



**UNIVERSITY DEPARTMENT OF BOTANY  
RANCHI UNIVERSITY, RANCHI**

Ref. No. RV/PO 1443/2016 (Bot.)

Date: 10-12-2016

**LIMITED TENDER NOTICE**

Sealed tender in two envelopes (Technical & Financial Bid) are invited from M/s Godrej & Boyce MFG. Co. Ltd. or their Authorized Dealer for set up of Lab furniture in University Department of Botany, Ranchi University, Ranchi. Last date of Receipt of Bid Document is 20/12/2016 by 5.00 PM and Bid submission 21/12/2016 by 3.00 PM Opening of Tender 22/12/2016 by 12.00 PM.

Details can be downloaded from Ranchi University website [www.ranchiuniversity.ac.in](http://www.ranchiuniversity.ac.in)

The undersigned reserves the rights to cancel/after or relax any condition without assigning any reason.

*Akhilavartava*  
10/12/16

Head, University Department of Botany  
Ranchi University, Ranchi

**Professor & Head  
Univ. Dept. of Botany  
RANCHI UNIVERSITY, RANCHI**

## Annexure:- I

### MANDATORY REQUIREMENTS

1. The bidder/Manufacturer should have ~~had~~ an Office in the state of Jharkhand for the faster and better serviceability
2. Manufacturer should submit SEFA Membership Certificates for Last four years on a continuous basis
3. **Test Report:** Welded Cabinets should be third-party tested for SEFA 8M by NABL approved Lab.
4. The Bidder should be Godrej & Boyce Mfg. Co. Ltd. or their Authorized Dealer.
5. ISO 9001-2008, ISO 14001-2004, BS OSHAS 18001-2007, BIFMA, ISO 50001 (For Design, Development, Manufacturing, Supply and servicing)
6. Bid should be in two parts:- a) Technical Bid  
b) Financial Bid.
7. Technical Bid should contain all the Mandatory Requirements with EMD and Tender Fees and should be in a separate sealed envelope.
8. Financial Bid should contain only Price Bid and should be in a separate sealed Envelope.
9. Tender Papers with Drawing and B.O.Q may also be collected from the office of the Undersigned during Office hours by 5.00 PM by paying the tender fees of Rs. 1000/- & EMD of Rs. 50,000/- in DD payable to Head, University Department of Botany, Ranchi University, Ranchi.
10. Bidder/Manufacturer should submit a copy of Income Tax return for last 3 years.
11. Bidder/Manufacturer should submit a copy of Audited balance sheet for Last 3 years.
12. Bidder/Manufacturer should submit a copy of VAT registration certificate & Latest clearance certificate.
13. Bidder/Manufacturer should submit a copy of PAN CARD.

**Technical Specification For Lab Furniture for University Department of Botany-Ranchi**  
**University Basic Science Block Morabadi**

**Lab -1 & 2**

Wall side table required with the size of 12 X 20 feet approx Length in L-shape with a depth of 3 feet approx and Height of 3 feet approx as per layout and wall side table having a length of 15 feet approx X Depth of 2.5 feet approx X Height of 3 feet Approx. The work table is made up of C-frame structure and 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 900mm. The table depths should be 920 mm for wall side. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The C-Frames should be for suspended storage cabinets. C-frames are connected with Horizontal members and these horizontal members made from rectangular pipes of 2mm thickness. Cross-sectional dimensions of the pipe should be 60 x 30 x 2 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two C-Frames together as shown using C-clamps/U-clamps. 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. Removable back panels should be provided to 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.

Island Table required with the size of 16 feet (L) X 5 feet (W) X 3 feet (H) made up of C-frame structure and 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 900mm. The table depths should be 1540 mm. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The C-Frames should be for suspended storage cabinets. C-frames are connected with Horizontal members and these horizontal members made from rectangular pipes of 2mm thickness. Cross-sectional dimensions of the pipe should be 60 x 30 x 2 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two C-Frames together as shown using C-clamps/U-clamps. Together with the C-Frames and Horizontal Members connected together, the skeletal structure of the workbench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Removable back panels should be provided to 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.

#### **WELDED UNDER-BENCH STORAGE CABINETS**

Welded Suspended type Storage cabinet with 1 drawer & 2 Shutters combination 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. The dimension of the cabinet will be 450/600/750/900mmW X 530mm D. Configuration of the Storage cabinet will be 1 Drawer + 2 Shutters.

#### **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 1.0 mm thick CRCA MS panel. It should be available with, single 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.**

Table should consist 2 nos of Ceramic sink with overall size of 515 x 375 x 145mm. With sink all the necessary accessories required like Peg Board made up of Stainless Steel with the size 420x550x55mm. Sink unit should consist 3 Way faucet bench mounted 3 way water fittings 8" swing gooseneck, Eye wash Deck mounted (Drench hose unit) with braided stainless steel hose and other accessories which required to connect to the drainage system.

#### **CHEMICAL STORAGE CABINETS**

It is used for storages of corrosive chemicals and is provided with a ventilation system to enable exhaust of localized fumes emanating from the chemicals stored. The material should be is 1.2 mm CRCA MS with pure Epoxy Powder coating. It must be fitted with a float glass to enable visibility inside the cabinet. It should also has louvers/perforations for air supply. The overall dimensions are 1000 x 486 x 1800 mm (W x D x H)

#### **PEG BOARDS**

These should be Single faced high grade stainless steel pegboard having a tray hole for water drainage and detachable pegs. The essence should be made up of 1 mm thick stainless steel (SS 304) whereas the pegs should be made up of polypropylene and should be adjustable with a minimum 10mm distance between each peg

#### **WORKTOP**

It should be 19mm (+/- 2mm) thick Jet Black Granite worktop. The exposed edges of the worktop should be chamfered and smoothed. 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.

#### **MASTER UPRIGHT**

Master Upright should be of the dimensions: 300 x 150 x 1.2 mm. 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.

#### **REAGENT SHELVES**

Reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves made of CRCA MS with pure epoxy powder coating and having cut outs for electrical switches and sockets. Glass will be provide on the shelf to as a rack.

#### **WELDED OVER-HEAD STORAGE CABINETS**

The construction should be the same as the under-bench cabinets. The height of these cabinets should be around 635mm while the depth should be around 340mm. The shutters should be available in Metal frame with inserted glass. There should be one height-adjustable shelf inside each cabinet. Other construction should be similar to under-bench cabinet.

REV 2004

INDICATION / SEAL

TITRE

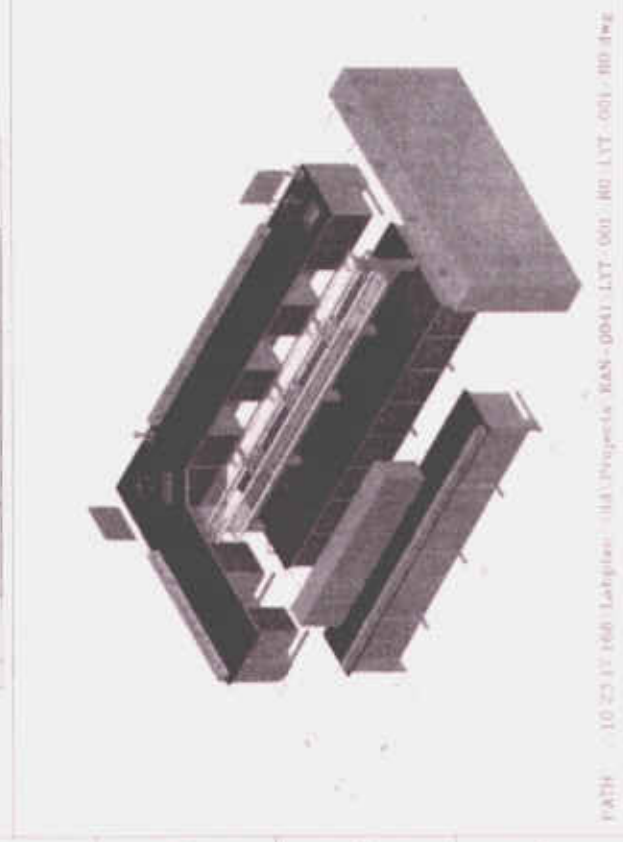
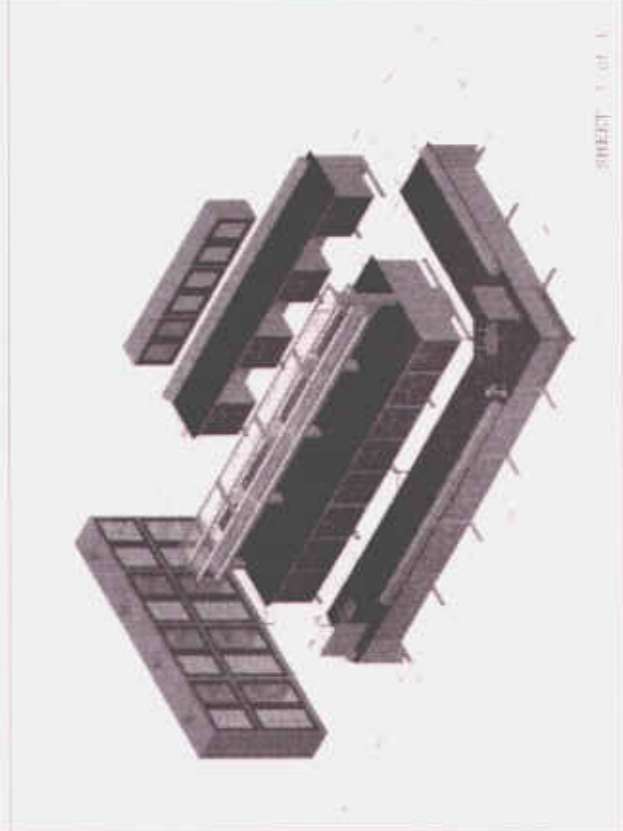
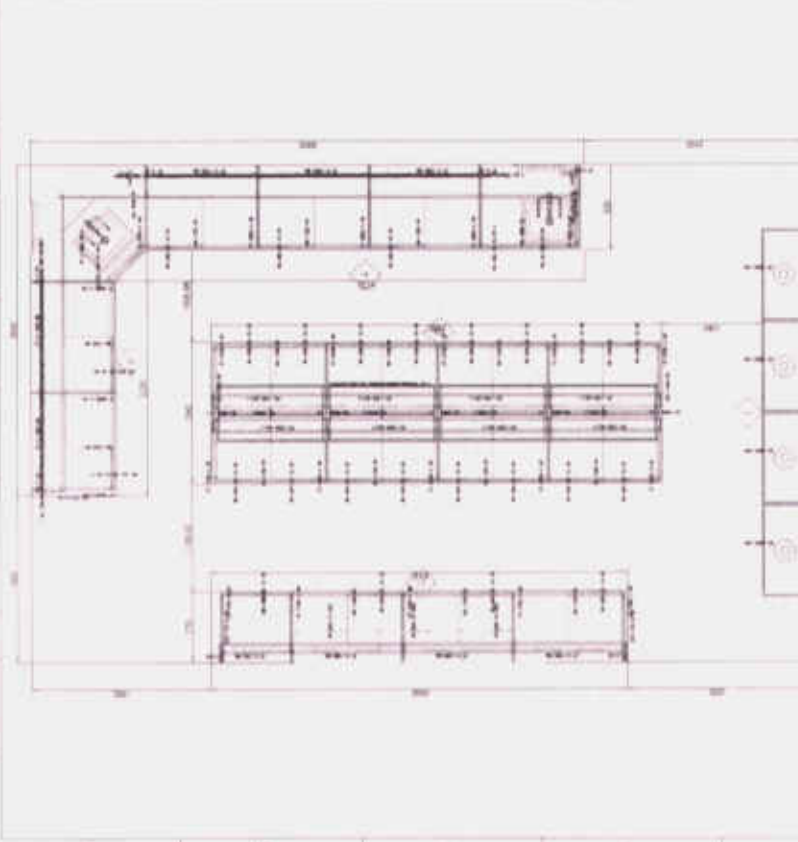
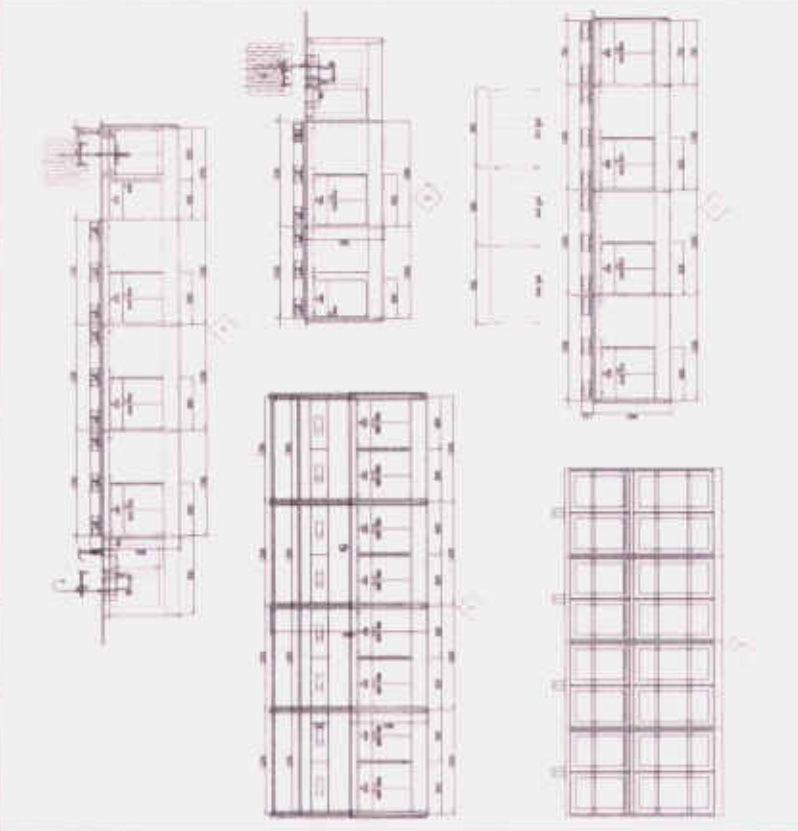
PROJET

Laboratoire Department of Biology, Kansas University

Drawn by:	Scale:	PTS
Checked by:	Orientation:	MM
Date: 10/08/2004	Project No:	10/08/2004/001/001
File Name: 1004-001	Sheet:	001

1004-001  
 A. Hays Mfg Co Ltd  
 Manufacture - 1004/001/001/001

REVISIONS  
 No. Description Date  
 1. Initial design of the building  
 2. Final design of the building  
 3. Final design of the building  
 4. Final design of the building  
 5. Final design of the building  
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SHEET 1 OF 1

## BILL OF QUANTITY - LAB FURNITURE

Customer	University Department of Botany-Ranchi University Basic Science Block Morabadi	12/10/2016	
Sr. No.	ITEM	QTY	UOM
<b>Lab 1</b>			
1	R.H. 900 ht.C-Frame assy. for table depths 770 wall side without upright , 1540 island without upright & 920 wall side with upright	1	Nos
2	R.H. 900 ht.C-Frame assy. for table depths 1840 island witout upright & 920 wall side without upright	1	Nos.
3	R.H. 900 ht.C-Frame assy. for table depth 1540 island with upright	2	Nos.
4	L.H. 900 ht.C-Frame assy. for table depths 770 wall side without upright , 1540 island without upright & 920 wall side with upright	1	Nos.
5	L.H. 900 ht.C-Frame assy. for table depths 1840 island witout upright & 920 wall side without upright	1	Nos.
6	L.H. 900 ht.C-Frame assy. for table depth 1540 island with upright	2	Nos.
7	Common 900 ht.C-Frame assy. for table depths 770 wall side without upright , 1540 island without upright & 920 wall side with upright	3	Nos.
8	Common 900 ht.C-Frame assy. for table depths 1840 island witout upright & 920 wall side without upright	6	Nos.
9	Common 900 ht.C-Frame assy. for table depth 1540 island with upright	6	Nos.
10	900 Ht. Corner C-Frame table	1	Nos.
11	750 module length horizontal members	1	Nos.
12	1200 module length horizontal members	15	Nos.
13	1050 module length horizontal members	2	Nos.
14	920 depth wall side without upright	2	Nos.
15	770 depth wall side without upright end cover panel	2	Nos.
16	1540 depth island with upright & without upright end cover panel	2	Nos.
17	1800 ht island upright with cutout & plain cover (without cutout)	1	Nos.
18	1800 ht.island upright with cutout & cover with cutout	3	Nos.
19	1800 ht.island plain upright & cover with cutout	1	Nos.
20	1200 module length Island Electrical Boom - Cutout : 6M + 6M	4	Nos.
21	Outer Cover for Single-sided Electrical Trunking	7	Nos.
22	5 pin 32A Industrial Socket - Cat. No. PS32BA5	15	Nos.



23	20A, SP MCB	15	Nos.
24	1 Module Plate - Model No: CS911M	15	Nos.
25	1200 module length Glass Reagent Shelf for Island	16	Nos.
26	750 module length Single side Electrical Trunking - Cutouts: 6M + 6M	1	Nos.
27	1200 module length Single side Electrical Trunking - Cutouts: 6M + 6M + 6M	7	Nos.
28	1050 module length Single side Electrical Trunking - Cutouts: 6M + 6M + 6M	1	Nos.
29	Top unit with Glass Shutter 900 mm W, 340 mm D & 635 mm H	3	Nos.
30	Hanging storage 900 mm W, 535 mm D & 635 mm H	1	Nos.
31	Hanging storage 750 mm W, 535 mm D & 635 mm H	1	Nos.
32	Hanging storage 600 mm W, 535 mm D & 635 mm H	23	Nos.
33	Hanging storage 600 mm W, 535 mm D & 635 mm H	1	Nos.
34	Hanging storage 450 mm W, 535 mm D & 635 mm H	1	Nos.
35	Hanging storage 450 mm W, 535 mm D & 635 mm H	1	Nos.
36	Ceramic Sink Model No. 50001 (Small) 515 x 375 x 145mm	2	Nos.
37	SS Pegboard Model No: WJH0360 420x550x55	2	Nos.
38	3 Way faucet bench mounted 3 way water fittings 8" swing gooseneck Model No. : 259924110 01 - 08	2	Nos.
39	Eye wash Deck mounted (Drench hose unit) with braided stainless steel hose Model No. BTEW1020SSH	2	Nos.
40	MS Chemical Storage Cabinet (with top cover panel) 1000 x 486 x 1800 mm : 1.2 mm thk	2	Nos.
41	Jet Black Granite (Sq.mt.) 20 (±2) mm thk	20	Sq.Mtrs.
42	Silicon Sealant - Black	1	Nos.
43	Masking Tape	1	R.Mtrs.
44	Neoprene Strip (Running Meter) (30mm wide & 6 mm thick)	80	R.Mtrs.
45	SR-998 Glue for Neoprene Mat. (Litres)	2	Nos.
46	PP damper dia 230 mm x 150 mm 6 mm thickness	4	Nos.
47	6/16A, 6 pin shutter Socket - Model No: M1332	54	Nos.
48	6 Module Plate - Model No: CS956M-S	27	Nos.
49	16A, 1 way Switch Model No: M0130	54	Nos.
50	Waste Coupling for Ceramic Sink 1 1/4" dia & 3" L	2	Nos.

51	Flexible/ F Serated Connector, Model No. PP080-002, Color-Black	2	Nos.
52	Bushing Nut for Ceramic Sink Size : 1-1/4" x 1-1/2" (32 x 40)	2	Nos.
53	Anti-Siphon bottle trap, Size : 38mm dia. (Black color)	2	Nos.
<b>Lab 2</b>			
1	R.H. 900 ht.C-Frame assy. for table depths 770 wall side without upright , 1540 island without upright & 920 wall side with upright	1	Nos.
2	R.H. 900 ht.C-Frame assy. for table depths 1840 island without upright & 920 wall side without upright	1	Nos.
3	R.H. 900 ht.C-Frame assy. for table depth 1540 island with upright	2	Nos.
4	L.H. 900 ht.C-Frame assy. for table depths 770 wall side without upright , 1540 island without upright & 920 wall side with upright	1	Nos.
5	L.H. 900 ht.C-Frame assy. for table depths 1840 island without upright & 920 wall side without upright	1	Nos.
6	L.H. 900 ht.C-Frame assy. for table depth 1540 island with upright	2	Nos.
7	Common 900 ht.C-Frame assy. for table depths 770 wall side without upright , 1540 island without upright & 920 wall side with upright	3	Nos.
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18	1800 ht. island upright with cutout & cover with cutout	3	Nos.
19	1800 ht. island plain upright & cover with cutout	1	Nos.
20	1200 module length Island Electrical Boom - Cutout : 6M + 6M	4	Nos.
21	Outer Cover for Single-sided Electrical Trunking	7	Nos.
22	5 pin 32A Industrial Socket - Cat. No. PS32BA5	15	Nos.
23	20A, SP MCB	15	Nos.
24	1 Module Plate - Model No: CS911M	15	Nos.
25	1200 module length Glass Reagent Shelf for Island	16	Nos.
26	750 module length Single side Electrical Trunking - Cutouts: 6M + 6M	1	Nos.
27	1200 module length Single side Electrical Trunking - Cutouts: 6M + 6M + 6M	7	Nos.
28	1050 module length Single side Electrical Trunking - Cutouts: 6M + 6M + 6M	1	Nos.
29	Top unit with Glass Shutter 900 mm W, 340 mm D & 635 mm H	3	Nos.
30	Hanging storage 900 mm W, 535 mm D & 635 mm H	1	Nos.
31	Hanging storage 750 mm W, 535 mm D & 635 mm H	1	Nos.
32	Hanging storage 600 mm W, 535 mm D & 635 mm H	23	Nos.
33	Hanging storage 600 mm W, 535 mm D & 635 mm H	1	Nos.
34	Hanging storage 450 mm W, 535 mm D & 635 mm H	1	Nos.
35	Hanging storage 450 mm W, 535 mm D & 635 mm H	1	Nos.
36	Ceramic Sink Model No. 50001 (Small) 515 x 375 x 145mm	2	Nos.
37	SS Pegboard Model No: WJH0360 420x550x55	2	Nos.
38	3 Way faucet bench mounted 3 way water fittings 8" swing gooseneck Model No. : 259924110 01 - 08	2	Nos.
39	Eye wash Deck mounted (Drench hose unit) with braided stainless steel hose Model No. BTEW1020SSH	2	Nos.
40	MS Chemical Storage Cabinet (with top cover panel) 1000 x 486 x 1800 mm : 1.2 mm thk	2	Nos.

41	Jet Black Granite (Sq.mt.) 20 (±2) mm thk	20	Sq Mtrs.
42	Silicon Sealant - Black	1	Nos
43	Masking Tape	1	R.Mtrs.
44	Neoprene Strip (Running Meter) (30mm wide & 6 mm thick)	80	R.Mtrs.
45	SR-998 Glue for Neoprene Mat. (Litres)	2	Nos
46	PP damper dia 230 mm x 150 mm 6 mm thickness	4	Nos
47	6/16A, 6 pin shutter Socket - Model No: M1332	54	Nos
48	6 Module Plate - Model No: CS956M-S	27	Nos
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51	Flexible/ F Serated Connector, Model No. PP080-002, Color-Black	2	Nos
52	Bushing Nut for Ceramic Sink Size : 1-1/4" x 1-1/2" (32 x 40)	2	Nos
53	Anti-Siphon bottle trap, Size : 38mm dia. (Black color)	2	Nos