



सेमी-कंडक्टर लेबोरेटरी/Semi-Conductor Laboratory  
अंतरिक्ष विभाग, भारत सरकार/Government of India, Department of Space  
सेक्टर-72, सा.अ.सि.नगर(मोहाली) -160071, चंडीगढ़ के समीप(पंजाब) भारत  
Sector-72, S.A.S. Nagar (Mohali)-160071, Near Chandigarh (Punjab) India.  
फोन/Phone: +91-172-2296 166/173, फैक्स/ Fax: +91-172-2237410.  
ईमेल/Email: [hps@scl.gov.in](mailto:hps@scl.gov.in) Website: [www.scl.gov.in](http://www.scl.gov.in)

निविदा सूचना संख्या. एससीएल/पीटी/47

**TENDER NOTICE No. SCL/PT/ 47**

**दिनांक/ Dated: 02.01.2017**

निदेशक, एससीएल के लिए एवं उनकी ओर से सेमी-कंडक्टर लेबोरेटरी के प्रमुख क्रय एवं भण्डार, निम्न के लिए दो भागों में ऑन लाइन निविदाएं आमंत्रित करते हैं।

For and on behalf of The Director, Head-Purchase & Stores, Semi-Conductor Laboratory (SCL) invites Online TWO Part Tenders for the following:

क्रम संख्या Sr. No.	निविदा संख्या Tender Number	विवरण Description	संख्या/ Quantity	धरोहर राशि (ईएमडी) Earnest Money Deposit (EMD)
1.	एससीएल/ पीएस5/ 2016E00510  SCL/PS5/2016E0 0510	विनिर्देशन एवं निविदा दस्तावेज सहित संलग्न बीओक्यू के अनुसार सेमी-कंडक्टर लेबोरेटरी (एससीएल) की टीएसएसजी बिल्डिंग में पुराने एचवीएसी प्लांट में इल्युमिनेशन और पावर डिस्ट्रीब्युशन सिस्टम, एलएएन, टेलीफोन, पेजिंग सिस्टम जिसमें वर्तमान इलेक्ट्रीकल इंस्टालेशन का डिसमेंटल कार्य भी शामिल है, की आपूर्ति, इंस्टालेशन, परीक्षण और कमिश्निंग के कार्य हेतु। Supply, Installation, Testing and Commissioning of illumination and Power Distribution system, Fire Detection system, LAN, Telephone, Paging system including Dismantling of existing electrical installation in the Old HVAC Plant in TSSG building at Semi-Conductor Laboratory (SCL), S.A.S Nagar, Mohali (Punjab) as per specification and BOQ attached with tender document.	निविदा दस्तावेज में दी गई विस्तृत जानकारी के अनुसार As per details given in Tender Document.	विस्तृत जानकारी के लिए निविदा दस्तावेज देखें For details, please see Tender Document

निविदा फार्म के डाउनलोड करने की तिथि एवं समय  
Date & Time for download of Tender Form

शुरू/ Starts: 06.01.2017 से/ from 17:01 hrs. (IST)  
समाप्त/Ends: 06.02.2017 तक/ at 17.00 बजे/hrs (IST)

ऑन लाइन निविदा को दो भागों में प्रस्तुत करने की तिथि एवं समय  
Date & Time of Submission of Online Tenders in TWO

शुरू/ Starts: 06.01.2017 से/ from 17:02 hrs. (IST)  
समाप्त/Ends: 06..02.2017 तक/ at 17.30 बजे/hrs (IST)

<b>Parts:</b>	
<b>ऑन लाइन निविदाएं खोलने की तिथि एवं समय (धरोहर राशि एवं तकनीकी भाग) Date &amp; Time of Opening of Online Tenders (EMD and Technical part):</b>	<b>शुरू/ Starts:</b> 13.02.2017 से/ from 10.00 hrs. (IST) <b>समाप्त/Ends:</b> 14.02.2017 तक/ at 17.00 बजे/hrs (IST)

**नोट/Note:**

1. निविदा दस्तावेज को e-tender portal <https://eprocure.isro.gov.in> से देख सकते हैं और एससीएल की वेबसाइट [www.scl.gov.in](http://www.scl.gov.in) / इसरो की वेबसाइट [www.isro.org](http://www.isro.org) / सीपीपी पोर्टल (<http://eprocure.gov.in>) से डाउनलोड कर सकते हैं  
Tender Documents can be accessed at e-tender portal <https://eprocure.isro.gov.in> and can be downloaded from SCL website ([www.scl.gov.in](http://www.scl.gov.in)) / ISRO website ([www.isro.gov.in](http://www.isro.gov.in)) / CPP Portal (<http://eprocure.gov.in>).

प्रमुख, क्रय एवं भंडार प्रभाग/Head, Purchase & Stores Division

## Tender Details

**Tender No:** SCL/PS5/2016E0051001

**Tender Date:** 21/12/2016

**Purchase Entity:** Pur\_Entity5

## Tender Notice

E-Procurement Tender no. SCL/PS5/2016E0051001, SEMI-CONDUCTOR LABORATORY [SCL] invites ONLINE offers in TWO part system through e-tender portal <https://eprocure.isro.gov.in> for Supply, Installation, Testing and Commissioning of Illumination and Power Distribution system, Fire Detection System, LAN, Telephone, Paging system including Dismantling of existing electrical installation in the Old HVAC Plant in TSSG building at Semi-Conductor Laboratory (SCL), S.A.S Nagar, Mohali (Punjab) as per specification and BOQ attached with the tender document. Tender documents can be down loaded from 06.01.2017- 17:01 hrs. to 06.02.2017 up to 17.00 hrs. The vendors need to get registered in the e-tender portal to access tender and submit their offer online. Vendors need to have Digital Signature Certificate as detailed on our e-portal and corporate e-mail ID to register on the above portal. Only online tenders will be accepted. No Manual/Postal/courier/e-mail/fax tender will be entertained. Please note Tender fee shall not be applicable for tenders submitted on-line through this portal. Vendors interested to participate in this e-Tender are required to register themselves as vendors, if not already registered, in our e-procurement portal <https://eprocure.isro.gov.in> by downloading plugins and help demos listed on the home page of the e-procurement link mentioned above to complete the vendor registration process. They can seek help from help desk 020 30187500 (Email: [support.isro@nextenders.com](mailto:support.isro@nextenders.com)) also the home page of e-procurement portal may be accessed for any technical help for registration and subsequent process. Vendors may please note that without registering in our E-procurement portal they will not be able to quote for this tender.



## Tender Attachments

### Technical Write-up/Drawings

#### Attachment - I:

IDT0010020000000000isro05401.pdf

#### Attachment - II:

IDT0010020000000000isro05402.pdf

#### Attachment - III:

IDT0010020000000000isro05403.pdf

#### Attachment - IV:

IDT0010020000000000isro05404.pdf

#### Attachment - V:

### Instructions to Tenderers (PT)

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1. Interested tenderers may, at their option, login to <http://eprocure.isro.gov.in> and submit offers along with prescribed Earnest Money Deposit (EMD) amount of Rs. 2,00,000.00 (Rupees Two Lakh Only) as per details in the tender notification. EMD instrument in original should be sent in a sealed cover with a covering letter quoting tender number and same must reach us prior to due date of tender. The scanned copy of EMD instrument should be attached online with the tender.

2. Foreign vendors shall be exempt from the payment of EMD. The vendors, who are not registered with SCL, shall submit an EMD (Earnest Money Deposit) or Bid Security as per details given in tender notification. Registered vendors or vendors who have already applied for renewal of registration, Central PSUs/PSEs/Autonomous Bodies, Micro and Small Enterprises (MSEs), Khadi and Village Industries Commission (KVIC), National Small Industries Corporation, etc., shall be exempt from the payment of EMD. Bidders seeking exemption from payment of EMD shall submit necessary proof like registration number etc. The bid submitted by vendor not registered with SCL without EMD will not be considered.

3. EMD shall be submitted in a single instalment through Demand Draft/Bankers Cheque/Fixed Deposit Receipts or Bank Guarantee in favour of Semi-Conductor Laboratory, payable at Mohali/ Chandigarh from any of the Scheduled Banks executed on non-judicial stamp paper of appropriate value. In case of fixed deposit receipt /bank guarantee, it shall be valid for a period of 45 days beyond the final tender validity date. EMD shall be interest free.
4. Vendors/firms name and tender no. shall be indicated on the reverse side of the EMD instrument.
5. EMD instrument should not be dated prior to the date of advertisement. Separate EMD shall be sent for each tender.
6. SCL will not be responsible for non-receipt of EMD instrument due to postal delay / loss in transit.
7. Any tender not accompanied with EMD shall be treated as invalid tender and rejected.
8. EMD of a bidder shall be forfeited if the tenderer/Contractor withdraws or amends his tender or deviates from the tender in any respect within the period of validity of the tender. Failure to furnish security deposit/performance bond by a successful vendor within the specified period shall also result in forfeiture of EMD.
9. EMD shall be refunded to all the unsuccessful bidders within thirty (30) days after placement of the Purchase Order. EMD shall be refunded to the successful tenderer/Contractor after payment of the Security Deposit or may be adjusted against the Security Deposit. EMD shall be refunded to all the participants in cases where the tender is cancelled or withdrawn by the purchaser, within thirty days from the date of such cancellation or withdrawal.
10. Request for the extension of the due date will not be considered.
11. SCL reserves the right to accept or reject any / or all the tenders in part or full without assigning any reasons thereof. The bidder is at liberty to seek information related to bidding conditions, bidding process and/or rejection of its bid.
12. In this tender either the Indian Agent on behalf of the Principal/OEM or the Principal/OEM itself can bid, but both cannot bid simultaneously for the same item. Indian agents while quoting on behalf of their principals shall provide necessary latest authorization letter obtained from their Principals/Manufacturers in their bid.
13. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the tender for the same item. If submitted, all offers submitted by the said agent shall be excluded from the procurement process.
14. The tenders of vendors who have not agreed to furnish Security Deposit or Performance Bank Guarantee as sought vide this tender shall be excluded from the procurement process.
15. The tenders of bidders where the validity of the tender is shorter than the period specified in the tender enquiry shall be excluded from the procurement process.

16. Late tenders, delayed tenders, fax quotations and e-mail quotations are not considered.
17. SCL reserves the right to verify all claims made by the bidder.
18. SCL reserves the right to change any milestone date of the tendering activity / tender schedule.
19. Tender which is not submitted in terms of instructions mentioned herein is liable to be rejected.
20. If tender opening date happens to be a public holiday, tender will be opened on the next working day and interested bidders may depute their representatives to attend the Tender Opening, with proper authorization.
21. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.
22. It is expressly agreed that the acceptance of the Stores Contracted for is subject to final approval in writing by the Purchaser.
23. It is to be noted that the drawings, specifications, end-use, etc., given by the purchaser, are confidential and shall not be disclosed to any third party.
24. Prices are required to be quoted according to the units indicated in the tender. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.
25. The quote should indicate quantity wise unit rate separately which have to be filled online. The Prices are to be mentioned both in figures as well as in words. The taxes, duties etc. are to be calculated and indicated in the column provided in online forms explicitly.
26. Bidders are expected to comply with commercial and other terms and conditions given in vendor specified terms of this tender. In case of any deviation, the reasons thereof should be clearly specified in the vendor specified terms column.
27. All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.
28. Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non-acceptance of tender, the tenderer will have to remove the samples at his own expense.
29. Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his bid. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all

such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

30. The tenderer would provide, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser during evaluation of tender.

31. Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.

32. Subletting and Assignment: The contractor/supplier cannot sublet, transfer or assign the order/Contract or any part thereof or interests therein or benefit or advantage thereof in any manner whatsoever, to any other party save with the previous written consent of the purchaser. Such consent by the purchaser, however, shall not relieve or discharge the contractor/supplier from any obligation, duty or responsibility under the Purchase Order/ Contract.

33. The contractor/supplier shall indemnify the purchaser against Workmen Compensation Act.

34. The authority of the person submitting the tender, if called for, should be produced. suggest changes to specifications with appropriate response for the same.

35. This being a two part tender -Technical and Commercial part separate, the Technical part should not contain Pricing information. The tenders containing Price details in Technical part will be treated as unsolicited offers and rejected.

36. The bids shall be opened as per schedule indicated in the Tender in the presence of the bidders/their authorized representatives who may like to attend the tender opening against presentation of Authorization letter.

The schedule of opening of Price bids shall be intimated separately to the technically qualified bidders only.

#### 37. PROCEDURE FOR EVALUATION OF TENDERS:

Technical Evaluation Criteria :

Vendor meeting the eligibility criteria and basic technical specifications mentioned in SCL Tender shall be considered to be technically qualified. Evaluation of Price Bids The following elements shall be considered for evaluation of Priced Commercial offer:

Price quoted by the bidder in the price bid template for meeting the functionalities given in the Tender and Technical Specifications sheet. Bid shall be evaluated on overall cost basis. Compliance with the Payment Terms prescribed in this tender document. In the event, the bidder offers Payment Terms stringent than SCL prescribed Payment Terms, the bid of the bidder shall be loaded based on Base Rate of SBI prevailing on the date of opening of price bids.



In the event of the bidder requiring SCL to bear bank charges outside India (foreign bank charges), the bidders bid shall be loaded at the rate 0.5percent towards bank charges outside India.

38. The bid should contain the following information:-

a. Agency Commission: Bidders are required to provide the following information in respect of their authorised Indian Agent, if any, alongwith technical bid as the same is mandatory as is required for consideration of the bid. Name, Address, Telephone no. , fax no., email of the Indian Agent including the contact person. A letter from the Manufacturer/supplier in the current date certifying that the said Indian Agent is their authorised Indian Agent and also indicating the responsibilities/role of the Indian Agent under the proposed purchase. Renumeration/service charges payable to the Indian Agent under the proposed purchase. The amount of agency commission included in the price and payable to Indian Agent of the contractor shall be paid directly to the Indian Agents by the Purchasers in equivalent in Indian rupees on the basis of an invoice from him applying TT buying rate of exchange ruling on the date of placement of the Purchase Order and which shall not be subject to any further exchange variations. The payment will be released to the Indian Agents within 30 days from the date of acceptance of the goods.

b. Details of any technical service, if required for erection, assembly, commissioning and demonstration.

39. The FOB/FCA prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer country.

40. The details of Import License will be furnished in the Purchase Order.

41. Instruction/operation manual containing all assembly details including wiring diagrams should be sent wherever necessary in duplicate. All documents/correspondence should be in English Language only.

42. Part shipment is not allowed unless specifically agreed to by us.

43. As far as possible, stores should be dispatched by Indian Flagged Vessels/ Air India or through any Agency nominated by us.

## Bid Templates

### Part A: General Specification

#### Item Specifications

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
1	Intent of Specification			
a)	The technical scope of the project includes supply, installation, testing and commissioning of illumination and power distribution system, fire detection system, LAN, telephone, paging system including dismantling of electrical installation in the Old HVAC plant located in ground floor of TSSG Building at Semi-Conductor Laboratory (SCL), S.A.S. Nagar, Mohali (Punjab).			

<p>b) Dismantling of existing Light Fixtures, power and control Cables, Cable Trays, Exhaust Fans, Electrical Panels, DBs, conduit and wiring etc. systems, as required, and removal to the identified location (SCL Store) in SCL premises.</p>				
<p>c) Specification includes receiving, unloading, storage, insurance, in-plant transportation and all equipment &amp; accessories covered under this specification.</p>				
<p>d) Technical Specification: Brief overview of Equipment &amp; services under this specification is described here. i) General Specification. ii) Dismantling of the existing system as mentioned in the BOQ. iii) Installation of 4x14W Lighting Fixture at</p>				

<p>false ceiling. iv) Supply &amp; Installation of Electrical MCC Panels &amp; MCB DB.v) Supply &amp; Installation of cables, conduits, Modules, Switch/sockets, Termination, earthing etc.vi) Supply &amp; Installation of fire detection system and its accessories.vii) Supply &amp; Installation of network system and UPVC Trunking.viii) Supply &amp; Installation of telephone wires and connectors for Fab development area &amp; Chemical Areaix) Any other electrical requirement for execution of the works.</p>				
<p>e) Drawing &amp; notes All drawing &amp; notes as listed in the annexure form a part of this specification</p>				
<p>2</p>	<p>General Information:The Contractor may conduct site visit to SCL to have a</p>			

	fair assessment of the work involved.			
3	General Design Consideration:			
a) System configuration:i) Voltage Supply: 415V± 10%ii) Frequency :50Hz± 5%iii) Fault level: As specified in the SLD iv) No of Phase and grounding: 3 Phase & Solidly ground earthv) Power Distribution: A.C., 3 Phase 4 wire for 3 Phase system, 1 Phase 3 wire system				
b) Code & Standards: All electrical equipment and accessories to be furnished, installed and commissioned under scope of these specifications shall be designed, manufactured, tested and installed in accordance with relevant Indian Standard Specifications (ISS), Indian electricity rules and any				

other applicable regulations.				
4	<p>A) Scope of Supply: The following equipment, cables, light fixtures etc shall be supplied as per requirements elaborated in the enclosed drawings/specifications / Bill of Quantities.a) Panels/MCB DBs: 415V MCC Panels /Power Distribution Boards as specified in BOQ and specification as per the annexure 1.b) Cables/wires: FRLS 1.1KV grade cable for power and lighting distribution as per specifications indicated in BOQ.c) MS Conduits, flexible conduit, earthing materials, double/single compression brass cable glands, cable lugs (Al &amp; Cu as required), cable ties, cable/wire identification tags required for the installation and</p>			

	<p> maintenance of trouble free operation of the downstream system and accessories cover under this specification.d) Supply of the required accessories and materials for installation of 4x14W (2feetx2feet) lighting fixture on the false ceiling.e) Paging speakers, telephone and paging system cable, connectors, MS box, conduit along with all related accessories with the specification and quantities mentioned in the BOQ.f) Addressable analogue fire detection Panel, Addressable fire detection devices, Manual Call Points, Light and horn units, I/O for Light and horn units, MS Boxes for loop in loop out etc as per quantities and specification as per the BOQ attached.g.) Network rack, switch, cable, cords, I/O, face plates, UPVC </p>			
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	<p>Trunking etc and required accessories for installation of networks requirement for the sitting cubicles. h )Erection testing &amp; commissioning spares.i.) Special tools &amp; tackles.j.) All relevant drawing, data, catalogues with instruction and trouble shoot manuals, type test certificates for the above accessories.k.) Materials and accessories which is necessary or used for satisfactory and trouble free operation and maintenance of the above equipments/material shall also be furnished</p>			
<p>B) Scope of Service:a) Furnishing of skilled &amp; unskilled Labor, supervisor, erection tools &amp; tackles, testing tools &amp; equipment, supplies, consumables and hardware and transport for timely and efficient</p>				



execution of the contract work.				
5	<p>Work Schedule :The total work of manufacturing, supplying, inspection, testing &amp; delivery schedule, submission of drawing, delivery of materials/equipments, erection at site, pre-commissioning test at site, commissioning and handing over shall be planned in such a way to complete it within 16 (Sixteen) weeks to be reckoned from the date of issue of Purchase order by SCL.</p>			
6	<p>Drawing, Data and Manuals: Following drawing /documents shall be submitted at the time of acceptance of the system.a) Electrical single line diagrams for complete electrical system starting from MCC electrical panel,</p>			

	<p>power and lighting DBs which includes Illumination system, Power Distribution system, Fire Detection system, Network System, telephone and paging system.b) Foundation drawing of all floor mounted equipment (Electrical panels, Network Racks etc), Ceiling mounting details for lighting fixture/speakers/detector/ Network Points etc and any other relevant drawing requires for repair &amp; Maintenance.c) Layout drawing with dimension of all electrical equipments under the bidder's scope.d) Make, type and catalogue of Switchgears of Electrical MCC Panels, speakers, detector, Networks and related accessories along with technical leaflets, data sheets, etc to be provided</p>			
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	<p>by the contractor. The contractor shall offer recommended makes mentioned in this document. e) Equipment data sheets furnishing guaranteed performance figure for each type of equipments.f) Test certificates, test results for each type of equipment.g) Checks list and test to be conduct during erection, testing &amp; commissioning of the individual equipments.h) Wiring diagram for Lighting, power, Fire Detection system, Paging, telephone and LAN.</p>			
7	<p>Deviation:a) Contractor to clearly mention the deviation in the specification, if bidder wishes to deviate from the specification.b) All such deviation shall be clearly mentioned on the deviation sheets and</p>			

	<p>submitted with the offer.c)  Unless such deviations are recorded in the deviation sheets and submitted with the offer, it will be assumed that the offer is made in conformity with this specification in all respects.d) The deviations shall be evaluated by SCL and acceptance of the same shall be the sole discretion of SCL.</p>			
8	<p>Quantity variation:The quantities indicated against each item in the Bill of Quantities (BOQ) are indicative and are for the purpose of bidding only. Variation in quantities upto + 25% shall be carried out by the contractor on the same conditions in all respects including the contract price. In case of contract items which exceed the said limit of +25%, the contractor may claim</p>			

	<p>revision of rates supported by proof analysis and if the rate claimed in excess of the rate specified in the bill of quantities, SCL's engineer-in-charge of the work shall after giving consideration to the analysis of rates submitted by the contractor determine the rates on the basis of market rates and the contractor shall be paid in accordance with the rates so determined. The Contractor's profit &amp; OH shall be factored in the rate analysis@15%.</p>			
9	<p>Extra Items:In case of extra items (that are completely new and are in addition to the items contained in the contract), the contractor may claim rates supported by proper analysis and SCL's engineer-in-charge of the work shall after giving consideration to the</p>			

	analysis of the rates submitted by the contractor, determine the rates on the basis of market rates and the contractor shall be paid in accordance with the rates so determined. The Contractor's profit & OH shall be factored in the rate analysis@15%.			
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**Part B: Technical Specification: 1. Dismantling**

**Item Specifications -I**

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
Dismantling of existing system:				
The Scope of dismantling covers the dismantling of materials, measurement of dismantled material and shifting to SCL stores area in SCL premises. The different type of material				

to be dismantled includes materials as per the BOQ, brief specifications of which are as follows				
1	Electrical Panels: The scope of the work for decommissioning of electrical Panels includes dismantling of the wall mounted/Floor mounted electrical panels, disconnecting of the existing cable, dismantling of earth wire/strip from the panel, shifting of panel from existing location i.e. HVAC plant to SCL store (Approx. 350mtr).			
2	Electrical DBs: The scope of the work for decommissioning of electrical DBs includes dismantling of the wall mounted DBs grouted in the wall/on the surface, dismantling of the electrical wires, conduit for incomer/outgoing of			

	the DBs, dismantling of the earth wire of the DBs and any other minor civil work for removing of the DBs, shifting of DBs from existing location i.e. HVAC plant to SCL store (Approx 350mtr)			
3	Industrial Sockets: The scope of the work for dismantling of the Industrial sockets includes removing of Sockets which is installed on wall/ grouted on the wall removing their power connection, to prepare a list for no of Sockets, shifting of Industrial Sockets from existing location i.e. HVAC plant to SCL store (Approx 350mtr)			
4	Illumination system:The scope for dismantling of illumination system installed in HVAC area includes 4' X1' lighting fixture installed in false			



	ceiling, 2x40W/1x40W W wall mounted batten, removing the MS Pipe used holding the fixture through ceiling, disconnecting their power connection, list out the no of fixture and inter-alias other items such as MS pipe, GI flexible conduit, MS conduit and PVC wire.			
5	Fire Detection system:The dismantling of the existing fire detection system includes the following sub system			
i) Fire detectors: Includes dismantling and removing Fire detectors of Fire detection system, list out total no of detectors including shifting of the same from the existing location in HVAC plant to the SCL Store within SCL premises (approx. 350m distance).				

<p>ii) Manual Call Point: This includes the dismantling and removing Manual Call Point of Fire detection system, list out total no of MCP including shifting of the same from existing location) in HVAC plant to the SCL Store within SCL premises (approx. 350m distance).</p>				
<p>iii) Sounder: This includes the dismantling and removing Sounders of Fire detection system, list out total no of Sounder including shifting of the same from existing location (Ground floor) of HVAC plant to the SCL Store within SCL premises (approx. 350m distance).</p>				
<p>iv) Fire Indicator: This includes the dismantling and removing fire indicator of Fire detection system, list out total no of fire indicator including</p>				

shifting of the same from existing location to the SCL Store within SCL premises (approx. 350m distance).				
6	<p>Paging System: The dismantling of paging system includes removing the speakers from the existing location along with the speaker cable in the false ceiling/wall/ceiling at a height of 5-8 meter (approx.), list out total no of speakers, including shifting of the same from existing location in HVAC plant to the SCL Store within SCL premises (approx. 350m distance) and installing new speakers and their cabling in the false ceiling/wall.</p>			
7	General electrical Items:			
i) Conduit: This includes dismantling of conduit of different size 20mm, 25mm, 32 mm removing				

<p>the same from the existing location, list out total length of conduit of power, control, Fire system, paging etc. and shifting the same from existing location to the SCL Store within SCL premises (approx. 350m distance).</p>				
<p>ii) Wire: This includes dismantling of wires of different size 2.5mm<sup>2</sup>, 4mm<sup>2</sup>, 16 mm<sup>2</sup> removing the same from the conduits, list out total length of wire as per the size of power distribution, control, Fire system etc. and shifting the same from existing location to the SCL Store within SCL premises (approx. 350m distance).</p>				
<p>iii) Cable: This includes dismantling of cables of different size 10Sq.mm/120Sq.mm/185Sq.mm etc. and multi core control cable removing the</p>				

<p>same from the wall/surface/cable tray, list out total length of cable as per the size of power distribution, control, Fire system etc and shifting the same from existing location to the SCL Store within SCL premises (approx. 350m distance).</p>				
<p>iv) Switchboards: This includes dismantling of switchboards of different sizes grouted in the wall/surface, list out total no of switchboards from different locations and shifting the same from existing location to the SCL Store within SCL premises (approx. 350m distance).</p>				

**Part B: Technical Specification: 2. MCC Panels**

**Item Specifications -II**

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
1	The scope includes Supply installation, testing and commissioning of 3 No of MCC electrical Panels for various utilities as per the Specification attached in the annexure 1 and drawing as per the SLD attached in annexure 2, 3 and 4. The contractor shall strictly adhere to the panel specification and approved make as per the list attached in the Annexure 1.			

**Part B: Technical Specification: 3. Electrical Works for HVAC Area**

**Item Specifications -III**

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
1	3 Phase MCB DB:The scope includes Supply installation, testing and commissioning of the			

	<p>three phase MCB DB for lighting and power distribution as per the quantity and specification attached in the BOQ. The 3 phase MCB DB to be supplied by the contractor will be wall mounted as required. The installation shall include supply of necessary hardware for installation of MCB DBs as required, termination and glanding of the new cable, wires and earthing of the MCB DBs as required.</p>			
2	<p>Installation of T5 Lighting Fixture for illumination of HVAC Area:The scope includes installation, testing, commissioning of different type of T5 lighting fixture in the false ceiling/wall. The scope includes installing the same as below:</p>			
a) Installation of 4x14W, T5 (2 feetx2 feet) light				

<p>fixture. The installation of light fixture shall include supporting it with suitable size GI wire (6 SWG) from the underside of the concrete ceiling at about 2.2 meters and 4-5 meter above false ceiling, providing GI flexible conduit, 1.5 sq mm FR PVC wire with earth for loop in loop out and making connections, providing fastners and clamps for GI wire etc. Note: Light Fixture will be provided by SCL free of cost to the selected contractor for incorporation in the work.</p>				
<p>b) Installation of 28W, T5 Batten light fixture. The installation of light fixture shall include all accessories and tube/lamp etc. directly on underside of concrete ceiling/ wall, including connections, providing circular box with ball sockets with nipple,</p>				



<p>1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, loop in loop out, and earthing etc. as required. Note: Light Fixture will be provided by SCL free of cost to the selected contractor for incorporation in the work.</p>				
<p>3</p>	<p>Cables, wire, conduit, earthing, Switchboards, Switches/Socket etc</p>			
<p>a) Cables: The scope includes the Supply and installation of XLPE insulated, overall FRLS PVC outer sheathed, Al armored cable on wall/surface/ existing cable tray as required for MCC Panel and MCB DBs as per the detailed specification and quantity in the BOQ. The necessary hardware for installation of cable like cable tie, clamps, tags etc will be in</p>				

the scope of Contractor				
b) Wire: The scope includes the Supply and installation of FRLS Copper wire of different size quantity & Specification as per the BOQ for power distribution and lighting and power etc as per the requirement.				
c )Conduit: The scope includes the Supply and installation of ISI make MS Conduits of different size quantity & Specification as per the BOQ for power distribution, lighting modification, 3 phase switch sockets and lighting etc as per the requirement. Flexible conduit shall be GI.				
d) Earthing: The scope includes the Supply and providing earthing for Panels, DBs as per the requirement, Specification and quantities as per the				

BOQ.				
e) Switchboards and Switch/Sockets: The scope includes the Supply and installation of Different size of Switchboards and switch/socket for Lighting, Power Distribution and Trunking specification and quantities as per the BOQ				

**Part B: Technical Specification: 4. Fire Detection system**

**Item Specifications -IV**

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
	The detailed specification for the different component of fire deduction system, Panel, Detector, MCP, Sounder, Network Cable, 2Cx1.5mm2 FRLS cable etc. and the required accessories shall be as			

below				
1	Supply installation testing and commissioning of addressable optical smoke detector with base on ceiling / in the void between false ceiling and existing steel structure. Make :Apollo ,Model :XP 95			
2	Supply, installation, testing and commissioning of addressable rate of rise heat detectors with base on ceiling / in the void between false ceilings (at a height of 3 meter from ground).Make :Apollo, Model :XP 95			
3	Supply, installation, testing and commissioning of addressable, Manual Call Point (MCP) on the wall/Surface.Make :Apollo ,Model :XP 95			
4	Supply, installation, testing and commissioning of			

	addressable loop Sounder with base on ceiling / in the void between false ceiling/ wall/surface. Make :Apollo ,Model :XP 95			
5	Supply installation testing and commissioning of addressable Input Out Put Module with base on ceiling / in the void between false ceiling. Make :Apollo ,Model :XP 95			
6	Supply and installation of 2Cx1.5mm <sup>2</sup> Copper, extruded PVC inner sheath, armored and overall FRLS PVC outer sheathed 1.1 KV grade, as per IS 7098 ( Part I, bearing ISI certification.) on existing cable tray/wall as required. Make: Finolex/Havells/KEI			
7	Supplying and making end termination with brass compression gland and copper lugs for			

	2Cx1.5mm2 Copper cable in MS Box of Size 4'X4' installed above the false ceiling/wall/surface as required.			
8	Supply, installation, testing and commissioning of MS painted box, Size 4'X4' with ELMEX type terminal block for loop in loop out of 2c x1.5 sq mm copper armored cable and connection to the fire detector device, above false ceiling/wall/surface/recess including wall cutting and providing necessary hardware for mounting /fixing, including all material for fixing as required.			

**Part B: Technical Specification: 5. Paging System**

**Item Specifications -V**

SI. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
	<p>The scope includes supply of Bosch make sounders, model no. LBC 3099, installing the same in false ceiling after making necessary cutting in the ceiling tile, supporting the sounder with suitable size GI wire to the existing steel structure at about 2.2 meters above false ceiling and connecting the sounders with wiring. The Scope also includes supply and installation of 2Cx1.5mm2 armored and twisted pair wire for speakers and other accessories requires for smooth commissioning of the paging system. Further details of the scope of work and specification are as follows.</p>			
1	Supply, Installation, Testing and Commissioning of Bosch			

	make speakers, model no. LBC 3099 on the false ceiling at a height of 3 meter by making a speaker size cut out on ceiling and fixing the same by min 6 SWG wire to be clamped on existing MS perlins at about 2.2 meter from false ceiling.			
2	Installation, Testing and Commissioning of speakers (Wall mounted) on the wall with metal cased at a height of 3-4 meter and providing all accessories like nut bolt, clamp to fix the speaker on wall as required .			
3	Supply and installation of 2Cx1.5mm2 Copper extruded PVC inner sheath, armored and overall FRLS PVC outer sheathed 1.1 KV grade, ISI marked on underside of concrete ceiling including the hardware as			



	required.Make: Finolex/Havells/KEI			
4	Supply and installation of ISI marked 2Cx1.5mm2 Copper, twisted pair PVC wire in existing GI flexible conduit for making connection from junction box to the paging speaker Make of wire : Finolex/Havells/KEI			
5	Supply, installation, testing and commissioning of MS painted box, Size 6'X6' with ELMEX type terminal block for loop in (One No) loop out (4 No) of 2c x1.5 sq mm twisted pair copper armored cable and connection to the speakers installed above false ceiling/wall/surface/recess including providing necessary hardware for mounting /fixing, as required			

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**Part B: Technical Specification: 5. Networks**

**Item Specifications -VI**

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
	The detailed specification for the network rack, switch, cable, cords, I/O, face plates etc. and the required accessories shall be as per the details below. CAT 6 cable shall be laid in the existing PVC DLP Trunking and Raceway			
1	Supply installation testing and commissioning of UL listed, modular type 32U network rack with front glass door and rear perforated door, floor mounted, Size 800x800 or bigger, with 2 Nos of 5 port or more Octagonal PDU 5/15Amp with MCB			

	<p>and Fan Tray with 4 Fans.  The rack should have provision of 4 nos of cable manager duct type 1U and 2 vertical manager-concealed types. Rack should be three side open able with front glass door and rear perforated door and provision of cable entry from top and bottom both with proper earthing kit as required  Make Rittal, Netrack, Schneider, Valrack</p>			
2	<p>Supply &amp; installation of Network Switch in Network Rack with the following specification as below. Switch shall have: Port Density: minimum 48 10/100/1000 BaseT Ports &amp; 4-1G SFP Ports ready for use with SFP module. Architecture: stand alone rack mountable. Bandwidth: minimum 136Gbps of switching bandwidth to</p>			

	<p>support above listed ports in non blocking configuration.Stackable/Scable: support for stacking multiple switchesStacking backplane bandwidth: Access switch shall have additional port(s) for providing minimum 40 Gbps stacking bandwidthL2 Features: 802.1x authentication, spanning tree etc.Network/jflow/sflow or equivalent: provision for Network/jflow/sflow or equivalent supportNetwork Management: support Network Management through command line interface (CLI), SNMP v1, v2c, v3, httpsIPv6 Readiness: IPv6 Readiness from day 1.PoE+Budget:Switch shall suport PoE power Budget of Minimum 360WRegulatory/Safety: confirming to UL60950 &amp;</p>			
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	EN60950.EAL/NIAP certified: Model No shall be EAL or NIAP/NDPP certified.Make Cisco, Juniper, HP, Brocade, dell			
3	Supply & installation of Network Switch in Network Rack with the following specification as below.Switch shall have:Port Density: minimum 24 10/100/1000 BaseT Ports & 4-1G SFP Ports ready for use with SFP module.Architecture: stand alone rack mountable.Bandwidth: minimum 88Gbps of switching bandwidth to support above listed ports in non blocking configuration.Stackable/Sc able: support for stacking multiple switchesStacking backplane bandwidth: Access switch shall have additional port(s) for providing minimum 40 Gbps stacking			

	<p>bandwidthL2 Features:  802.1x authentication,  spanning tree  etc.Network/jflow/sflow  or equivalent: provision  for Network/jflow/sflow or  equivalent  supportNetwork  Management: support  Network Management  through command line  interface (CLI), SNMP v1,  v2c, v3, httpsIPv6  Readiness: IPv6 Readiness  from day 1.  PoE+Budget:Switch shall  support PoE power Budget  of Minimum  180WRegulatory/Safety:  confirming to UL60950 &amp;  EN60950.EAL/NIAP  certified: Model No shall  be EAL or NIAP/NDPP  certified.Make Cisco,  Juniper, HP, Brocade, dell</p>			
4	<p>Supply and  installation/laying of  category 6A or better, 4  pair shielded cable U/FTP</p>			

	<p>or F/UTP in metal Raceway/UPVC Trunking, sheath type: low smoke zero halogen with transmission properties &amp; electrical properties tested minimum up to 500MHz &amp; verified by ETL &amp; comply with ANSI/TIA/EIA-568-C.2 &amp; ISO/IEC 11801Make Commscope, Schneider, Molex, Siemon</p>			
5	<p>Supply installation testing and commissioning of CAT6A Patch Panel unloaded in Network rack with port identification number, with self adhesive clear label holder. Each port/jack on the panel should be individually removable on field from the panel and have integrated rear cable management metallic shelf and have a separate provision of grounding.Make Commscope, Schneider,</p>			

	Molex, Siemon			
6	Supply installation testing and commissioning of Patch Cords Cat 6A shielded 1 meter in Network rack with 4 pair shielded copper wire, factory pre terminated with shielded RJ45 plugs, Aluminium/polyster shield screen material, with low smoke Zero halogen sheath, comply to TIA-568-C.2 Cat 6A in I/Os of Network Rack. Make Commscope, Schneider, Molex, Siemon			
7	Supply installation testing and commissioning of Patch Cords Cat 6A shielded 2 meter in Field Side with 4 pair shielded copper wire, factory pre terminated with shielded RJ45 plugs, Aluminium/polyster shield screen material, with low smoke Zero halogen			



	sheath, comply to TIA-568-C.2 Cat 6A in Metal raceway/UPVC Trunking at field side. Make Commscope, Schneider, Molex, Siemon			
8	Supply and installation of Shielded Cat 6A information outlet U/FTP or F/UTP, compliance to category 6A or better, TIA568C.2-500MHz at Metal raceway/UPVC Trunking at field side. Make Commscope, Schneider, Molex, Siemon			
9	Supply and installation of single gang square face plate (Dual & Quad) and SMB Box with a provision to support variety of jacks- UTP,STP etc in Metal raceway/UPVC Trunking system on the field side Make Commscope, Schneider, Molex, Siemon			

**Part B: Technical Specification: 6. Trunking and Raceway**

**Item Specifications -VII**

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
	The scope includes Supply of UPVC cable management (Trunking System) its accessories, installing the same on wall/surface as per the specification below and quantities specified in the BOQ. The PVC trunking shall be fire retardant, low smoke and the contractor shall provide the necessary test certificates in support of this requirement.			
1	Supply & Installation of UPVC cable management (Trunking System) Minimum 195x50mm (3 Compartment) with flexible cover to fit onto whole branch with a			

	<p>provision of 3 compartment with 2 separation partitions for Power supply distribution , Network and communication cables including provision to fix power sockets/LAN Socket/Telephone sockets separately. The item includes including supply and installation of finishing accessories and cable accessories flat junction, body joints, cover joints, clips, earth link, base for cable ties, tags etc as required. The system shall consist of separation partition for Power Distribution and LAN/Telephone. It shall have provision to accept mounting boxes that snap fit into the profile complete as required. Make Legrand, OBO Betterman, MK</p>			
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2	Supply and installation of internal angle for UPVC cable management (Trunking System of 195x50) as required Make Legrand, OBO Betterman, MK			
3	Supply and installation of external angle for UPVC cable management (Trunking System of 195x50) as required Make Legrand, OBO Betterman, MK			
4	Supply and installation of Flat angle for UPVC cable management (Trunking System of 195x50) as required Make Legrand, OBO Betterman, MK			
5	Supply and installation of End Cap for UPVC cable management (Trunking System of 195x50) as required Make Legrand, OBO Betterman, MK			

6	Supply and fixing of module frame for UPVC cable management (Trunking System) including supply of all accessories required for fixing the module complete as required. Make Legrand, OBO Betterman, MK			
7	Supply and fixing of following modular power sockets/switches for Aluminium cable management (Trunking System) and for raceway including supply of all accessories required for fixing the switch/sockets outlets complete with all interconnection earthing as required. Make Legrand, OBO Betterman, MK			
8	Supply & Installation of Metal/GI Raceways Minimum 300mmx38mm-3 compartment for LV and ELV cabling in screed			

	<p>floors, can be combine with junction box, floor box, for wiring devices along with raceway accessories such as fixing brackets, coupler for joining raceways etc and shall have separate compartment for Power supply distribution, Network and communication cables including provision to fix power sockets/LAN Socket/Telephone sockets separately and including supply and installation of finishing accessories. The system shall consist of separation partition for Power Distribution and LAN/Telephone. It shall have provision to accept mounting boxes that snap fit into the profile complete as required. Make Legrand, OBO Betterman, MK</p>			
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9	Supply and installation of vertical Riser for 300mm width raceway along with the installation accessories as requiredMake Legrand, OBO Betterman, MK			
10	Supply and installation of Height adjustable junction box with fly over and site cover for 300mm raceway along with the installation accessories as requiredMake Make Legrand, OBO Betterman, MK			
11	Supply and installation of floor boxes for screed floor for minimum 3 compartment along with lid and trim cover with flexible cable exit for 300mm raceway along with the installation accessories as requiredMake Make Legrand, OBO Betterman, MK			

12	Supply and fixing of module frame for metal raceway including supply of all accessories like support plate required for fixing the module complete as required. Make Legrand, OBO Betterman, MK			
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**Part C: Terms and Conditions**

**Item Specifications -VIII**

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
1	Eligibility Criteria:			
	a) Bidders should have satisfactorily executed at-least one (1) work of value not less than Rs. 40 lakh or two (2) works of value not less than Rs.30 lakh or three (3) works of value not less than Rs. 20 lakh during the last 7 (seven) years. 'Similar Work' shall			



<p>mean electrical works inter-allia involving illumination, power distribution works. Documents evidencing satisfactory completion of similar works issued by the respective clients/organisations should be enclosed by the participating bidders to ascertain their eligibility for the work. Completion certificate for works issued by private parties shall be supported by TDS.</p>				
<p>b) Average Annual turnover of the last three (3) years ending 31-03-2016 should not be less than Rs.15 Lakh. Vendor to provide Chartered Accountant certificate for the Annual financial turnover and balance sheet showing Profit &amp; Loss.</p>				
<p>c) Should have a solvency</p>				

<p>of Rs. 20 Lakh or more. Bidder to provide latest solvency certificate from any scheduled bank.</p>				
<p>d) The Contractor should possess valid license of Class 'A' Category Electrical Contractor issued by the State Licensing Authority.</p>				
<p>2</p>	<p>Warranty clause: Contractor shall confirm the standard warranty/ Guarantee/Shelf life period of 24 months from the date of delivery and acceptance.</p>			
<p>3</p>	<p>Power supply for installation on metered basis Electricity, if available in the premises and sparable, may be provided to the contractor by Department only at the single point subject to the following conditions:</p>			

<p>i) The Contractor has to make his own arrangement to tap Electricity from a 3 phase/single phase supply from location decided by Engineer-in-charge. Electricity supply will be made available only on metered basis. Electric charges will be recovered at actuals.</p>				
<p>ii.) In all cases where/when the energy meter is not installed, defective energy meter is not replaced or not rectified immediately, the consumption charges towards electricity will be recovered on the basis of the total wattage of the load multiplied by the number of hours utilized. In all such cases the Contractor shall maintain a log book indicating wattage of the load and hours of consumption and</p>				

<p>get the same attested by Engineer-in-charge at appropriate time without fail. The decision of Engineer-in-charge in the matter shall be final.</p>				
<p>4</p>	<p>Storage/ site office space: Contractor shall be provided a lockable room within SCL premises for storage space and site office</p>			

**Vendor Specified Terms**

Description	Vendor Terms
<p>1. Definitions:</p> <p>a) The term Purchaser shall mean the Director, Semi-Conductor Laboratory or his successors or assignees.</p> <p>b)The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractors Successors, representatives, heirs, executors and administrators unless excluded by the Contract.</p> <p>c) The term Purchase Order/Contract shall mean the communication</p>	

<p>signed on behalf of the Purchaser by an officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of stores of plant, machinery, Software or equipment or part thereof.</p> <p>d) The term Stores shall mean all that the Contractor agrees to supply under the Contract as specified in the Purchase Order including its installation, testing and commissioning as per the specifications.</p>	
<p>2. For imported stores, prices shall be quoted on FOB/FCA nearest International/Gateway airport basis.</p> <p>For indigenous stores, prices shall be quoted on F.O.R destination basis i.e. SCL, S.A.S. Nagar, Mohali, Punjab exclusive of excise duty and taxes as may be applicable.</p> <p>The rates at which the said Government levies, taxes and duties are applicable, shall be indicated separately.</p> <p>The prices of the indigenous items shall also be exclusive of transit insurance which shall be arranged by the Purchaser and shall be to Purchaser account.</p> <p>Notes:</p> <p>a) Purchaser is entitled to Excise Duty exemption as per CE Notification no. 10/97 Central Excise dated March 01 1997 amended vide Notification No. 16/2007 Central Excise dated March 01, 2007 and</p>	

<p>would accordingly issue Excise Duty Exemption Certificate in favour of the contractor quoting in Indian Rupees. The bidder should take the same into account while quoting the prices in Indian Rupees.</p> <p>b)For imported materials, the Purchaser is entitled to issue Customs duty exemption certificate (CDEC) to the contractor under customs notification no.51/96 dated 23.07.1996 and subsequent amendments to enable the contractor to avail off the benefit of concessional rate of customs duty under this notification. CVD under this notification is nil. In addition to the above CDEC, any documentary support requested by the contractor from the purchaser for customs clearance of goods against the above CDEC shall be provided by the purchaser.</p> <p>c) For indigenous stores, no concessional Central Sales Tax form will be issued. Please indicate the rate of Central Sales Tax (without Form C) / VAT / Service Tax as applicable.</p>	
<p>3. PRICES:</p> <p>Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.</p> <p>4. Delivery Period :</p> <p>The contractor shall specify their best delivery period inclusive of all</p>	

<p>Govt. formalities of the exporting country.</p>	
<p>5. SECURITY DEPOSIT:</p> <p>a) On acceptance of the tender, the Contractor shall submit security deposit for ten percent (10 percent) of the value of the Contract within 15 days from the date of purchase order. If the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores contracted at the cost and risk of the Contractor.</p> <p>b) Security Deposit shall be submitted through Demand Draft /Bankers Cheque/ fixed deposit receipt or Bank Guarantee from any of the Scheduled Banks executed on non-judicial stamp paper of appropriate value, and shall be valid for a period of sixty (60) days beyond the date for completion of the Purchase Order/Contract.</p> <p>c) In case the contractor fails to furnish the security deposit within the specified date or extended due date, the Purchase Order/Contract shall be cancelled, and the EMD, if any, made earlier shall be forfeited, and, in addition, appropriate penal action may also be considered.</p> <p>d) After the Purchase Order/Contract is successfully executed in all respects, the Bank Guarantee towards Security Deposit may be discharged and retained amount and / or EMD refunded to vendors.</p> <p>e) In the event of non-execution of the Purchase order/Contract or breach of any terms and conditions of the Purchase Order, the Security</p>	

<p>Deposit shall be forfeited.</p>	
<p>6. Warranty :</p> <p>The Contractor shall provide for the tendered equipment comprehensive warranty for parts as well as labour for a period of 12 months from the date of successful installation, commissioning and testing of the equipment at Purchasers site at no extra charges against any manufacturing defect/faulty workmanship. In case any defect arises during warranty period, the Contractor should replace/rectify the same at its own cost at site/works.</p>	
<p>7. Warranty Replacements:</p> <p>a)If in the opinion of the purchaser it becomes necessary to replace or repair any defective equipment during the warranty period, such replacement or repair shall be made by the Contractor free of all costs to the Purchaser provided the notice informing the Contractor of the defect is given by the Purchaser within a period of 14 months from the date of acceptance thereof.</p> <p>b)All replacement parts during the warranty period shall be supplied by the Contractor, free-of-cost on DDP (Delivery Duty paid) basis with freight and insurance upto Purchaser site at S.A.S. Nagar, Punjab and customs duty applicable in India to the Contractor account including compliance with the customs procedure in India. The indigenous</p>	



<p>replacement parts, if any, shall be supplied by the Contractor free of cost on F.O.R. Purchaser site at SAS Nagar, Punjab basis.</p> <p>All defective parts including the imported parts shall be returned by Purchaser to the Contractor, if requested, on Freight to pay basis.</p>	
<p><b>8. GUARANTEE &amp; REPLACEMENT :</b></p> <p>a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.</p> <p>b) For a period of twelve (12) months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty.</p> <p>c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.</p> <p>d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the</p>	

Contractor the whole or any portion of the defective stores.

e) The decision of the purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the purchaser, as to whether or not the stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or as to whether the nature of the defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

f) PERFORMANCE BANK GUARANTEE:

To fulfil guarantee conditions outlined in clause 8 (a) to (e) above, the Contractor shall furnish a Bank Guarantee (as per format given by purchaser) from any scheduled bank/ bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract and shall be valid for a period of 60 days beyond the expiry date of warranty period. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.

g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of the stores at purchasers site.

h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications then such a specification shall apply in such cases the period of 14 months referred to in clause 8 (b) & (c) shall be the asked for guarantee period plus two months.

9. TERMS OF PAYMENT IN CASE OF OVERSEAS SUPPLIER[S]:

Being a Department of the Government of India, the terms of payment are by Sight Draft. The payment shall be remitted as under:

90% of the value shall be paid within 30 days of the receipt of the materials at purchaser site and the balance 10% amount shall be payable on successful installation, commissioning and acceptance of the entire project at Purchasers site against a Performance Bank Guarantee (refer clause no. 8(f)).

All bank charges outside India related to the payment shall be borne by the Contractor and all bank charges in India shall be borne by the purchaser.

In the event of the Contractor not being able to provide the Performance Bank Guarantee the payment of balance 10% amount shall be made after the expiry of the warranty period. Indian agent remuneration/service charge shall be payable by the Purchaser directly to the Indian agent in Indian Rupees based on T.T buying rate of exchange prevailing on the date of placement of purchase order within 30 days of acceptance of equipment at purchaser site.

The Sight Draft will be operative on presentation of the under mentioned documents :

<p>a) Original Bill of Lading / Airway Bill</p> <p>b) Commercially certified invoices describing the stores delivered, quantity, unit rate and their total value, in triplicate. The invoice should indicate the discounts, if any, and Agency Commission separately.</p> <p>c) Packing List showing individual dimensions and weight of packages.</p> <p>d) Country of Origin Certificate in duplicate, wherever applicable.</p> <p>e) Test Certificate.</p> <p>f) Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.</p> <p>g) Warrantee and guarantee Certificate/s as applicable.</p>	
<p>10. TERMS OF PAYMENT IN CASE OF INDIGENOUS SUPPLIER[S]:</p>	

<p>The payment shall be remitted as under:</p> <p>90% of the value shall be paid within 30 days of the receipt of the materials at purchaser site and the balance 10% amount shall be payable on successful installation, commissioning and acceptance of the entire project at Purchasers site against a Performance Bank Guarantee (refer clause no. 8(f)).</p> <p>In the event of the Contractor not being able to provide the Performance Bank Guarantee the payment of balance 10% amount shall be made after the expiry of the warranty period.</p> <p>While the purchaser bank charges shall be borne by the purchaser, the contractor shall bear the bank charges payable to his banker including the charges towards advising/amendments/commissions etc.</p>	
<p>11. DEMURRAGE:</p> <p>Supplier shall bear demurrage charges, if any, incurred by the purchaser due to delayed presentation of shipping documents to the bankers within a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.</p>	

<p><b>12. VALIDITY:</b></p> <p>The tender must be valid for a minimum period of 120 days from the date of opening of Technical bid and 90 days after opening of Price bid.</p> <p>The tender where the validity period is shorter than the period specified in the tender enquiry, shall be excluded from the procurement process.</p>	
<p><b>13. GUARANTEED TIME DELIVERY :</b></p> <p>The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.</p> <p><b>14. MODE OF DESPATCH:</b></p> <p>Stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the purchaser whose contact details shall be indicated in the purchase order.</p>	
<p><b>15. PORT OF ENTRY:</b></p>	

IGI Airport, New Delhi

16. CONSIGNEE:

Sr. Purchase & Stores Officer (Stores),

Semi-Conductor Laboratory, Sector 72, S.A.S. Nagar (Mohali), Punjab,  
India - 160 071

17. SHIPPING MARKS:

The mark on the shipping documents such as invoice, bill of lading and  
on the packages should be as follow:

PURCHASE ORDER NO.      DATED

GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

<p>SEMI-CONDUCTOR LABORATORY</p> <p>DESTINATION: SECTOR 72, S.A.S. NAGAR (MOHALI),PUNJAB, INDIA.</p>	
<p>18. INSURANCE OF THE STORES:</p> <p>Insurance wherever necessary, will be arranged by the Purchaser. The necessity or otherwise of insurance will be as indicated in the Purchase Order/Contract.</p>	
<p>19. INSTALLATION AND COMMISSIONING :</p> <p>Installation, commissioning and demonstration of performance of the tendered stores as per Purchaser tendered specifications shall be carried out by the Contractor at Purchaser site at S.A.S. Nagar, Punjab, India.</p> <p>The Contractor shall provide in advance guidelines for preparation of the installation site and list of items to be supplied by Purchaser during installation.</p> <p>On receipt of intimation from the Purchaser, the Contractor shall depute its engineer(s) to Purchaser site within two weeks to carry out installation and commissioning and will demonstrate the functionality of the tendered equipment to Purchaser specifications as per mutually</p>	



<p>agreed acceptance procedure. The Contractor shall be responsible for any loss/damages sustained due to delay on the part of the Contractor to send its engineer for installation and commissioning.</p> <p>Failure to commission the tendered equipment successfully shall entitle Purchaser to full refund of the payment made and the interest thereon. Decision regarding successful installation and commissioning shall rest solely with the Purchaser</p> <p>20. REPLACEMENT :</p> <p>If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the purchaser agrees, the price towards replacement items shall be paid by the purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.</p>	
<p>21. REJECTION:</p> <p>In the event that any of the stores supplied by the Contractor is found defective in material or workmanship or otherwise not in conformity</p>	

<p>with the requirements of the Contract specifications, the purchaser shall either reject the stores or request the Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the purchaser. If the Contractor fails to do so, the purchaser may at his option either :</p> <p>a) replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or</p> <p>b) terminate the Contract for default as provided under clause 39, or</p> <p>c) acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice the Purchaser's rights under clause 26.</p>	
<p>22. EXTENSION OF TIME :</p> <p>If the completion of supply of stores is delayed due to reason of force majeure such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the purchaser in writing of his claim for an extension of time. The purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but</p>	

<p>without prejudice to other terms and conditions of the Contract.</p> <p>23. TRAINING:</p> <p>For the tendered equipment, the Contractor to provide comprehensive training to Purchaser engineers on system operation, maintenance, application software and related applications for an appropriate period during installation and commissioning at no extra cost to the Purchaser. The training should be extensive enough so that quick diagnosis of problems and remedial actions is possible at Purchaser site.</p>	
<p>24. DELAY IN COMPLETION/LIQUIDATED DAMAGES:</p> <p>If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5 percent) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 percent) of the Contract price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as</p>	

<p>delayed until such time as the missing parts are delivered. Delivery of stores shall be complete on Installation, commissioning, Testing and Acceptance.</p>	
<p>25. INSPECTION AND ACCEPTANCE TEST:</p> <p>The Purchasers representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractors premises the material and workmanship of all stores to be supplied under this Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the purchasers representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractors premises.</p> <p>Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.</p> <p>For tests on the premises of the Contractor or of any of his sub-Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the purchasers representative to carry out the tests efficiently.</p> <p>When the stores have passed the specified test, the purchaser representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s</p>	

<p>certificates to the purchaser as may be required.</p> <p>26. ADDRESS OF INDIAN AGENT: if any:</p>	
<p>27. RECOVERY OF SUM DUE:</p> <p>Whenever any claim for the payment of, whether liquidated or not, money arising out of or under this Contract against the Contractor, the purchaser shall be entitled to recover such sum by appropriating in part or whole, the security deposited by the Contractor, if a security is taken against the Contract. In the event of the security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor under this or any other Contract with the purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the purchaser on demand the remaining balance due. Similarly, if the purchaser has or makes any claim, whether liquidated or not, against the Contractor under any other Contract with the purchaser, the payment of all moneys payable under the Contract to the Contractor including the security deposit shall be withheld till such claims of the purchaser are</p>	

<p>finally adjudicated upon and paid by the Contractor.</p> <p>28. REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:</p> <p>The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.</p>	
<p>29. PACKING:</p> <p>a) The Contractor wherever applicable shall pack and crate all stores for sea /air/road shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail, air or sea. The Contractor shall be held responsible for all damages due to improper packing.</p> <p>b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to</p>	

comply with this requirement shall make the Contractor liable for additional expenses involved.

c) The Contractor shall notify the purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.

d) The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.

e) Trans-shipment of equipment shall not be permitted except with the written permission of the purchaser.

f) Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:

i) Commercial Bill of Lading / Air Way Bill / Post parcel Receipt.

(Two non-negotiable copies)

ii) Invoice (3 copies)

iii) Packing List (3 copies)

iv) Test Certificate (3 copies)

<p>v) Certificate of Origin, wherever applicable.</p> <p>The Contractor shall also ensure that one copy of the packing list is enclosed in each case.</p>	
<p>30. ARBITRATION:</p> <p>If at any time any question, dispute or difference whatsoever shall arise between the purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for arbitration of the International Chamber of Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.</p> <p>In case of dispute arises with domestic/Indian suppliers, the applicable Arbitration procedure shall be as per Indian Arbitration &amp; Conciliation Act, 1996.</p>	



<p><b>31. LANGUAGE AND MEASURES:</b></p> <p>All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.</p> <p><b>32. TECHNICAL DOCUMENTATION:</b></p> <p>The Contractor shall provide installation, operation maintenance and programming manual. All documentation shall be in English language .</p>	
<p><b>33. SECURITY INTEREST:</b></p> <p>On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, purchaser shall have a</p>	

<p>security interest in such items which shall be deemed to be released only at the time when the applicable deliverable item is finally accepted and delivered to the purchaser in accordance with the terms of the Contract. Such security interest of the purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity .</p>	
<p>34. APPLICABLE LAW:</p> <p>The Contract shall be interpreted, construed and governed by the law</p> <p>35. INDEMNITY:</p> <p>The Contractor shall warrant and be deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any patent, copyright or trade mark and shall at all times indemnify the purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the Contract.</p>	

<p>36. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:</p> <p>Where counter terms and conditions/printed or cyclostyled conditions have been offered by the supplier, the same shall not be deemed to have been accepted by the purchaser unless specific written acceptance thereof is obtained .</p> <p>37. CONTRACTORS DEFAULT LIABILITY:</p> <p>The purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:</p> <p>a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.</p> <p>b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.</p>	

<p>38. In the event the Purchaser terminates the Contract in whole or in part as provided in Clause 37 the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in Clause 24 until such reasonable time as may be required for the final supply of stores.</p> <p>A) If this Contract is terminated as provided in Clause 37 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser:</p> <p>a) Any completed stores.</p> <p>b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted, by the purchaser and for manufacturing material delivered and accepted.</p> <p>B) In the event the Purchaser does not terminate the Contract as provided in Clause 37, the Contractor shall continue the performance of the Contract in which case he shall be liable to the purchaser for liquidated damages for delay as set out in Clause 26 until the stores</p>	

<p>are accepted.</p>	
<p><b>39. ERECTION OF PLANT &amp; MACHINERY:</b></p> <p>Wherever erection of a plant or machinery is the responsibility of the Contractor as per the terms of the Contract and in case the Contractor fails to carry out the erection as and when called upon to do so within the period specified by the purchaser, the purchaser shall have the right to get the erection done through any source of his choice. In such an event, the Contractor shall be liable to bear any additional expenditure that the purchaser is liable to incur towards erection. The Contractor shall, however, not be entitled to any gain due to such an action by the purchaser.&lt;br&gt;</p> <p><b>40. Any Other Term:</b></p>	

**Supporting Documents from Vendor**

**Attachment - I:**

**Attachment - II:**

**Price Bid Form**

Item Description	Slab Range	Qty	UOM	Currency	Unit Price	Total Price
Supply of MCC Panel 1 of 400A Incomer for Fab Development Activities detailed as per specification and drawing attached in annexure 1 & 2.	-	1	No.	-	-	-
Supply of MCC Panel 2 of 250A Incomer for Chemical Area detailed as per specification and drawing attached in annexure 1 & 3.	-	1	No.	-	-	-
Supply of MCC	-	1	No.	-	-	-

Panel 3 of 250A Incomer for Chemical Area detailed as per specification and drawing attached in annexure 1 & 4.						
Supply of 4Cx16 sq mm Aluminium conductor, XLPE insulated, extruded PVC inner sheath, armoured Cable of FRLS category and 1.1KV grade as per IS 7098 with latest amendment Make: Finolex/KEI/Havell s/RPG	-	100	MTR	-	-	-
Supply of 3.5Cx95 sq mm Aluminium conductor, XLPE insulated, ,extruded PVC	-	30	MTR	-	-	-

inner sheath, armoured and overall FRLS PVC outer sheathed 1.1 KV grade, as per IS 7098 Make: Finolex/KEI/Havells/RPG						
Supply of 3.5Cx120 sq mm Aluminium conductor, XLPE insulated, extruded PVC inner sheath, armoured and overall FRLS PVC outer sheathed 1.1 KV grade, as per IS 7098 Make: Finolex/KEI/Havells/RPG	-	250	MTR	-	-	-
Supply of 100mm size of perforated pre galvanised finish (galvanising as per IS 277) Cable Tray with	-	150	MTR	-	-	-



<p>perforation not more than 17.5 percentage in convenient section, joined with connectors, with clamps of cable tray100mm W x50 mm D x 1.6 mm T Cable Tray should be ISI mark.</p>						
<p>Supply of 300mm size of perforated pre galvanised finish (galvanising as per IS 277) Cable Tray with perforation not more than 17.5 percentage in convenient section, joined with connectors, with clamps of cable tray300mm Wx50 mmDx1.6 mmT Cable Tray should be ISI</p>	-	50	MTR	-	-	-

mark.						
Supply of 450mm Ladder type welded pre galvanised sheet (galvanising as per IS 277) joined with connectors, with clamps of cable tray 450mm Wx100 mm Dx2 mm T Cable Tray should be ISI mark.	-	100	MTR	-	-	-
Supply of Flush/Surface mounting TPN DB as per IS 8623 with 100A Copper Bus Bar for each phase, fully insulated busbar and neutral bar, masking sheet, Door earthing, having IP 54 protection, with provision for	-	3	No.	-	-	-

MCB/Isolater.RCC B at incomer and SP MCBs at outgoing (without isolator/MCB) of 8 Way (4+24Way) DB Make: Legrand/Siemens/ ABB						
Supply of 63A,3 phase + neutral, four pole, (three phase and neutral), 415 volts, residual current circuit breaker with overload (RCBO) having a sensitivity current upto 300 milliamperesMake : Legrand/Siemens/ ABB	-	3	No.	-	-	-
Supply of 5 amps to 32 amps rating, Single Pole	-	72	No.	-	-	-

240/415 volts, "C" curve, miniature circuit breaker (MCB) Make: Siemens/Schneider/ABB						
Supply of indoor end termination with brass compression gland and aluminum lugs for 4Cx16mm <sup>2</sup> mm <sup>2</sup> size of PVC insulated & PVC sheathed aluminum conductor Make: Dowells, 3M.	-	6	No.	-	-	-
Supply of indoor end termination with brass compression gland and aluminum lugs for 3.5Cx 95 mm <sup>2</sup> size of PVC insulated and PVC	-	2	No.	-	-	-

sheathed aluminum conductor Make: Dowells, 3M.						
Supply of indoor end termination with brass compression gland and aluminum lugs for 3.5Cx 120 mm2 size of PVC insulated and PVC sheathed aluminum conductor Make: Dowells, 3M.	-	4	No.	-	-	-
Supply of indoor end termination with brass compression gland and aluminum lugs for 3.5Cx 185 mm2 size of PVC insulated and PVC sheathed aluminum	-	2	No.	-	-	-

conductor Make: Dowells, 3M.						
Supply of 20 mm flexible GI conduit along with accessories of ISI Mark	-	300	MTR	-	-	-
Supply of accessories for Wiring of 2 X 1.5 sq. mm size along with 1 X 1.5 sq.mm size of FRLS PVC insulated copper conductor, single core cable Note: The item includes both supply of wire and conduit by the contractor.Make of wire: Polycab/Rallision/ Finolax//KEI/Have lls	-	400	MTR	-	-	-
Supply of accessories	-	200	MTR	-	-	-

<p>forWiring of 2 X 2.5 sq. mm size along with 1 X 2.5 sq.mm size of FRLS PVC insulated copper conductor, single core cable Note: The item includes both supply of wire and conduit by the contractor.Make of wire: Polycab/Rallision/Finolax//KEI/Have lls</p>						
<p>Supply of accessories for Wiring of 4 X 2.5 sq. mm size along with 2 X 1.5 sq.mm size of FRLS PVC insulated copper conductor, single core cable Note: The item includes both supply of</p>	-	150	MTR	-	-	-

wire and conduit by the contractor. Make of wire: Polycab/Rallision/Finolax//KEI/Have IIs						
Supply of accessories for Wiring of 4 X 16 sq. mm size along with 2 X 6 sq.mm size of FRLS PVC insulated copper conductor, single core cable Note: The item includes both supply of wire and conduit by the contractor. Make of wire: Polycab/Rallision/Finolax//KEI/Have IIs	-	200	MTR	-	-	-
Supply of 20mm Size of ISI marked MS conduit along	-	350	MTR	-	-	-



with accessories The conduit shall be of ISI Mark						
Supply of 3Cx1.5 sq. mm Size of FRLS PVC insulated copper Conductor, single core cable Make: Polycab/Rallision/Finolax//KEI/Have IIs	-	500	MTR	-	-	-
Supply of 3Cx2.5 sq. mm Size of FRLS PVC insulated copper Conductor, single core cable Make: Polycab/Rallision/Finolax//KEI/Have IIs	-	500	MTR	-	-	-
Supply of 1 or 2 Module (75mmX75mm) , GI box alongwith modular base & cover plate for modular switches	-	20	No.	-	-	-

Make Legrand, L & T, ABB						
Supply of 4 Module (125mmX75mm) , GI box alongwith modular base & cover plate for modular switches Make Legrand, L & T, ABB	-	10	No.	-	-	-
Supply of 6 Module (200mmX75mm) , GI box alongwith modular base & cover plate for modular switches Make Legrand, L & T, ABB	-	10	No.	-	-	-
Supply of 8 Module ((125mmX125mm) , GI box alongwith modular base & cover plate for modular switches	-	10	No.	-	-	-

Make Legrand, L & T, ABB						
Supply of 5/6 amps modular switch Make: Legrand, L & T, ABB	-	30	No.	-	-	-
Supply of 3 pin 5/6 amp socket outlet Make: Legrand, L & T, ABB	-	50	No.	-	-	-
Supply of 15/16 amps modular switch Make: Legrand, L & T, ABB	-	10	No.	-	-	-
Supply of 6 pin 15/16 amp socket outlet Make: Legrand, L & T, ABB	-	10	No.	-	-	-
supply of Telephone socket Outlet Make: Legrand, L & T, ABB	-	20	No.	-	-	-

Supply of plug and socket DBs suitable for 63 Amps 415 volts , 3P N E, along with MCB,Top plug and Neutral link and top plug as per IS 8623 Make Make : Siemens/Schneider/ABB	-	10	No.	-	-	-
Supply of Earthing pit with GI Earth Pipe 4.5m long, 40mm dia along with the accessories as per IS 3043	-	4	No.	-	-	-
Supply of GI Strip of 25x5mm size along with accessories for Earthing	-	50	MTR	-	-	-
Supply of 6 SWG dia G.I. wire for Earthing	-	50	MTR	-	-	-

Supply of 4.00 mm dia copper wire for Earthing	-	50	MTR	-	-	-
Supply of Bosch make speakers, model no. LBC 3099 for Paging	-	10	No.	-	-	-
Supply of 2Cx1.5mm2 Copper, extruded PVC inner sheath, armoured and overall FRLS PVC outer sheathed 1.1KV grade, ISI Mark for pagingMake: Finolex/Havells/K EI	-	200	MTR	-	-	-
Supply and installation of ISI marked 2Cx1.5mm2 Copper, twisted pair PVC wire for paging (Only Supply) Make: Finolex/Havells/K	-	100	MTR	-	-	-

EI						
Supply of MS painted box, Size 6 inchX6 inch with ELMEX type terminal block for loop in (One No) loop out (4 No) of 2c x1.5 sq mm twisted pair cable for paging	-	10	No.	-	-	-
Supply of addressable optical smoke detector with base Make :Apollo ,Model :XP 95	-	52	No.	-	-	-
Supply of addressable rate of rise heat detectors with base Make :Apollo ,Model :XP 95	-	12	No.	-	-	-
Supply of addressable, Manual Call Point (MCP) Make	-	10	No.	-	-	-

:Apollo ,Model :XP 95						
Supply of addressable, Sounders with isolator /base Make :Apollo ,Model :XP 95	-	8	No.	-	-	-
Supply of addressable Input Out Put Module with base Make :Apollo ,Model :XP 95	-	2	No.	-	-	-
Supply of 2Cx1.5mm2 Copper, extruded PVC inner sheath, armoured and overall FRLS PVC outer sheathed 1.1 KV grade, as per IS 7098Make: Finolex/Havells/K EI	-	500	MTR	-	-	-
Supply of end termination with	-	128	No.	-	-	-

brass compression gland and copper lugs for 2Cx1.5mm2 Copper cable MAke Dowell, 3M						
Supply of MS painted box, Size 4''X4'' with ELMEX type terminal block for loop in loop out of 2c x1.5 sq mm copper armoured cable	-	64	No.	-	-	-
Supply of UL listed, modular type 32U network rack with front glass door and rear perforated door, floor mounted, Size 800x800 or bigger, detailed specification as per item specification	-	2	No.	-	-	-



sheet Part B: Technical Specification: 5. Networks Make Rittal, Netrack, Schneider, Valrack						
Supply of Network Switch as per specification detailed specification as per item specification sheet Part B: Technical Specification: 5. Networks Make Cisco, Juniper, HP, Brocade, dell	-	3	No.	-	-	-
Supply of category 6A or better, 4 pair shielded cable U/FTP or F/UTP sheath type: low smoke zero halogen with transmission properties &	-	2100	MTR	-	-	-

<p>electrical properties tested minimum up to 500MHz &amp; verified by ETL &amp; comply with ANSI/TIA/EIA-568-C.2 &amp; ISO/IEC 11801Make Commscope, Schneider, Molex, Siemon</p>						
<p>Supply of CAT6A Patch Panel unloaded in Network rack with port identification number, with self adhesive clear label holder. Each port/jack on the panel should be individually removable on field from the panel and have integrated rear cable management</p>	-	5	No.	-	-	-

metallic shelf and have a separate provision of grounding. Make Commscope, Schneider, Molex, Siemon						
Supply of Patch Cords Cat 6A shielded 1 meter with 4 pair shielded copper wire, factory pre terminated with shielded RJ45 plugs, Aluminium/polyster shield screen material, with low smoke Zero halogen sheath, comply to TIA-568-C.2 Cat 6A in I/Os of Network Rack. Make Commscope, Schneider, Molex, Siemon	-	92	No.	-	-	-

<p>Supply of Patch Cords Cat 6A shielded 2 meter in Aluminium Bus trunking at field side with 4 pair shielded copper wire, factory pre terminated with shielded RJ45 plugs, Aluminium/polyster shield screen material, with low smoke Zero halogen sheath, comply to TIA-568-C.2 Cat 6A in I/Os of Network Rack. Make Commscope, Schneider, Molex, Siemon</p>	-	50	No.	-	-	-
<p>Supply of Shielded Cat 6A information outlet U/FTP or F/UTP, compliance to category 6A or</p>	-	100	No.	-	-	-

better, TIA568C.2-500MHzMake Commscope, Schneider, Molex, Siemon						
Supply of single gang square face plate (Dual & Quad) (Dual & Quad) and SMB Box with a provision to support variety of jacks- UTP,STP etcMake Commscope, Schneider, Molex, Siemon	-	46	No.	-	-	-
Supply of 195x50mm 3 compartment UPVC cable management (Trunking System) with flexible cover to fit onto whole branch including internal or	-	125	MTR	-	-	-

<p>external angle,, including finishing accessories and cable accessories flat angle, flat junction, body joints, cover joints, clips, earth link, base for cable ties,tags etc as required. with a provision of 3 compartment with 2 separation partitions for Power supply distribution , Network and communication cables including provision to fix power sockets/LAN Socket/Telephone sockets separately. It shall have provision to accept mounting boxes that snap fit into the profile</p>						
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complete as required. Make Legrand, OBO Betterman, MK						
Supply of internal angle for UPVC cable management (195x50mm Trunking System) Make Legrand, OBO Betterman, MK	-	10	No.	-	-	-
Supply of external angle for UPVC cable management (195x50mm Trunking System) Make Legrand, OBO Betterman, MK	-	10	No.	-	-	-
Supply of flat angle for UPVC cable management (195x50mm Trunking System) Make Legrand, OBO	-	5	No.	-	-	-

Betterman, MK						
Supply of End Cap for UPVC cable management (195x50mm Trunking System) Make Legrand, OBO Betterman, MK	-	15	No.	-	-	-
Supply of 2 module frame for UPVC cable management (195x50 Trunking System) Make Legrand, OBO Betterman, MK	-	50	No.	-	-	-
Supply of 4 module frame for UPVC cable management (195x50 Trunking System) Make Legrand, OBO Betterman, MK	-	10	No.	-	-	-
Supply of 6 module frame for UPVC cable	-	50	No.	-	-	-



management (195x50Trunking System) Make Legrand, OBO Betterman, MK						
Supply of 5/6A, 5 Pin Modular Switch socket for Aluminium cable management (Trunking System) Make Legrand, OBO Betterman, MK	-	80	No.	-	-	-
Supply of 5/6 amps switch for Aluminium cable management (Trunking System) Make Legrand, OBO Betterman, MK	-	40	No.	-	-	-
Supply of RJ45 Cat 6 socket for Aluminium cable management (Trunking System) Make Legrand,	-	92	No.	-	-	-

OBO Betterman, MK						
Supply of 300mmx38mm- 3 compartment Metal/GI Raceways for LV and ELV cabling in screed floors, can be combine with junction box, floor box, for wiring devices along with raceway accessories such as fixing brackets, coupler for joining raceways etc and shall have separate compartment for Power supply distribution, Network and communication cables including provision to fix power sockets/LAN	-	125	MTR	-	-	-

Socket/Telephone sockets separately and including supply and installation of finishing accessories. It shall have provision to accept mounting boxes that snap fit into the profile complete as required. Make Legrand, OBO Betterman, MK						
Supply of vertical Riser for 300mm width raceway along with the installation accessories Make Legrand, OBO Betterman, MK	-	6	No.	-	-	-
Supply of Height adjustable junction box with fly over and site	-	11	No.	-	-	-

cover for 300mm raceway along with the installation accessories Make Legrand, OBO Betterman, MK						
Supply of floor boxes for screed floor 3 compartment Raceway along with lid and trim cover with flexible cable exit for 300mm raceway along with the installation accessories Make Legrand, OBO Betterman, MK	-	8	No.	-	-	-
Supply of 8 module frame for metal raceway including supply of all accessories Make Legrand, OBO Betterman,	-	24	No.	-	-	-

MK						
Supply of 4 module RJ45 port frame for metal raceway including supply of all accessories Make Legrand, OBO Betterman, MK	-	8	No.	-	-	-
Installation , testing and commissioning of floor mounted MCC Electrical Panel 1 of 400A Incomer for Fab Development Activities as per SLD attached in Annexure 2	-	1	No.	-	-	-
Installation , testing and commissioning of floor mounted MCC Electrical Panel 2 of 250A Incomer for Chemical Lab as	-	1	No.	-	-	-

per SLD attached in Annexure 3						
Installation , testing and commissioning of floor mounted MCC Electrical Panel 3 of 250A Incomer for Chemical Lab as per SLD attached in Annexure 4	-	1	No.	-	-	-
Installation of 4Cx16 sq mm Aluminium conductor, XLPE insulated, extruded PVC inner sheath, armoured on Cable Tray as required	-	100	MTR	-	-	-
Installation of 3.5Cx95 sq mm Aluminium conductor, XLPE insulated, extruded PVC	-	30	MTR	-	-	-

inner sheath, armoured FRLS PVC outer sheathedon Cable Tray as required						
Installation of 3.5Cx120 sq mm Aluminium conductor, XLPE insulated, extruded PVC inner sheath, armoured FRLS PVC outer sheathedon Cable Tray as required	-	250	MTR	-	-	-
Rerouting of existing PVC insulated and PVC sheathed armoured power cable (Above 95 sq. mm and upto 185 sq. mm) of 1.1 kV grade on cable tray as required. as required.Note:	-	60	MTR	-	-	-

Cable tray is at an elevation of around 5-6 meter from floor level.						
Installation of 100mm W x50 mm D x1.6 mm T size of perforated pre galvanised finish ( galvanising as per IS 277) Cable Tray with connectors, with clamps of cable tray including supply of support materials such as unistruds, clamping rids etc , minor civil work as required	-	150	MTR	-	-	-
Installation of 300mm W x50 mm Dx1.6 mm T size of perforated pre galvanised finish ( galvanising as per IS 277)	-	50	MTR	-	-	-



Cable Tray with connectors, with clamps of cable tray including supply of support materials such as unistruds, clamping rids etc , minor civil work as required						
Installation of 450mm W x 100 mm D x2 mm T size of Ladder type welded pre galvanised sheet ( galvanising as per IS 277) Cable Tray joined with connectors, with clamps of cable tray including supply of Tee, Bends support materials such as unistrud, clamping rod civil work as required on the wall for Proper	-	100	MTR	-	-	-

Support						
Instalattion of Horizontal type, suitable for wall mounting, 3 Phase 415 V, as per IS 8623 distribution board of sheet steel, dust protected, duly powder coated, IP 54, inclusive of 250 A, tinned copper insulated bus bar, common neutral link, earth bar, din bar for mounting MCBs as required complete with MCCB/MCBs with Incomer MCCB of 200A 35 kA - 1no. Outgoing 63A TPN MCB -12 nos. as required	-	1	No.	-	-	-
Installation of Flush/Surface	-	3	No.	-	-	-

mounting 8 way TPN DB as required						
Fixing of 63A,3 phase + neutral, four pole, (three phase and neutral), 415 volts, residual current circuit breaker with overload (RCBO), in the existing MCB DB as required.	-	3	No.	-	-	-
Fixing of 5 amps to 32 amps rating, Single Pole 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB as required	-	72	No.	-	-	-
Making indoor end termination	-	6	No.	-	-	-

with brass compression gland and aluminum lugs for 4Cx16mm <sup>2</sup> mm <sup>2</sup> size of PVC insulated & PVC sheathed aluminum conductor as required						
Making indoor end termination with brass compression gland and aluminum lugs for 3.5Cx95mm <sup>2</sup> mm <sup>2</sup> size of PVC insulated & PVC sheathed aluminum conductor as required	-	2	No.	-	-	-
Making indoor end termination with brass compression	-	4	No.	-	-	-

gland and aluminum lugs for 3.5Cx120mm <sup>2</sup> mm <sup>2</sup> size of PVC insulated & PVC sheathed aluminum conductor as required						
Making indoor end termination with brass compression gland and aluminum lugs for 3.5Cx185mm <sup>2</sup> mm <sup>2</sup> size of PVC insulated & PVC sheathed aluminum conductor as required	-	2	No.	-	-	-
Installation, testing & commissioning of 4x14W, 2 feet x 2 feet, T5 light fixture. The	-	50	No.	-	-	-

<p>installation of light fixture shall include supporting it with suitable size GI wire from the underside of the concrete ceiling at about 2.2 meters above false ceiling, providing GI flexible conduit, 1.5 sq mm FR PVC wire with earth for loop in loop out and making connections, providing fastners and clamps for GI wire etc. as required.Note: Light Fixture will be provided by SCL free of cost to the selected contractor for incorporation in the work.</p>						
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<p>Installation, testing &amp; commissioning of 4x14W, 2 feet x 2 feet, T5 light fixture. The installation of light fixture shall include supporting it with suitable size GI wire from the underside of the concrete ceiling at about 3 meters above false ceiling, providing GI flexible conduit, 1.5 sq mm FR PVC wire with earth for loop in loop out and making connections, providing fastners and clamps for GI wire etc. as required. Note: Light Fixture will be provided by</p>	-	20	No.	-	-	-
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SCL free of cost to the selected contractor for incorporation in the work.						
Installation, testing & commissioning of 4x14W, 2 feet x 2 feet, T5 light fixture. The installation of light fixture shall include supporting it with suitable size GI wire from the underside of the concrete ceiling at about 4-5 meters above false ceiling, providing GI flexible conduit, 1.5 sq mm FR PVC wire with earth for loop in loop out and making connections,	-	20	No.	-	-	-



<p>providing fastners and clamps for GI wire etc. as required.Note: Light Fixture will be provided by SCL free of cost to the selected contractor for incorporation in the work.</p>						
<p>Installation, testing and commissioning of pre-wired, T5, 28W fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube/lamp etc. directly on underside of concrete ceiling/ wall, including connections , providing circular box with ball</p>	-	30	No.	-	-	-

sockets with nipple , 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, loop in loop out, and earthing etc. as required. as required.Note: Light Fixture will be provided by SCL free of cost to the selected contractor for incorporation in the work.						
Fixing of 20 mm flexiable GI conduit along with accessories above false ceiling as required.	-	300	MTR	-	-	-
Wiring of 2 X 1.5 sq. mm size along with 1 X 1.5 sq.mm size of FRLS PVC	-	400	MTR	-	-	-

insulated copper conductor, single core cable in surface/ recessed steel conduit as required. Party will install both wire and conduit as required.						
Wiring of 2 X 2.5 sq. mm size along with 1 X 2.5 sq.mm size of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. Party will install both wire and conduit as required.	-	200	MTR	-	-	-
Wiring of 4 X 2.5 sq. mm size along with 2 X 1.5 sq.mm size of FRLS PVC	-	150	MTR	-	-	-

insulated copper conductor, single core cable in surface/ recessed steel conduit as required. Party will install both wire and conduit as required.						
Wiring of 4 X 16 sq. mm size along with 2 X 6 sq.mm size of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. Party will install both wire and conduit as required.	-	200	MTR	-	-	-
Fixing of 20mm Size of ISI marked MS conduit along with accessories in surface/recess as required	-	350	MTR	-	-	-

Drawing of 3Cx1.5 sq. mm Size of FRLS PVC insulated copper Conductor, single core cable in the existing surface/recessed steel/PVC conduit as required as required	-	500	MTR	-	-	-
Drawing of 3Cx2.5 sq. mm Size of FRLS PVC insulated copper Conductor, single core cable in the existing surface/recessed steel/PVC conduit as required as required	-	500	MTR	-	-	-
Fixing 1 or 2 Module (75mmX75mm) , GI box alongwith modular base & cover plate for	-	20	No.	-	-	-

modular switches in recess/wall as required.						
Fixing 4 Module (125mmX75mm) , GI box alongwith modular base & cover plate for modular switches in recess/wall as required.	-	10	No.	-	-	-
Fixing 6 Module (200mmX75mm) , GI box alongwith modular base & cover plate for modular switches in recess/wall as required.	-	10	No.	-	-	-
Fixing 8 Module ((125mmX125mm) ) , GI box alongwith modular base & cover plate for modular switches in recess/wall as	-	10	No.	-	-	-

required.						
Fixing of 5/6 amps modular switch on the existing modular plate & switch box including connections as required.	-	30	No.	-	-	-
Fixing of 3 pin 5/6 amp socket outlet on the existing modular plate & switch box including connections as required.	-	50	No.	-	-	-
Fixing of 15/16 amp switch on the existing modular plate & switch box including connections as required.	-	10	No.	-	-	-
Fixing of 6 pin 15/16 amp socket outlet on the	-	10	No.	-	-	-

existing modular plate & switch box including connections as required.						
Fixing of Telephone socket outlet on the existing modular plate & switch box including connections as required.	-	20	No.	-	-	-
Fixing of 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps C curve, SP, MCB, in sheet steel enclosure, on surface or in recess with chained metal cover for the	-	15	No.	-	-	-



socket out let and complete with connections, testing and commissioning etc. as required.						
Fixing of plug and socket DBs suitable for 63 Amps 415 volts , 3P N E complete with MCB, neutral link and top plug and complete with connections, testing and commissioning etc. as required.	-	10	No.	-	-	-
Making Earthing pit with GI Earth Pipe 4.5m long, 40mm dia along with the masonry works as required.	-	4	No.	-	-	-
Laying of GI Strip of 25x5mm size on	-	50	MTR	-	-	-

wall/floor/recess including connection termination with GI nut, bolt, spring washer as required.						
Fixing 4.00 mm dia copper wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	-	50	MTR	-	-	-
Installation , Testing and Commissioning of Bosch make speakers, model no. LBC 3099 on the false ceiling as required	-	10	No.	-	-	-
Installation, Testing and Commissioning of	-	10	No.	-	-	-

speakers (Wall mounted) on the wall with metal cased at a height of 3-4 meter and providing all accessories like nut bolt, clamp to fix the speaker on wall as required .						
installation of 2Cx1.5mm2 Copper extruded PVC inner sheath, armored and overall FRLS PVC outer sheathed 1.1 KV grade, ISI marked on underside of concrete ceiling including the hardware as required.	-	200	MTR	-	-	-
Supply and installation of ISI marked 2Cx1.5mm2	-	100	MTR	-	-	-

Copper, twisted pair PVC wire (only installation) as required						
installation, testing and commissioning of MS painted box, Size 6 inchX6inch with ELMEX type terminal block for loop in (One No) loop out (4 No) of 2c x1.5 sq mm twisted pair copper armored cable and connection to the speakers installed above false ceiling/wall/surface/recess including providing necessary hardware for mounting /fixing, as required	-	10	No.	-	-	-

installation,testing and commissioning of addressable optical smoke detector with base on ceiling / in the void between false ceiling and existing steel structure.	-	52	No.	-	-	-
Installation, testing and commissioning of addressable rate of rise heat detectors with base on the existing false ceiling (at a height of 3 meter from ground).	-	12	No.	-	-	-
Installation, testing and commissioning of addressable, Manual Call Point	-	10	No.	-	-	-

(MCP) on the wall/Surface.						
Installation, testing and commissioning of addressable, Sounders with isolator on the wall/surface.	-	8	No.	-	-	-
installation,testing and commissioning of addressable Input Out Put Module with base on ceiling / in the void between false ceiling.	-	2	No.	-	-	-
Installation of 2Cx1.5mm2 Copper, extruded PVC inner sheath, armoured and overall FRLS PVC outer sheathed on existing cable tray/wall as	-	500	MTR	-	-	-

required.						
Making end termination with brass compression gland and copper lugs for 2Cx1.5mm <sup>2</sup> Copper cable in MS Box of Size 4''X4'' installed above the false ceiling/wall/surface as required.	-	128	No.	-	-	-
Installation, testing and commissioning of MS painted box, Size 4''X4'' with ELMEX type terminal block for loop in loop out of 2c x1.5 sq mm copper armoured cable and connection to the fire detector device, above false	-	64	No.	-	-	-

ceiling/wall/surface/recess including wall cutting and providing necessary hardware for mounting /fixing, as required						
Installation testing and commissioning of UL listed, modular type 32U network rack with front glass door and rear perforated door, floor mounted, Size 800x800 or bigger, as required	-	2	No.	-	-	-
Installation of Network Switch in Network Rack as required	-	3	No.	-	-	-
Installation/laying of category 6A or better, 4 pair	-	2100	MTR	-	-	-



shielded cable U/FTP or F/UTP in Aluminium trunking as required						
Installation testing and commissioning of CAT6A Patch Panel unloaded in Network rack with port identification number as required	-	5	No.	-	-	-
Installation testing and commissioning of Patch Cords Cat 6A shielded 1 meter in Network rack as required	-	92	No.	-	-	-
Installation testing and commissioning of Patch Cords Cat 6A shielded 2 meter in Aluminium Bus	-	50	No.	-	-	-

trunking at field side. as required						
Installation of Shielded Cat 6A information outlet at Aluminium Bus trunking at field side. as required	-	100	No.	-	-	-
Installation of single gang square face plate (Dual & Quad) n Aluminium Bus trunking system on the field side as required	-	46	No.	-	-	-
Installation of 195x50mm 3 Compartment UPVC cable management (Trunking System) with flexible cover to fit onto whole branch including internal or external angle, including	-	125	MTR	-	-	-

installation of finishing accessories and cable accessories flat angle, flat junction, body joints, cover joints, clips, earth link, base for cable ties, tags etc as required.						
Installation of internal angle for UPVC cable management (Trunking System) for 195x50 mm Trunking System as required	-	10	No.	-	-	-
Installation of external angle for UPVC cable management (Trunking System) for 195x50mm Trunking System as required	-	10	No.	-	-	-

Installation of flat angle for UPVC cable management (Trunking System) for 195x50mm Trunking System as required	-	5	No.	-	-	-
Installation of End Cap for UPVC cable management (Trunking System) for 195x50mm Trunking System as required	-	15	No.	-	-	-
Fixing of 2 Module frame for UPVC cable management (Trunking System) including supply of all accessories required for fixing the module complete as required.	-	50	No.	-	-	-

Fixing of 4 Module frame for UPVC cable management (Trunking System) including supply of all accessories required for fixing the module complete as required.	-	10	No.	-	-	-
Fixing of 6 Module frame for UPVC cable management (Trunking System) including supply of all accessories required for fixing the module complete as required.	-	50	No.	-	-	-
Fixing of 5/6A, 5 Pin Modular Switch socket for Aluminium cable management (Trunking System)	-	80	No.	-	-	-

including supply of all accessories required for fixing the switch/sockets outlets complete with all interconnection earthing as required.						
Fixing of 5/6 amps switch for Aluminium cable management (Trunking System) including supply of all accessories required for fixing the switch/sockets outlets complete with all interconnection earthing as required.	-	40	No.	-	-	-
Fixing of RJ45 Cat 6 computer socket for Aluminium	-	92	No.	-	-	-

<p>cable management (Trunking System) and for raceway including supply of all accessories required for fixing the switch/sockets outlets complete with all interconnection earthing as required.</p>						
<p>Installation of Metal/GI Raceways for LV and ELV cabling in screed floors, can be combine with junction box, floor box, for wiring devices along with raceway accessories such as fixing brackets, coupler for joining raceways etc and shall have</p>	-	125	MTR	-	-	-

<p>separate compartment for Power supply distribution, Network and communication cables including provision to fix power sockets/LAN Socket/Telephone sockets separately and including supply and installation of finishing accessories. The system shall consist of separation partition for Power Distribution and LAN/Telephone. It shall have provision to accept mounting boxes that snap fit into the profile complete as</p>						
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required.(Minimum 300mmx38mm 3 Compartment )						
installation of vertical Riser for 300mm width raceway along with the installation accessories as required	-	6	No.	-	-	-
installation of Height adjustable junction box with fly over and site cover for 300mm raceway along with the installation accessories as required	-	11	No.	-	-	-
installation of floor boxes for screed floor for minimum 3 compartment along with lid and trim cover with	-	8	No.	-	-	-

flexible cable exit for 300mm raceway along with the installation accessories as required						
fixing of 8 module frame for metal raceway including supply of all accessories like support plate required for fixing the module complete as required	-	24	No.	-	-	-
fixing of 4 module RJ 45 port frame for metal raceway including supply of all accessories like support plate required for fixing the module complete as required	-	8	No.	-	-	-

Decommission existing Floor mounted Electrical Panel (3000x2400x350) by disconnecting the Incoming Cable of size 185mm <sup>2</sup> , comprising 25 No of outgoing cables (upto 25mm <sup>2</sup> ) including removing and shifting of Panel from existing location (First floor) of Old HVAC Plant to the SCL Store within SCL premises ( approx. 300m distance)	-	1	No.	-	-	-
Decommission existing Floor mounted Electrical Panel (3500x2400x350) by disconnecting the Incoming	-	1	No.	-	-	-

<p>Cables of size 120mm<sup>2</sup> comprising 10 No of outgoing cables (upto 25mm<sup>2</sup>) including removing and shifting of Panel from existing location (First floor) of Old HVAC Plant to the SCL Store within SCL premises ( approx. 300m distance)</p>						
<p>Decommission existing Floor mounted Electrical Panel (1500x1500x350) by disconnecting the Incoming Cable of size 35mm<sup>2</sup> comprising 8 No of outgoing cables (upto 25mm<sup>2</sup>) including removing and</p>	-	1	No.	-	-	-

shifting of Panel from existing location (First floor) of Old HVAC Plant to the SCL Store within SCL premises ( approx. 300m distance)						
Decommission existing wall mounted Distribution Board (approx. 300mmx150mmx 100mm) by disconnecting of the 1 no of Incoming Power cable 4Cx10 mm <sup>2</sup> and 12 No 3x2.5 mm <sup>2</sup> of outgoing wires in conduit including removing and shifting of Panel from existing location (First floor) of Old HVAC Plant to the SCL	-	1	No.	-	-	-

Store within SCL premises ( approx. 300m distance)						
Decommission existing wall mounted Distribution Board comprising of SFU rating 100A by disconnecting from existing location (Ground floor) of Old HVAC Plant to the SCL Store within SCL premises ( approx. 300m distance)	-	2	No.	-	-	-
Decommission existing wall mounted Distribution Board comprising of Changeover switch by disconnecting from existing location (Ground floor) of Old HVAC	-	5	No.	-	-	-

Plant to the SCL Store within SCL premises ( approx. 300m distance)						
Decommission of existing Cable tray Upto 300mm size, upto a height of 5- 6 meter by disconnecting support from the ceiling and shifting the same from existing location (Ground floor) of Old HVAC Plant to the SCL Store within SCL premises ( approx. 300m distance)	-	50	MTR	-	-	-
Decommission of existing Cable tray upto 450mm size, upto a height of 5- 6 meter by disconnecting support from the ceiling and	-	150	MTR	-	-	-

shifting the same from existing location (Ground floor) of Old HVAC Plant to the SCL Store within SCL premises ( approx. 300m distance)						
Decommission of existing Cable tray upto 900mm size, upto a height of 5-6 meter by disconnecting support from the ceiling and shifting the same from existing location (Ground floor) of Old HVAC Plant to the SCL Store within SCL premises ( approx. 300m distance)	-	50	MTR	-	-	-
Dismanteing and removing of existing control cables installed on	-	500	MTR	-	-	-



<p>wall/cable tray including removing of clamps etc and shifting of the same from existing location Old Gas Plant Area to the SCL Store within SCL premises ( approx. 500m distance)Note: Height of cable tray will be upto around 5-6 meter</p>						
<p>Dismanteing and removing of existing power cables Upto a Size of 35mm<sup>2</sup>, installed on wall/cable tray including removing of clamps etc and shifting of the same from existing location</p>	-	200	MTR	-	-	-

<p>Old Gas Plant Area to the SCL Store within SCL premises ( approx. 500m distance)Note: Height of cable tray will be upto around 5-6 meter</p>						
<p>Dismanteing and removing of existing power cables Above 35mm2 and upto 95mm2 , installed on wall/cable tray including removing of clamps etc and shifting of the same from existing location Old Gas Plant Area to the SCL Store within SCL premises ( approx. 500m distance)Note: Height of cable</p>	-	150	MTR	-	-	-

tray will be upto around 5-6 meter						
Dismanteing and removing of existing power cables Above 95mm2 and upto 185mm2,installed on wall/cable tray including removing of clamps etc and shifting of the same from existing location Old Gas Plant Area to the SCL Store within SCL premises ( approx. 500m distance)Note: Height of cable tray will be upto around 5-6 meter	-	250	MTR	-	-	-
Dismanteing and removing of Fire detector of Fire detection system	-	24	No.	-	-	-

including shifting of the same from existing location (Ground floor/first floor) of Old HVAC Plant to the SCL Store within SCL premises ( approx. 300m distance)						
Dismanteing and removing of Manual Call Point of Fire detection system including shifting of the same from existing location (Ground floor/first floor) of HVAC Area to the SCL Store within SCL premises ( approx. 300m distance)	-	2	No.	-	-	-
Dismanteing and removing of Sounder of Fire detection system including shifting	-	4	No.	-	-	-

of the same from existing location (Ground floor/first floor) of HVAC Area to the SCL Store within SCL premises ( approx. 300m distance)						
Dismanteing and removing of existing 20mm Size MS conduit installed upto a height of 4-5 meter approx on wall surface/ceiling/cable tray including bends, clamps etc and shifting of the same from existing location (Ground floor/first floor) of Old HVAC Plant to the scarp yard near SCL store within SCL premises ( approx. 300m	-	850	MTR	-	-	-

distance)						
Dismanteing and removing of existing 25mm Size MS conduit installed upto a height of 4-5 meter approx on wall surface/ceiling/cable tray including bends, clamps etc and shifting of the same from existing location (Ground floor/first floor) of Old HVAC Plant to the scarp yard near SCL store within SCL premises ( approx. 300m distance)	-	1250	MTR	-	-	-
Dismanteing and removing of existing 32mm Size MS conduit installed upto a	-	150	MTR	-	-	-

<p>height of 4-5 meter approx on wall surface/ceiling/cable tray including bends, clamps etc and shifting of the same from existing location (Ground floor/first floor) of Old HVAC Plant to the scarp yard near SCL store within SCL premises ( approx. 300m distance)</p>						
<p>Dismanteing and removing of 3x2.5mm2 wire installed upto a height of 4-5 meter approx on wall surface/ceiling/cable tray and shifting of the same from existing location</p>	-	400	MTR	-	-	-

(Ground floor/first floor) of Old AC Plant to the SCL Store within SCL premises ( approx. 300m distance)						
Dismanteing and removing of 2x16mm2 wire installed upto a height of 4-5 meter approx on wall surface/ceiling/cable tray and shifting of the same from existing location (Ground floor/first floor) of Old AC Plant to the SCL Store within SCL premises ( approx. 300m distance)	-	180	MTR	-	-	-
Dismanteing and removing of 2x4mm2 wire installed upto a	-	725	MTR	-	-	-



<p>height of 4-5 meter approx on wall surface/ceiling/cable tray and shifting of the same from existing location (Ground floor/first floor) of Old AC Plant to the SCL Store within SCL premises ( approx. 300m distance)</p>						
<p>Dismanteing and removing of existing 2x40W luminaires (size 4 feet x 1 feet) installed above false ceiling/Surface (3 meter hight) with strips of 1 meter length via channel and shifting of the same from existing location (Ground floor) of</p>	-	52	No.	-	-	-

Old AC Plant to the SCL Store within SCL premises ( approx. 300m distance)						
Dismanteing and removing of existing industrial type socket 15A /5A installed & grouted on wall/surface including removing of box, socket etc and shifting of the same from existing location of Old AC Plant to the SCL Store within SCL premises ( approx. 300m distance)	-	30	No.	-	-	-
Dismanteling and removing of existing speakers installed (at a height of 3 meter)	-	2	No.	-	-	-

including shifting of the same from existing location of Old AC Plant to the SCL Store within SCL premises ( approx. 300m distance)						
Dismanteling and removing of existing switchboard including switches including switches installed and grouted in wall of the rooms including shifting of the same from existing location of Old AC Plant to the SCL Store within SCL premises ( approx. 300m distance)	-	5	No.	-	-	-
Dismanteling and removing of existing exhaust	-	12	No.	-	-	-

fan (300mm) including switches installed and grouted in wall of the rooms including shifting of the same from existing location of Old AC Plant to the SCL Store within SCL premises ( approx. 300m distance)						
Fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	-	50	MTR	-	-	-
Supplying of Horizontal type, suitable for wall mounting, 3 Phase 415 V, as per IS 8623 distribution board of sheet steel, dust protected, duly	-	1	No.	-	-	-

<p>powder coated, IP 54, inclusive of 250 A, tinned copper insulated bus bar, common neutral link, earth bar, din bar for mounting MCBs as required complete with MCCB or MCBs with Incomer MCCB of 200A 35 kA 1no. Outgoing 63A TPN MCB 12 nos. Make: Legrand/Siemens/ABB</p>						
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Break-up of other taxes and other costs should be specified in respective narration columns.

Sum of these Break-up values should be specified in respective value columns.