CANARA BANK

INVITATION TO TENDER

ONLY FOR EMPANEL CONTRACTORS

OF

CIRCLE OFFICE KOLKATA

TENDER FROM ANY OTHER CONTRACTOR WILL BE SUMMARILY REJECTED

INSTRUCTION TO BIDERS

AND

GENERAL CONDITIONS OF CONTRACT

FOR

ELECTRICAL WORKS

 \mathbf{AT}

CANARA BANK – BARUIPUR I BRANCH, KOLKATA

	TENDER NO.:	40/22-23/SP	
NAME OF THE CONTR	RACTOR:		
	•••••		
ADDRESS:			

Date: 19-09-2022

NOTICE INVITING THE TENDER

at f	invited from panel Contractors for ree of cost from the Premises & Estate ata during working hours from 19-09 -
:	NIL
:	20 days
:	On or before 10:30 pm, 26-09-2022 to The Divisional Manager, Premises & Estate section Canara Bank, Circle Office Kolkata
:	1.00 pm on 26-09-2022
	e lowest tender and reserves the right nders without assigning any reasor
	Divisional Manager Premises & Estate Section Canara Bank, Circle Office Kolkata
	at folko

GENERAL RULES & INSTRUCTIONS TO TENDERERS

Name of the work: Electrical Works to be carried out at BARUIPUR I Branch

The rates quoted shall also be inclusive of materials, labour charges, work contract tax, surcharge and all the taxes except GST.

GST WILL BE PAID EXTRA.

The rates quoted by the tenderer shall hold good till the completion of the work from the date of issue of the "WORK ORDER" and no enhancement in the rates are allowed during the period of execution of the work under any circumstances. The rates quoted shall also cover for the work to be executed before and after office hours and also on holidays.

The time stipulated for the completion of the work is 20 days from the date of issue of the WORK ORDER and the work is to be carried out as per the convenience of occupants without disturbing other occupants of the building.

TENDERS:

The entire set of tender paper issued to the tenderer should be submitted fully priced and also signed on the last page together with initials on every page. Initials / signatures will indicate the acceptance of tender papers by the tenderers.

The schedule of quantities shall be filled in as follows:

- o The "rate" column to be legibly filled in ink in both English figures and words.
- o 'Amount' column to be filled in for each item and the amount for each sub-head as detailed in the "schedule of quantities".
- All corrections to be initialed.
- o The "Rate" column for all the items shall be filled up.
- o The "Amount" column for the items for which the quantities are not mentioned shall not be filled up.
- In case of any errors / omissions in the quoted rates, the rates mentioned in the tender in words shall be taken as correct rates.

No modifications, over-writings or corrections can be made in the tender papers by the tenderer, but may at his option offer his comment or modifications in a separate sheet of paper attached to the original tender papers.

The Bank reserves the right to reject the lowest or any tender or all of the tenders for each section or to split up and distribute any item of work to any specialist firm or firms, without assigning any reason.

The tenderers should note that tender is strictly on the item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable and self – supporting. If called upon by the bank, detailed analysis of any or all the rates shall be submitted. The architects/bank shall not be bound to accept the contractor's analysis.

The Quantity mentioned in the BOQ is approximate measurements. The works will be paid for as "measured work" on the basis of actual work done and not as "lump sum" contract.

All the items of work described in the schedule of quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly, related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges will be allowed in this connection. In the case of lumpsum charges in the tender in respect of an item of works, the payment of such items of work will be made for the actual work done on the basis of lump-sum charges as assessed to be payable by the architects/bank.

The bank has power to add or delete any work or described in specifications or included in schedule of quantities and intimates the same in writing but no addition, omissions or variation shall be made by the contractor without authorization from the bank. No variation shall vitiate the contract. The bank reserves the right to delete any of the items in the tender without assigning any reasons whatsoever.

The tenderer shall note that his tender shall remain open for consideration for a period of 90 days from the date of opening of tender.

AGREEMENT

The successful contractor is required to sign agreement as may be drawn up to suit the local conditions and shall pay for all the stamps and legal expenses incidental thereto. The original will be kept with the Bank and duplicate with contractor.

EARNEST MONEY AND SECURITY DEPOSIT:

There is NO Earnest Money Required to deposite/ submit along with the bids. Retention Money shall be deducted from the final bill at 3% of the gross value of bill. The Retention amount will be refunded to the contractor 15 days after the end of defects liability period provided he has satisfactorily carried out all the work and attended to the entire defect in accordance with the condition of the contract. No interest is allowed on Retention Money.

A part of the Security Deposit if and as decided by the constituent bank can also be furnished in the form of a Bank Guarantee on the bank other than that of the constituent bank.

CONTRACTOR TO PROVIDE EVERYTHING NECESSARY:

The contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the drawings, schedule of the quantities and specifications taken together weather the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the contractor finds any discrepancies therein he shall immediately and in writing, refer the same to the Architects/Bank whose decision shall be final and binding.

The rates quoted against individual items will be inclusive of everything necessary to complete the said items of works within the contemplation of the contract, and beyond the unit price. No extra payments will be allowed for incidental or contingent labour and/or materials inclusive of all taxes and duties whatsoever except for specific items, if any, stipulated in tender documents

The contractor shall supply, fix and maintain at his own cost, for the execution of any work, all tools, tackles, machineries and equipments and all necessary scaffolding, staging and lighting by night as well as by day required not only for proper execution and protection of the said work.

The contractor shall take down and remove any or all such scaffoldings as occasion shall be required or when ordered to do so, and shall fully reinstate and make good all matters and things disturbed during the execution of work to the satisfaction of architect/bank.

The contractor shall all times give access to workers employed by the bank or any men employed at site and to provide such parties with proper sufficient and if required, special scaffolding and ladder and provide them lighting as may be required to enable such workmen to inspect the work, lay or fix pipes, electrical wiring, special fittings etc. The quoted rates of tenderers shall accordingly include all these above-mentioned contingent works.

LIQUIDATED DAMAGES:

Should the work be not completed to the satisfaction of bank within the stipulated period, the contractor shall be bound pay the bank a sum calculated as given below by way of Liquidated Damages after the expiry of completion date

.1.00% of the estimated amount shown in the tender per week subject to a ceiling of 10% of the accepted contract sum.

TIME PERIOD FOR COMPLETION: 20 days from the date of award of work.

FINAL PAYMENTS

The final bill shall be accompanied by a certificate of completion from the Occupant/Bank Officials. Payments of the final bill shall be made after deduction of retention money as specified in clause 9 of these conditions which sums shall be refunded after the completion of the defects liability period after receiving the banks certificate that the contractor has rectified all defects to the satisfaction of the banks. The acceptance of payments of the final bill by the contractor would indicate that he would have no further claims in respect of the work executed.

ESCALATION:

The rates quoted shall be firm throughout the tenure of the contract [including extension of time, if any granted] and will not be subject to any fluctuation due to increase in cost of materials, labour, sales tax, octroietc, unless specifically provided in these documents.

CONTRACTORS EMPLOYEES:

The contractor shall employ technically qualify and competent supervisors for the work who shall be available [by turn] throughout the working hours to receive and comply with the instructions of the bank officials. The contractor shall engage at least one experienced engineer, as site in-charge for the execution of the work the contractor shall employ in connection with the work persons having appropriate skill or ability to perform their job efficiently. The contractor shall employ local labours on the work as far as possible. No laborers below age of 16 and who is not an Indian national shall be employed on the work. Any laborers supplied by the contractor to be engaged on the work on day-work basis either wholly or partly under the direct order or control of bank or its representative shall be deemed to a person employed by the contractor.

The contractor shall comply with provision of all labour legislation including the requirements of

- a. Payments of minimum wages act
- b. Employers liabilities
- c. Workmen's compensation act
- d. Contract labour (regulation and abolition) act, 1970 and central rules 1971
- e. Apprentices act 1961
- f. Any other act or enactment relating thereto and rules framed there under from time to time

The contractor shall keep the bank saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the bank in connection with any claim that may be made by any workmen.

The contractor shall comply at his own cost with the order of requirement of any health officer of state or any local authority or of the bank regarding the maintenance of proper environmental sanitary condition of the area.

The contractor shall arrange to provide first aid treatment to the laborers engaged on the works. He shall within 24 hrs of occurrence of any accident at or about the site or in connection with execution of work, report such accidents to the bank and also the competent authority where such report is required by law.

The contractor shall obtain all Risk Insurance Policy at their cost within 7 days of commencement of work, for the laborers/workmen working at the site including the work till the work is completed. The policy shall be in the joint name of the Bank and contractor and Bank's name shall appear First.

PAYMENTS:

The contractor, in the form prescribed by the bank shall prepare all the bills and submit the same to Bank with measurement of work. Normally one interim bill shall be prepared each month. Bank may release payment within 15 days of receipt of bills/after check measurement, after deduction of retention money, Income Tax etc.The contractor shall have a competent engineer at site for the supervision of the work.

The contractor shall have to make his own arrangements for watch and ward of the work/building, till the work is handed over to the bank.

The decision of the bank will be final and binding with regard to the quality of work is concerned.

The contractor is responsible for procuring the required materials for the work and stores the same at site at his cost and risk.

The amount stated in the interim certificate shall be the 75% of total value of the work executed up to date of the bill, less the amount to be retained by the bank as retention money. If the bank has supplied any materials or goods to the contractors, the cost of such materials will be progressively deducted from the amount due to the contractor on accordance with the quantities consumed in the work. All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for works actually done and completed and shall not preclude the requiring of bad, unsound or imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the contract or any part there of if any respect or accruing of any claim nor shall it conclude, determine of effect in any way the power if the bank under conditions or any of them add to the final settlement and adjustment of the accounts or otherwise or in any other way or affect the contract.

The contractor shall submit the final bill within one month from the date of completion of the work. A certificate of completion from the bank shall accompany the final bill. The payment of the final bill shall be made after deduction of retention money as specified elsewhere in these documents.

ARBITRATION:

All disputes or differences of any kind whatsoever which shall at any time arise between the parties here to touching or concerning the works or the execution or maintenance thereof of this contract or the rights touching or concerning the works or the execution of maintenance thereof of this contractor or the construction remaining operation or effect thereof or to the rights or liabilities of the parties are arising out of or in relation thereto whether during or after determination foreclosure or branch of the contract[other than those in respect of which the decision of any person is by the contract expressed to be final and binding] shall after written notice by either party to the contract to the other of them and to the employer hereinafter mention to deal referred for adjudication to a sour arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole arbitrator referred to above, the employer will send within 30 days of receipt of the notice, to the contractor a panel of 3 names of persons who shall be presently unconnected with the organization for which the work is executed.

The contractor shall on receipt of the names as aforesaid, select, anyone of the person's name to be appointed as a sole arbitrator and communicate his name to the employer within 30 days of the receipt of the names. The employer shall thereupon without any delay appoint the person as the sole arbitrator. If the contractor fails to communicate such selection as provided above within the period specified, the competent authority shall make the selection and appoint the selected person as the sole arbitrator.

If the employer fails to send to the contractor the panel of 3 names as a foresaid within the period specified, the contractor shall send to the employer a panel of 3 names of persons who shall be unconnected with either party. The employer shall on receipt of the name as a foresaid select anyone of the person's names and appoint him sole arbitrator. If the employer fails to select the person and appoint him as a sole arbitrator within 30 days of the receipt of the panel and inform the contractor accordingly, the contractor shall be entitled to appoint one of the persons from the panel as the sole arbitrator and communicate his name to the employer.

If the arbitrator as appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed as aforesaid.

The work under contract shall, however, continue during arbitration proceedings and payment due or payable to the contractor shall be withheld on account of such proceedings.

The arbitrator shall be deemed to have entered on the reference the data he issued notice to both the parties fixing the date of the first hearing.

The arbitrator may from time to time, with the consent of parties, enlarge the time or making and publishing the award.

The arbitrator shall give a separate award of each disputes or difference referred to him. The arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasonable award. The venue of arbitration shall be such place as may be fixed by the arbitrator in his sole discretion.

The fee, if any, of the arbitrator shall, if required to be paid before the award is made and published, be half and half by each of the parties. The cost of the reference and of the award including the fees, if any, of the arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle the amount of costs to be so paid.

The award of the arbitrator shall be final and binding on both the parties.

Subject to aforesaid the provision of the arbitration act 1940 or any statutory modification or reenactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.

The employer and the contractor hereby also agree that arbitration under the clause shall be a condition precedent to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

Date:	Signature of the Contractor
	With seal and address

AP	PROVED MAKE OF MATERIALS	
1	Switch fuse units (HRC)	LEGRAND / INDO-ASIAN / HAVELLS
2	Timer (TSQ 100)	L&T/HAVELLS
3	Voltmeter & Ammeter	A. E. / IMP
4	Voltmeter & Ammeter selector switches	KAYCEE / L & T
5	Phase indicating lamp	Vaishno / SIEMENS / ROSS controls
6	Capacitor	CROMPTON/SIEMENS
7	HRC fuses	GE power / SIEMENS / L & T / SCHNEIDER
8	Power Cable : XLPE	GLOSTER/POLYCAB/HAVELLS / NICCO
9	HRC fuse base & carriers.	GE power / SIEMENS / L & T / SCHNEIDER
10	1.1 KV grade PVC insulated armoured aluminium cable (ISI marked)	GLOSTER / NATIONAL / NICCO / HAVELLS
11	1.1KV / 600V grade PVC insulated & sheathed / insulated copper wire & flexible cords (ISI marked).	FINOLEX / HAVELLS
12	RCCB / ELCB / MCCB	LEGRAND / INDO-ASIAN / HAVELLS
13	Moulded case circuit breaker	LEGRAND / INDO-ASIAN / HAVELLS
14	RCCB / ELCB	LEGRAND / INDO-ASIAN / HAVELLS
15	Switch fuse with rewirable fuses. (6A & 32A TPN)	LEGRAND / INDO-ASIAN / HAVELLS
16	Isolator	LEGRAND / INDO-ASIAN / HAVELLS
17	Changeover switch (on load type)	LEGRAND / INDO-ASIAN / HAVELLS
18	MCB distribution board	LEGRAND / INDO-ASIAN / HAVELLS
19	6/16 Amp modular type switch / flushed type plug socket	ANCHOR (Roma) / CRABTREE / INDO-ASIAN
20	6/16 Amp modular switch / socket, module plate & mounting M.S. / PVC box.	ANCHOR (Roma) / CRABTREE / INDO-ASIAN
21	16/25 Amp., 2 module electronic regulator	ANCHOR (Roma) / CRABTREE / INDO-ASIAN
22	Ceiling rose	KAY / EPP / ANCHOR / JJ
23	Holder	KAY / EPP / ANCHOR / JJ
24	Alarm bell	KHERAJ / GETCO
25	Black enamelled Steel conduits (conforming to IS in all respects)	BEC / SUPREME / AKG
26	Compression type brass gland	DOWELLS / JOHNSON / COMET
27	Cable termination socket	DOWELL'S
28	Light fitting & lamps	PHILLIPS / HAVELLS
29	Ceiling / Wall Mounted Fan	CROMPTON / KHAITAN / HAVELL'S
30	Exhaust fan	CROMPTON / KHAITAN / HAVELL'S
31	Industrial type socket & top	HAVELL'S / CROMPTON / LEGRAND
32	Telephone wire	FINOLEX / RRK/NATIONAL
33	Starters	NORTH WEST / CABTREE
34	All other items not covered above	As per sample approved by Employer/Consultant

	TENDER FOR ELECTRICAL WORKS AT CANARA I	BANK I	BARUIPUI	R BRANCH	
A	ELECTRICAL	Qty	Unit	Rate (In Rs.)	Amount (In Rs.)
1	Design, Manufacture, Supplying and Commissioning of Main LT Panel MS 3' X 4' Distribution Board of 1.6mm thick MS sheet fabricated cubicle type with Danger Notice Board indicating sign (DANGER) in English, Hindi, wall mounted fully recessed / partly recessed with dust proof hinged and lockable doors, brass cable glands for incoming and out going connections with inter connections with copper tapes /wires consisting of following:- (i) A cubical having 100 Amps TPN-MCCB (Before bus bar) breaking current 20KA, 100 Amps TPN Bus Bar(Copper Tinned), Voltmeter, Ammeter & Digital power factor meter, three indicators, C.Ts. with selector switches & backup fuses (HRC type) (ii) 100 Amps 4 Pole Heavy duty on load change over switch-1 No. (iii) 63 amps 3 phase and neutral 6 way lighting D.B. with suitable rated 6/10/16 Amps SP MCB-15 Nos(for switch board wiring)., 32/40Amp DP MCB-2 Nos.(Spare) (iv) 63 Amps 3 phase & neutral 6 way power DB with suitable rated 32/40 Amps DP MCB-7 Nos. (6 for AC circuit, 1 spare) 20 Amps SP MCB-8 Nos (5 nos for 16A plug point each separate wiring, 1 for glow sign board, 2 nos spare) (v) 63 Amps FP ELCB-1 Nos. for LDB & 63 Amps FP ELCB-1 No. for PDB, ELCB of 30MA having 30 m sec. sensitivity,63 amp TPN for ATM panel (Complete as per technical specifications and including earthing of each Electrical equipments) (vi) LT Panel labeling using aluminium strip for section wise load distribution	1	EACH		
1.1	3 Phase to single phase selector switch of 40ampere for UPS supply line. This selector switch to be connected in main panel after 63 Amps TPN ELCB -1No. For UPS input circuit from where UPS input wire is to derived. Basic purpose of this selector switch is to select the any of the R, Y, B phase for UPS input supply line in case of any particular phase failure.	1	EACH		
1.1.2	Supply and erection of 6 way SPN Double door UPS Outgoing				
	DB consisting of	2	EACH		
	Incomer : 40A 2 pole MCB - 1 No. Outgoing : 6/10A SPMCB - 4 nos.		EACH		
	Supply and erection of 40A 2 pole MCB in MS enclosure for UPS	2	EACH		
	input. (COMPUTER POWER SUPPLY WILL BE SEPERATELY CONTROLLED FROM SEPARATE MCB)				

2	Wiring for light points with 2 x 1.5 sqmm and PVC insulated copper conductor wire of 650/1100 volts grade in concealed / exposed PVC pipe, including by 5 Amp piano type modular switch with MS boxes, including making all the connections, including cutting chases and making good the surfaces wherever required. (This also includes SPMCB of Main panel to switch board wiring of minimum 4 sq mm copper wire and non of the switch boards circiut wiring to be parralled. Each switch board must be fed from separate circiut wiring from SPMCB of the Main panel)			
2.1	Each Light point controlled by one 6 Amps modular type switch. (Proper care must be taken for neutral return line and not more than two switches return line is to be looped or paralled).	35	EACH	
2.2	Wiring for 5 Amp light plug points with 2 x 1.50+1.00 sqmm & PVC insulated copper conductor wire of 650/1100 volts grade with PVC insulated Copper earth wire in concealed / exposed PVC pipe,,including 5pin 5Amp Socket with modular switch with MS boxes with earthing the third points, including cutting chases and making good the surfaces wherever required.			
2.2.1	Light Plug Point in Counter/Wall/Partition (in 3 Module PVC box with plate)	5	EACH	
2.2.2	Light Plug Point for Ceiling/ Wall/ Bracket/ Exhaust Fan	13	EACH	
2.2.3	Light Plug Point in front of safe room(in 3 Module PVC box with plate)	1	EACH	
3	16 Amps switch socket wiring.(Power Points) :-Wiring for Power circuit with 2x4 sqmm + 1x1.5 sqmm earth wire.			
3.1	Wiring for 16Amp (Socket board 2 no. 16A, 6 pin socket with 2 nos 16A switch) power plug points with 2x4+1.50 sqmm PVC insulated copper conductor wire of 650/1100 volts grade with PVC insulated copper earth wire in concealed / exposed PVC pipe, including 2no. 6pin 16Amp Socket with 2no.16Amp modular switch with MS boxes with with earthing the third points, including cutting chases and making good the surfaces wherever required. There must be separate circuit wiring for each point & this circuit wiring must not be parralled/looped with switch board of light/plug points.	5	EACH	
4	Fans			
4.1	Exhaust Fan - Supply fixing and installing the 300 mm diameter single phase 230 volt AC exhaust fan for toilet and ups room complete with motor, capacitor fan assembly mounting and frame & louvers. (Make- BAJAJ, KHAITAN, CROMPTON GREAVES/ HAVELS)	3	EACH	
4.2	400mm sweep, oscillating type, 3-speed pull control, single piece type propeller Wall/Brackets fan (Supply & Fixing) (Make-BAJAJ, CROMPTON GREAVES, HAVELLS)	10	EACH	

4.3	Supply, fixing and installing the 48 inch diameter, 3 blade, 230 VAC, 50 Hz ceiling fan complete with the motor, starting capacitor, fan assembly, hang pipe, domes,(top & bottom) Regulator, Rubber bush, required hardwares etc. The work involved the assembly testing, installation from ceiling, connecting & commissioning of the fan at site. (Make-BAJAJ,CROMPTON GREAVES, HAVELLS)	1	EACH	
5	Wiring for Air Conditioners point with 2x4+4 sqmm PVC insulated copper conductor wire of 650/1100 volts grade with PVC insulated copper earth wire in concealed / exposed PVC pipe, ,including Concealed Industrial Metallic Socket with 20/32Amp SP MCB housed in MS sheet box with PVC insulated Copper earth wire. Work is also including circuit wiring & cutting chases and making good the surfaces wherever required. (Circuit Shall not be paid extra)There must be separate circuit wiring for each point & this circuit wiring must not be parralled/looped with switch board of light/plug points.	6	EACH	
6	FIXTURE: Lighting Fixture Supply & Installation: Supply, unpacking, assembling, testing, fixing, connecting and commissioning the following luminaries required for internal wiring of the bank premises complete in all respect.			
6.1	Supply of 30 W 2' x 2' LED fitting complete as required (Make: LCTLR-36-CDL- Crompton or equivalent of Wipro/ Phillips)	12	EACH	
6.2	Supply of recess down lighter with assembly complete with 9 W LED lamps including making necessary connections etc. complete as required. (Make: LCDD - 15- CDL - Crompton or equivalent of Wipro/ Philips)	25	EACH	
6.3	Surface mounted Box type 1 x 28watt T-5 lamp channel luminaires suitable for 1 x 28watt energy saving tube lamp complete with box type fixtures including lamp, electronic choke (Low losses & improved power factor) and lamp holder etc. along with erection of the same with connections, testing etc. complete in all respects as approved and desired by the Engineer-in-charge at site (Safe room - 3, Record Room - 2,UPS Area & passage-2) (Make: Crompton Greaves, Phillips, Havells)	6	EACH	
6.4	1x12W LED lamp complete with jumbo holders wipro make in toilet/UPS room including all necessary fitting and wiring	3	EACH	
7	Telephone Points:			
7.1	Wiring for Telephone points with 4 pair 0.61 mm Taped Copper wire with PVC pipe with 2 pin Telephone outlet (Anchor Roma) in modular type cover. (Please note that this TELEPHONE wiring is to done from MDF to Router location with minimum four pair wire)	1	EACH	

7.2	Wiring for Telephone points with 2 pair 0.61 mm Taped Copper wire with PVC pipe with 2 pin Telephone outlet (Anchor, Roma) in modular type cover.(Please note that this TELEPHONE wiring is to done from MDF to Cabin and counter location with minimum two pair wire, and 1 for two counter)	10	EACH	
8	CALL BELL			
8.1	Call bell point wiring including Ding – Dong bell with 1.5 mm sq. multi strand PVC copper wire including plate switches, sockets, etc. (Make: Anchor / Havells)	1	no.	
9	UPS			
9.1	Wiring for UPS points with 2 x 2.5 + 1x1.5 sqmm PVC insulated copper conductor wire of 650/1100 volts grade with required earth wire with concealed / exposed PVC pipe, including making all the connections, including cutting chases and making good the surfaces wherever required.including the cost of computer socket board, with 3 nos 5 Amp 5 pin sockets with 3 no. 5 Amp switch 1no.fuse and 1 no. light indicator with modular swithboard. (max. two points on each circuit, Circuit shall not be paid extra, Router point 5amp pin socket 4nos. should be indepently fed from single SPMCB of UPS DB)	12	EACH	
9.2	Design, Manufacture, Supplying and Commissioning of 6 Way Double door Distribution Board (Combined for main panel & UPS Panel) of 1.6mm thick MS sheet fabricated cubicle type with Danger Notice Board indicating sign (DANGER) in English, Hindi, wall mounted fully recessed / partly recessed with dust proof hinged and lockable doors, brass cable glands for incoming and out going connections with inter connections with copper tapes /wires consists of following:- i. 63 Amps TPN ELCB -1No. (To be installed in the Main Panel from where UPS DB wire to be derived) ii. 63 Amps DPMCB -2 Nos. for Branch UPS input supply including input wiring of minimum 6 sqmm copper wire of phase, neutral & Earth wiring from main panel to i/p DPMCB. iii. 32 Amps DPMCB -3 Nos., 1 for branch UPS output, 1FOR atm UPS output. iv. 6/10 Amps SPMCB -8 Nos.	3	EACH	
10	EARTHING SYSTEM:			

Supply, Assembling installing. Testing and commissioning all the items for constructing copper place arthing station comprises of one no. copper earthing plate 600 x 600 x 3 mm thick, 25 mm dia medium class GI Watering pipe (minimum 4.5 mm deep) GI funnel with stainless steel wire mesh strainer, concrete watering chamber with RCC to cover up the watering pip, 100 kgs of common salt, 200kgs of fire charcoal powder, earthing conductor size 25mm x 3mm from the plate to the ground level as per the revised IS 3043 standard, required hardware & miscellaneous items. The work involves digging pit in the soil, burying the earth conductor plate, installing the watering pipe, back filling the soil and constructing the water pit,(FOR UPS /COMPUTER/ROUTER ONLY) 10.2 GI — Plate — Earthing Station: Supply, Assembling installing, Testing and commissioning all the items for constructing GI plate earthing station comprises of one no. GI earthing plate 600 x 600 x 600 x 6 mm thick, 25 mm dia medium class GI Watering pipe (minimum 4.5 mm deep) GI funnel with stainless steel wire mesh strainer, concrete watering chamber with RCC to cover up the watering pit, 100 kgs of common salt, 200kgs of fire charcoal powder, earthing conductor size 25mm x 3mm from the plate to the ground level as per the revised IS 3043 standard, required hardware & miscellaneous items. The work involves digging pit in the soil, buying the earth conductor plate, installing the watering pipe, back filling the soil and constructing the water pit (FOR MAIN PANEL BOARD, LIGHTING, UPS Neutral earthing(But not for UPS Point wiring) & POWER CIRCUIT EARTHING) 10.3 Earthing Common Deep Conductors wire of 650/1100 volts grade (FINOLEX make flame guard Quality) as earth wire with concealed/ exposed PVC pipe including making all the connections. (Please Note that this earth wire from copper earthing point should terminate to UPS TPN ELCB in the main panel & earth wire from GI Plate earthing should terminate to Main electricity panel & UPS NEUTRAL EARTHING) In no case U	40:			F : 677	1	1
Supply, Assembling installing, Testing and commissioning all the items for constructing GI plate earthing station comprises of one no. GI earthing plate 600 x 600 x 6 mm thick, 25 mm dia medium class GI Watering pipe (minimum 4.5 mm deep) GI funnel with stainless steel wire mesh strainer, concrete watering chamber with RCC to cover up the watering pit, 100 kgs of common salt, 200kgs of fire charcoal powder, earthing conductor size 25mm x 3mm from the plate to the ground level as per the revised IS 3043 standard, required hardware & miscellaneous items. The work involves digging pit in the soil, burying the earth conductor plate, installing the watering pipe, back filling the soil and constructing the water pit.(FOR MAIN PANEL BOARD, LIGHTING, UPS Neutral earthing(But not for UPS Point wiring) & POWER CIRCUIT EARTHING) 10.3 Earthing Conductors: Wiring with 1x10sqmm PVC insulated copper conductor wire of 650/1100 volts grade (FINOLEX make flame guard Quality) as earth wire with concealed/ exposed PVC pipe including making all the connections. (Please Note that this earth wire from copper earthing point should terminate to UPS TPN ELCB in the main panel & earth wire from GI Plate earthing should terminate to Main electricity panel & UPS NEUTRAL EARTHING) In no case UPS neutral earthing and UPS point wiring earthing shouls be common. Due to this UPS neutral should Be earthed to GI earthing however for UPS piont wiring only Copper earthing to be used. 11 CABLES 11.1 Main Wiring with 4x35 sqmm flame proof PVC insulated aluminium conductor armoured CABLE of 650/1100 volts grade with required earth wire with concealed / exposed PVC pipe, including making all the connections, including cutting	10.1	items for constructing copper plate earthing station comprises of one no. copper earthing plate 600 x 600 x 3 mm thick, 25 mm dia medium class GI Watering pipe (minimum 4.5 mm deep) GI funnel with stainless steel wire mesh strainer, concrete watering chamber with RCC to cover up the watering pit, 100 kgs of common salt, 200kgs of fire charcoal powder, earthing conductor size 25mm x 3mm from the plate to the ground level as per the revised IS 3043 standard, required hardware & miscellaneous items. The work involves digging pit in the soil, burying the earth conductor plate, installing the watering pipe, back filling the soil and constructing the water pit.(FOR UPS)	1	EACH		
Wiring with 1x10sqmm PVC insulated copper conductor wire of 650/1100 volts grade (FINOLEX make flame guard Quality) as earth wire with concealed/ exposed PVC pipe including making all the connections. (Please Note that this earth wire from copper earthing point should terminate to UPS TPN ELCB in the main panel & earth wire from GI Plate earthing should terminate to Main electricity panel & UPS NEUTRAL EARTHING) In no case UPS neutral earthing and UPS point wiring earthing shouls be common. Due to this UPS neutral should Be earthed to GI earthing however for UPS piont wiring only Copper earthing to be used. 11 CABLES 11.1 Main Wiring with 4x35 sqmm flame proof PVC insulated aluminium conductor armoured CABLE of 650/1100 volts grade with required earth wire with concealed / exposed PVC pipe, including making all the connections, including cutting	10.2	Supply, Assembling installing, Testing and commissioning all the items for constructing GI plate earthing station comprises of one no. GI earthing plate 600 x 600 x 6 mm thick, 25 mm dia medium class GI Watering pipe (minimum 4.5 mm deep) GI funnel with stainless steel wire mesh strainer, concrete watering chamber with RCC to cover up the watering pit, 100 kgs of common salt, 200kgs of fire charcoal powder, earthing conductor size 25mm x 3mm from the plate to the ground level as per the revised IS 3043 standard, required hardware & miscellaneous items. The work involves digging pit in the soil, burying the earth conductor plate, installing the watering pipe, back filling the soil and constructing the water pit.(FOR MAIN PANEL BOARD, LIGHTING, UPS Neutral earthing(But not for UPS Point wiring) & POWER	1	EACH		
aluminium conductor armoured CABLE of 650/1100 volts grade with required earth wire with concealed / exposed PVC pipe, including making all the connections, including cutting		Wiring with 1x10sqmm PVC insulated copper conductor wire of 650/1100 volts grade (FINOLEX make flame guard Quality) as earth wire with concealed/exposed PVC pipe including making all the connections. (Please Note that this earth wire from copper earthing point should terminate to UPS TPN ELCB in the main panel & earth wire from GI Plate earthing should terminate to Main electricity panel & UPS NEUTRAL EARTHING) In no case UPS neutral earthing and UPS point wiring earthing shouls be common. Due to this UPS neutral should Be earthed to GI earthing however for UPS piont wiring only Copper earthing to be used.	20	MTR		
aluminium conductor armoured CABLE of 650/1100 volts grade with required earth wire with concealed / exposed PVC pipe, including making all the connections, including cutting			20	Mari		
PROPER COLOUR CODING FOR RYBN CONDUCTOR)		aluminium conductor armoured CABLE of 650/1100 volts grade with required earth wire with concealed / exposed PVC pipe, including making all the connections, including cutting chases and making good the surfaces wherever required.(WITH				
11.2 P/F generator wire 16mm 4- core Alum. Cable.	11 2	D/E	15	MTR		

12	Glow Sign	Board	point	wiring:-	20	MTR	
	$2 \times 4 \text{ sqmm} + 1 \times 1.5 \text{ s}$	qmm multi stran	d PVC copper	wire in PVC			
	Pipes. This is to be co	nnected to either	r one of SP or	DP MCB of			
	the Main Panel.						
13	Four Pole ICTP Swite	ch with three fus	ses of 100 A (Before main	1	EACH	
	panel) for receiving 3	3 Phase & Neutr	al Supply 100	Amps(Main			
	Supply PSEB) To be	e installed at su	itable location	(Not to be			
	installed in open spa	ce)					
	GRAND TOTAL						

Note $\;\;$ PRACTICES AND PROPER COLOUR CODING MUST BE

FOLLOWED WHILE CARRYING OUT WIRING WORK AND MINIMUM 4 METER DISTANCE TO BE MAINTAINED BETWEEN TWO EARTHING