of the Departments, COFA, Head Engineering, COSP and Librarian:
Providing and fixing in position of the mobile drawer units with the tables as per the drawing. Top shall be made up of 25mm thick pre-laminated board and drawer shall be made of the 18mm pre-laminated board as shown in the drawing. Slides shall be Nylon Roller Slides. It shall have two drawers and dimensions 400WX500DX385H in mm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.15 Table for the Common room in the Hostel:
Providing and placing in position of the tables in the common room of the hostel as per the drawing. Top of the table shall be made from 25mm thick pre-laminated board with 2mm thick PVC edge bending. In the understructure legs shall be made form MS ERW tube connecting the top support and base. Top support shall be made form MS U brackets (3nos) welded to 63.5mm diameter x 1.6mm thick MS ERW tube. It shall be fixed on the top of the leg tube with the M12 bolt. Top support shall be fixed to wooden top with the self-taping screws. It shall be powder coated with average thickness 40 microns. Base of the table shall also be made from the MS ERW tubes, formed at one end and welded at other end with MS ERW tube. Height adjustment shall be provided. Finish shall be with chromium (0.2-0.5 microns) over nickel plating (thickness 10-14 microns). Size ( 894 X 894 750 mm) complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.16 Discussion Table for the Director's Room and Rest Room:
Manufacturing, supplying and placing in position of the tables in the Director’s Room & Rest Rooms per the drawing. Top of the table shall be made from 25mm thick pre-laminated board with 2mm thick PVC edge bending. In the understructure legs shall be made form MS ERW tube connecting the top support and base. Top support shall be made form MS U brackets (3nos) welded to 63.5mm diameter x 1.6mm thick MS ERW tube. It shall be fixed on the top of the leg tube with the M12 bolt. Top support shall be fixed to wooden top with the self-taping screws. It shall be powder coated with average thickness 40 microns. Base of the table shall also be made from the MS ERW tubes, formed at one end and welded at other end with MS ERW tube. Height adjustment shall be provided. Finish shall be with chromium (0.2-0.5 microns) over nickel plating (thickness 10-14 microns). Size ( 894 X 750 mm) complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.17 Reception Table for Admin Building and Library:
Manufacturing, supplying and placing in position of the reception table as per the drawing. Top of the table shall be made up of rubber wood with clean matt PU finish 18mm thick. Inside radius, outside radius and depth shall be 700, 1350 and 200mm respectively. It shall have frosted glass 10mm thick with diamond cut finish on the edges. Inside radius, outside radius and depth of glass shall be 1202.5, 1402.5 and 200mm respectively. Angles sustained with the arc must be 60 degrees. Modesty panel shall be made of MS perforated sheet and shall have dimensions 0.8mm (thick) x 66.5mm (height) below the work surface and 0.8mm (thick) x 260mm (height) above the work surface. Legs of the desk shall be made of 1.6mm thick MS tube of diameter 50.8mm and height 604mm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.18 Reception Table for the reception/waiting area in the Guest House and Library in Hostel:
Providing and fixing in position of the reception table as per the drawing. Top of the table shall be made up of rubber wood with clean matt PU finish 18mm thick. Inside radius, outside radius and depth shall be 700, 1350 and 200mm respectively. It shall have frosted glass 10mm thick with diamond cut finish on the edges. Inside radius, outside radius and depth of glass shall be 1202.5, 1402.5 and 200mm respectively. Angles sustained with the arc must be 60 degrees. Modesty panel shall be made of MS perforated sheet and shall have dimensions 0.8mm (thick) x 66.5mm (height) below the work surface and 0.8mm (thick) x 260mm (height) above the work surface. Legs of the desk shall be made of 1.6mm thick MS tube of diameter 50.8mm and height 604mm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.19 Centre table for the reception/waiting area in the Guest House, Admin Building, visitor's room, Director's Room and common room in the Hostel:
Providing and fixing glass top rectangular top center table as per the drawing. It shall have overall size 1000mm(W)x650mm(D)x450mm(H). The understructure of the table shall be made of MDF laminated with wooden texture and water proof paper. Top glass shall be 10mm thick and bottom glass shall be 5mm thick. The accessories used in the table shall be metal alloy and stainless steel complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.5.20 Table for the Dining hall in the Hostel:
Providing and fixing in position of the canteen tables as per the drawing. Top shall be made of stainless steel with the dimensions 1200 x 600 mm. It shall have PLB insert for durability. Understructure i.e tabular frames shall be made of 50.8 x 50.8mm x 1.2mm thick powder coated ERW tubes at base which must be welded and fixed to top with screws. Tabular stiffeners must be provided between 2 vertical frames. Tubes shall be closed with the plastic caps. Seats which are provided with the table shall be SS Round Stool type. Level adjusters shall be provided in order to take care of the unevenness of the floor complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.
2.5.21 Table for the Dining Hall:
Providing and placing in position of the tables for the dining hall as per the drawing. Top shall be made up of Rubber Wood of thickness 18mm and dimensions 800x800 mm. It shall have serrated stainless steel pedestal of height 720mm complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6 HOSTEL & GUEST HOUSE'S BEDS/CHAIRS/SIDE TABLE
2.6.1 Double Bed and head rest for the VIP rooms in the guest house:
Providing and fixing of bed of size 1800W x 1950L x 375 in mm with teak wood stud of 50 mm x 50 mm and top, bottom teak wood beam of 35 mm x 50 mm. The bed top and side shall be of 12 mm thick ply. 100 mm approved make cushion shall also be provided over bed surface. side surface of the bed shall be finished with 4 mm thick approved shade veneer duly finished with melamine polish with groove design. All complete as per the direction of Engineer-in-Charge / Architect. Head rest shall have size 1950 x 600 in mm made up of 19 mm block board which shall be fixed to the existing wall. The board surface shall be finished with 4 mm thick veneer of approved shade with 50 mm thick projected cushion.

2.6.2 Double Bed and head rest for the VIP rooms in the guest house:
Providing and fixing of bed size 1800W x 1950L x 375 in mm with teak wood stud of 50 mm x 50 mm and top, bottom teak wood beam of 35 mm x 50 mm. The bed top and side shall be of 12 mm thick ply. 100 mm approved make cushion shall also be provided over bed surface. side surface of the bed shall be finished with 4 mm thick approved shade veneer duly finished with melamine polish with groove design. All complete as per the direction of Engineer-in-Charge / Architect. Head rest shall have size 1950 x 600 in mm made up of 19 mm block board which shall be fixed to the existing wall. The board surface shall be finished with 4 mm thick veneer of approved shade with 50 mm thick projected cushion.

The veneer surface shall be duly finished with melamine polish with groove design. All complete as per the direction of Engineer-in-Charge / Architect. Teak wood leaping shall also be provided around the block board as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6.3 Bed side table for the VIP rooms in the guest house:
Providing and fixing of bed side table of 600 mm x 600 mm x 450 mm made up of 19 mm block board finished with 4 mm thick veneer duly finished with melamine polish. groove design etc. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6.4 Chairs for the VIP rooms:
Providing and fixing in position of the chair in the rooms of the guest house as per the drawing. It shall be made of solid rubber wood with the dimensions 530W x 630H x 880H in mm. It shall be cushioned with the 1.2” foam and shall have normal fabric. Metal hardware shall be zinc coated. It shall have cappuccino (80174) D-13 AC finish. It shall have knock down construction complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6.5 TV Trolley for all the rooms in Guest House:
Providing and fixing of TV Unit of size 1200(W) x 395(D) x 767(H) made up of 15mm thick prelaminated particle board having melamine coating. The structure shall be made of hollow plastic tubes. The construction shall be knock down construction complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6.6 Dining Table for the VIP room:
Providing and fixing of Dining table of the size 1800mm x 900mm x 750mm. It shall be made out of 40 mm x 75 mm teak wood stud, 25 mm x 150 mm teak wood beam as frame with 19 mm block board finished with 4 mm thick veneer duly finished with melamine polish. Necessary wooden bedding of size 12 mm x 40 mm shall be provided on the edges. All the wooden sections shall be duly finished with melamine polish. 120 mm thick polished etching glass shall also be provided on top. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6.7 Dining Chairs for the VIP rooms:
Providing and fixing dining chair of size 450mm x 450mm x 750mm made out of teak wood stud and frame work with ply finished with cushion. All exposed woodwork shall be duly finished with melamine polish. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6.8 Single Beds and bed head rest for the ordinary rooms in the Guest House:
Providing and fixing of bed of size 1050W x 1950L x 375 in mm with teak wood stud of 50 mm x 50 mm and top, bottom teak wood beam of 35 mm x 50 mm. The bed top and side shall be of 12 mm thick ply. 100 mm approved make cushion shall also be provided over bed surface. The side surface of the bed shall be finished with 4 mm thick approved shade veneer duly finished with melamine polish with groove design. All complete as per the direction of Engineer-in-Charge / Architect. Providing, fitting and fixing of bed head rest of size 1950 x 600 in mm made up of 19 mm block board which shall be fixed to the existing wall. The board surface shall be finished with 4 mm thick veneer of approved shade with 50 mm thick projected cushion.

The veneer surface shall be duly finished with melamine polish with groove design. All complete as per the direction of Engineer-in-Charge / Architect. Teak wood leaping shall also be provided around the block board. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6.9 Bed side table for the ordinary rooms in the Guest House:
Providing and fixing of bed side table of 600 mm x 600 mm x 450 mm made up of 19 mm block board finished with 4 mm thick veneer duly finished with melamine polish. groove design etc. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.
2.6.10 Computer Table for the ordinary rooms in the Guest House, Hostel and Cyber Cafe:
Providing and fixing in position of the computer table as per the drawing. Its top shall be made of 18 mm melamine laminated particle board & rest 15 mm paper laminated particle board. It must have load bearing capacity of 28 -32 kgs. It shall have dimensions 900W x 500D x 750H in mm. Melamine laminated top and rest paper lamination shall be in honey colour. It shall have knock down structure. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.6.11 Single Bed for the Hostel:
Providing and fixing in position of the single bed as per the drawing. It shall be made of M.S pipe 24.4 X 50.8 X 1.2 thick, M.S. pipe 19.05x 19.05 x 0.8 thick, M.S. angle 20x20x1.6 thick, M.S. pipe of dia. 50.8 x 0.9 thick, M.S. pipe of dia. 15.875 x 0.8 thick. It shall have dimensions length 1975mm, breadth 1008mm and height 525mm as shown in the drawing. Frame shall be powder coated in black with DFT 50-60 microns. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.7 MODULAR WORKSTATION:

Material & Construction

Half Height Partition for the modular workstations: Providing and fixing the partitions as per the below configuration:

Partition: The modular partitions shall not be grouted in the floor. The thickness of partition shall be 65mm (+/- 5mm) and height 1200mm (+/- 50mm). The modular partition shall be an assembly of the following parts:

Frames:
The framework for the partition shall be comprised of a welded main frame made of two vertical uprights, a top horizontal tube and a bottom ‘C’ channel. The vertical upright shall be made from 1.5mm thick CRCA M.S. Grade D formed into ‘C’ channel of 41.5 x 50. The top horizontal shall be 1.2mm thick M.S. tube of 38.1 x 25.4 mm. The bottom horizontal shall be 1.5mm thick M.S. ‘C’ channel of size 38.1mm x 31.8mm.

The vertical upright shall have side slots of size 60mm (h) x 18mm (w), for passage of cables throughout the width of the panel. The bottom horizontal shall have 2 slots of size 100mm (l) x 20mm (w) for entry of cables into the system. The vertical upright section shall have fronts slits for fixing worksurface, storage unit and accessory tile brackets at a pitch of 25.4mm.

The vertical upright shall have side slots of size 60mm (h) x 18mm (w), for passage of cables throughout the width of the panel. The bottom horizontal shall have 2 slots of size 100mm (l) x 20mm (w) for entry of cables into the system.

for entry of cables into the system. The vertical upright section shall have fronts slits for fixing worksurface, storage unit and accessory tile brackets at a pitch of 25.4mm.

Levers

The partition panels shall have leavers made out of Nylon studs with screw insert, with adjustment of +10mm.

Trens

The trims shall be powder coated aluminium alloy (of grade He-9 63400) curved trims of 69 mm X 10.5 mm and average wall thickness of 1.2mm and shall be fitted on the top horizontal using M6 X 55L bolts and nut and the open vertical ends of the upright using M6 X 25L bolt and nut.

Electricals:

Raceway: The raceway shall be powder coated in 0.8mm thick M.S. CRCA Grade ’D’ as per IS:513-1994, which shall be hinged using plastic hinge for fascia and shall be made in PP(Black). These shall be provided at the bottom level as well as at the belline level above worksurface.

The fascia shall be with or without cut-outs for mounting of switches. The switches shall be mounted 50mm from the edge of the fascia.

Tiles:

All the modules of the frames shall be snap fitted with tiles on both sides fitted with plastic buttons

Fabric Tiles:
It shall be fabric upholstered metal tiles in 0.8mm thick M.S. CRCA Grade ’D’ as per IS: 513-1994.

Whiteboard tile:
It shall consist of 0.9mm th plain particle board confirming to IS 3087-1985 with white or approved colour/shade glossy/matt laminate 1.0mm th as per IS: 2046-1969. All the edges of the worksurface shall be finished with 0.4mm th PVC edging & the tiles shall be fitted with M.S. Buttons on the rear side which shall be hooked with the main frame.

Glass tile:
It shall have 5mm th glass fitted into the main frame using glass corner clips made from Nylon66 which should be directly fitted into the vertical upright at the four edges of the glass. At the top the glass should be fitted by combination of glass corner clips at the bottom edges of the glass and glass clips made from Nylon66 which supports the glass at the top edge through horizontal of the frame. Powder coated 1.2mm th aluminum alloy horizontal and vertical extrusions should be press fitted using corner joinery for glass made of Nylon66 to form glass frames which should be hooked into the main frames but should not support the glass.

Metal Tile:
It shall be powder coated metal tile in 0.6mm thickness CRCA Grade D as per IS: 513 - 1994

Fabric Tackable Tile:
It shall consist of metal sheet frame of M.S. CRCA Grade sheet as per IS: 513-1994 and shall be of minimum thickness 0.6mm, with inlay of 6mm thick P.E. foam. Fabric of approved shade shall be suitably glued to the framework. Tiles shall be fitted with Nylon 66 plastic buttons fitted on the rear side for fixing to partition frame. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

CPU interface fixed on the Worktops:
The work surface should have provision for CPU interface make freemote or equivalent. the device shall act as the interface between the user and the CPU with the help of a single device that does not exceed 340mm x 180mm x 18mm and can be incorporated seamlessly beneath the work surface. The device needs to be a passive device that does not require any additional Power supply with following features:

a) Provide the user remote accessibility to all the key controls of the PC that may be required to operate the PC on a daily basis, i.e. On / Off button, Headset & Mic jacks, 2 USB Ports, CD / DVD optical drive. Operating lights of the PC, without having to physically access the PC.

b) Provide the user the ability to switch off the PC, in a normal manner without loss of data or corruption of Operating System, from within the work-surface with the push of a single button as opposed to having to necessarily use the MS Window Modular workstations should be a tile based system with frames which should be fitted on both sides. The Framework should be made of two vertical uprights, a top horizontal tube and a bottom C channel

The workstation should have raceways for electrical and data cables which

Should be provided at the bottom level as well as at level above the work surface

The work surface should be made up of pre laminated particle board of approved make.

There should be a drawer unit provided with two drawer and filing box. The
drawer should be powder coated standing to the tests specified.
The modular workstation should be provided with a metal keyboard tray and a
CPU trolley.
The modular workstaion should have a glass tile, a fabric tile, the free enc
end post should be grouted.
Each workstation should be provided with CPU interface fixed to the the worktops
of the approved makes.
The quality and make should be of the approved makes

2.8 FILE STORAGE COMPACTORS:

Material & Construction
File Storage Compactor: Providing and fixing in position of the compactor as per the drawing. It shall consist of n (given below) bodies as shown in the drawing and each of 915mm wide and 457mm depth. It shall have height from ground 2080 mm (1980 body + 65 undercarriage + 35 channel system). Shelves shall be made of 0.8 thk CRCA steel conforming to IS: 513 Gr.D. The Undercarriage shall be welded frame made of HR sheet 3.15 mm thk conforming to IS:10748 suitably fabricated to take the loads. It shall be suitably powder coated with the dry film thickness of 40 microns. It must have a drive wheel and ‘Sprocket-Chain-Tensioner’ arrangement mounted rigidly into body side for the easy movement of the bodies. A Centralized locking arrangement shall be provided through Locking Stiffener mounted into back of Single Last unit so that it gets locked on channels when all the units are brought together. It shall have given below no. of bodies and configuration: All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

The body should be powder coated with dry film thickness of 40 microns
Should have a drive wheel and sprocket chain tensioner arrangement mounted into body side for the easy movement of the bodies

Compactors should have a centralized locking arrangement which should be provided with locking stiffene mounted on the single last unit

The compactors should be of the approved make

2.9 STORAGE UNITS FOR WORKSTATIONS:

Material & Construction
Should have twin door with self closing hinges of wooden finish. The locking mechanism should be 3 point locking mechanism.
Should have epoxy polyester powder coating finish
Should be of approved make.

2.10 INTERIORS

2.10.1 WOODEN FLOORING
Flooring in the conference rooms in the Library Area and Admin Building:
Providing and Fixing natural treated Wooden Flooring 15mm thick of EURO or equivalent make (EU9004, vertical range). All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

2.10.2 Full Height Partition
Providing and fixing full height partition with Veneer of approved shade as per design out of partial frame 2’ x 1 1/2” at the rate 2’ X 2’ grid covered with 12mm comm. Plywood finished in veneer on both the sides/Glazed as per design duly finished with melamine polish. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charge.

Providing and fixing Wooden panelling as per design out of partial frame 1” x 1”1/2” at the rate 2’ X 2’ grid covered with 12mm comm. Plywood finished in veneer, with duly finished with melamine polish.

2.10.3 Window Dressing
Vertical Fabric Blinds of 4” width and height matching to the window opening of as per approve make and shade with manual operation for swivel and opening.

2.10.3 Carpeting
Providing and laying of carpet having Multilevel Textured tufted loop pile . Pile fiber 100% Nylon or Nylon 6.6.Dye Method : Solution Dyed or Milliton.Pile Height : 4 mm to 5 mm.
Primary Backing : Polyester Non Woven.Pile Treatment : Stain Protector or Stain Smart.
Wear Classification : Heavy or Severe use. All complete as per design, drawing and as per specifications / additional specifications & as directed by Engineer-in-Charoe.

3.0 TEST SPECIFICATION
1. Powder Coating Test : all steel coated surfaces to follow the following testing standards

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>CHARACTERISTIC</th>
<th>SPECIFICATION</th>
<th>METHOD USED</th>
<th>STANDARDS REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DFT ( DRY FILM THICKNESS)</td>
<td>35 MICRON(min)</td>
<td>ELCOMETER OR DFT METER</td>
<td>ASTM-D 1186-93, IS 13871:1993, IS 101</td>
</tr>
<tr>
<td>2</td>
<td>GLOSS AT 60°</td>
<td>70 ±5 UNITS</td>
<td>GLOSS METER</td>
<td>ASTM-D 523-89 ISO 2813</td>
</tr>
</tbody>
</table>

DIN-67530, IS 13871:1993, IS 101
### Performance Test Results (Chemical Spot Tests)

#### Testing Procedure:

Chemical spot tests for non-volatile chemicals shall be made by applying 5 drops of each reagent to the surface to be tested and covering with a 1-1/4" dia. watch glass, convex side down to confine the reagent. Spot tests of volatile chemicals shall be tested by placing a cotton ball saturated with reagent on the surface to be tested and covering with an inverted 2-ounce wide mouth bottle to retard evaporation. All spot tests shall be conducted in such a manner that the test surface is kept wet throughout the entire test period, and at a temperature of 77° ±3° F. For both methods, leave the reagents on the panel for a period of one hour. At the end of the test period, the reagents shall be flushed from the surface with water, and the surface scrubbed with a soft bristle brush under running water, rinsed and dried. Volatile solvent test areas shall be cleaned with a cotton swab soaked in the solvent used on the test area. Immediately prior to evaluation, 16 to 24 hours after the reagents are removed, the test surface shall be scrubbed with a damp paper towel and dried with paper towels.

#### Test Evaluation:

Evaluation shall be based on the following rating system:

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No detectable change.</td>
</tr>
<tr>
<td>1</td>
<td>Slight change in color or gloss.</td>
</tr>
<tr>
<td>2</td>
<td>Slight surface etching or severe staining</td>
</tr>
<tr>
<td>3</td>
<td>Pitting, catering, swelling, or erosion of coating. Obvious and significant deterioration.</td>
</tr>
</tbody>
</table>

After testing, panel shall show no more than three (3) Level 3 conditions.

#### Test Reagents

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Chemical Reagent</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acetate, Amyl</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>2</td>
<td>Acetate, Ethyl</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>3</td>
<td>Acetic Acid, 98%</td>
<td>Watch glass</td>
</tr>
<tr>
<td>4</td>
<td>Acetone</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>5</td>
<td>Acid Dichromate, 5%</td>
<td>Watch glass</td>
</tr>
<tr>
<td>6</td>
<td>Alcohol, Butyl</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>7</td>
<td>Alcohol, Ethyl</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>8</td>
<td>Alcohol, Methy</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>9</td>
<td>Ammonium Hydroxide, 28%</td>
<td>Watch glass</td>
</tr>
<tr>
<td>10</td>
<td>Benzene</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>11</td>
<td>Carbon Tetrachloride</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>12</td>
<td>Chloroform</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>13</td>
<td>Chromic Acid, 60%</td>
<td>Watch glass</td>
</tr>
<tr>
<td>14</td>
<td>Cresol</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>15</td>
<td>Dichlor Acetic Acid</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>16</td>
<td>Dimethyformamide</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>17</td>
<td>Dioxane</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>18</td>
<td>Ethyl Ether</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>19</td>
<td>Formaldehyde, 37%</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>20</td>
<td>Formic Acid, 90%</td>
<td>Watch glass</td>
</tr>
<tr>
<td>21</td>
<td>Furfural</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>22</td>
<td>Gasoline</td>
<td>Cotton ball &amp; bottle</td>
</tr>
<tr>
<td>23</td>
<td>Hydrochloric Acid, 37%</td>
<td>Watch glass</td>
</tr>
<tr>
<td>24</td>
<td>Hydrofluoric Acid, 48%</td>
<td>Watch glass</td>
</tr>
<tr>
<td>25</td>
<td>Hydrogen Peroxide, 3%</td>
<td>Watch glass</td>
</tr>
<tr>
<td>26</td>
<td>Iodine, Tincture of</td>
<td>Watch glass</td>
</tr>
</tbody>
</table>
4.0 TEST SPECIFICATIONS AS REQUIRED FOR CHAIRS AS PER BIFMA

(Bureau of Industrial Furniture Manufacturer’s Association)

4.1 BACK DURABILITY TEST – CYCLE

Purpose:
On tilting chairs / to evaluate the ability of the chair to withstand the fatigue stress and wear that occurs as a result of the user tilting back in the chair.

Procedure:
A load of 45 Kg placed on seat and back pulled / pushed with a load of 34 Kg for 1,20,000 cycles at the rate of 9 +/-cycles / minute. A load of 400 kgs applied till deflection stabilizes.

Acceptance level:
No structural breakage or loss of serviceability

4.2 SEATING IMPACT TEST- CYCLIC

Purpose:
On tilting chairs & non-tilting chairs / to evaluate the ability of the chair to withstand the fatigue stress and wear that occurs as a result of the user drooping into the chair.

Procedure:
A load of 57 kgs dropped from a height of 51 mm (2") on the seat for 1,00,000 cycles at the rate of 30 +1-2 cycles / minute.

Acceptance level:
No structural breakage or loss of serviceability including stackability if applicable

4.3 BASE TEST – CYCLIC

Purpose:
On all pedestal bases / to evaluate the ability of the pedestal to withstand stresses such as those caused by shock loads.

Procedure:
A load of 600 kgs applied for 1 minute.
A load of 400 kgs applied till deflection stabilizes.
Acceptance level:
No structural breakage or loss of serviceability

4.4 CASTOR DURABILITY TEST

Purpose:
On chairs fitted to pedestal bases / to evaluate the ability of the pedestal base and castors to withstand stresses and wear such as those caused by the user moving back and forth while maintaining castor retentions.

Procedure:
A load of 136 kgs placed in a hopper and mounted on the pedestal base with castors free to rotate and swivel / fit is then pulled/pushed to and for with a stroke length of approx. 762 mm for 1,00,000 cycles at the rate of 9 +/-cycles / minute. A load of 400 kgs applied till deflection stabilizes.
Acceptance level:
No structural breakage or loss of serviceability

4.5 CASTOR RETENTION TEST:

Purpose:
On castors rese to the pesessai cases susjexceo to the casser ouraxwey ies / as par or the casser ouraxwey ies

Procedure:
At the conclusion of the durability cycling, a pulling force applied to the castors

* Where concentrations are indicated, percentages are by weight
4.6 CASTOR WHEEL PULL-OUT TEST:

Propose:
On castors fitted pedestal bases I as part of the castor durability test

Procedure:
A pulling force applied on the castors fitted to the pedestal base

Acceptance level:
The castor-assembly should not separate from the vertical castor pin fitted to the pedestal base upto a force less than 14 kgs.

4.7 CASTOR WHEEL PULL-OUT TEST:

Purpose:
On castors fitted to pedestal bases / a part of the castor durability test

Procedure:
A pulling force applied between the two castors wheels of the castor assembly

Acceptance level:
The castor-wheels should not separate from the castor axle pin of the castor assembly upto a force less than 100 kgs.

4.8 CASTOR BREAKABILITY TEST

Purpose:
On castors / as part of the castor durability test

Procedure:
A load of 3.5 kgs dropped on the castor assembly from a height of 50.0 cm

Acceptance level:
No structural breakage or loss of serviceability

5.0 LIST OF APPROVED MAKES

<table>
<thead>
<tr>
<th>SL NO</th>
<th>DESCRIPTION</th>
<th>APPROVED MAKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COMPACTOR GODREJ / STEELCASE / HAWORTH</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>HINGES HETTICH/HAFFLE</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>LEGS HETTICH/HAFFLE</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>LOCKS HETTICH/HAFFLE, GODREJ</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>DOUBLE EXTENSION BALL HETTICH/HAFFLE, GODREJ</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>PP SHEETS MANDHANA/DUGAR/KHANNA</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>ISOThELIC RESIN MECHEMCO/KAYSYNTHORSYN</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>PP DAMPERS GODREJ/LOYAL WOOD or</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>MELAMINE POLISH ASIAN/ICI/NEROLAC/BERGER</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>BLINDS VISTA LEVOLOR/HUNTER</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>PAINT ASIAN/ICI/NEROLAC/BERGER</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>TEXTURE PAINT SPECTRUM/HERITAGE</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>HANDLES DORMA / GODREJ / HETTICH</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>LAMINATE GREEN LAM/MERINO/NOVAPAN</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>GLASS SAINT GOBAIN/ MODI GUARD / ASAHI</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>FABRIC RESPONSE/ U-LIKE/GRANDHANDLOOM</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>PRELAMINATED PARTICLE BOARD NOVAPAN/ MERINO</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>PLAIN PARTICLE BOARD MERINO/NOVAPAN/GREENLAM</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>BLOCK BOARD CENTURY/ GREEN PLY/ VERGO/KITPLY</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>PLASTIC LAMINATED SHEET 1.5MM AND 1.0MM THICK MERINO/ GREEN PLY/CENTURY</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>EDGE BANDING TAPE REHAU/ DOLKIN</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>METAL LAMINATE GREENLAM/MERINO</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>DOOR HANDLE LOCK DORSET/ GODREJ/ NATIONAL</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>MULTI PURPOSE LOCKS DORSET/ GODREJ</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>GLASS WOOL U.P TWIGA</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>VENEER GREENLAM/CENTURY/KITPLY</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>BOARD PLY GREENLAM/CENTURY/KITPLY</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>GLASS FILM 3M</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>CHAIR HAWORTH / GODREJ/STEELCASE</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>MODULAR FURNITURE HAWORTH / GODREJ/STEELCASE</td>
<td></td>
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</tr>
<tr>
<td>32</td>
<td>SOFA</td>
<td>HAWORTH / GODREJ/DURIAN</td>
</tr>
<tr>
<td>33</td>
<td>STORAGES</td>
<td>HAWORTH / GODREJ/STEELCASE</td>
</tr>
<tr>
<td>34</td>
<td>ANTI STATIC PVC FLOOR</td>
<td>ARMSTRONG / LG/FIRFLOOR</td>
</tr>
</tbody>
</table>