CANARA BANK

INVITATION TO TENDER

ONLY FOR EMPANELLED CONTRACTORS

<u>**OF**</u>

CIRCLE OFFICE KOLKATA

TENDER FROM ANY OTHER CONTRACTOR WILL BE SUMMARILY REJECTED

INSTRUCTION TO BIDDERS

AND

GENERAL CONDITIONS OF CONTRACT

FOR

ELECTRICAL WORKS

 \mathbf{AT}

CANARA BANK - HARIPAL BRANCH

	TENDER NO.:	27/24-25/BDS	
NAME OF THE CONT	ΓRACTOR:		
ADDRESS:			

Date: 17.08.2024

NOTICE INVITING THE TENDER

То,		
M/s		
Sealed tenders on item rate basis of Electrical Works at premises of Haripal Tender Documents may be obtained of Section, Circle Office Canara Bank 17.08.2024 till 23.08.2024.	Bra at f	nch. ree of cost from the Premises & Estate
Earnest Money Deposit	:	NIL
Period of completion	:	20 days
Last date, time and place for Submission of tender	:	On or before 3:00 pm, 22.08.2024 to The Assistant General Manager, Premises & Estate section Canara Bank, Circle Office Kolkata
Time and date of opening of tender	:	3.30 pm on 23.08.2024
The Bank will not be bound to accept to accept or reject any or all the whatsoever.		<u> </u>
		Assistant General Manager Premises & Estate Section Canara Bank, Circle Office Kolkata

.....

GENERAL RULES & INSTRUCTIONS TO TENDERERS

Name of the work: Electrical Works to be carried out at PREMISES OF HARIPAL 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.
- The "Rate" column for all the items shall be filled up.
- 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 lump-sum 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 5% 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

SCH	EDULE FOR ELECTRICAL WORKS TO BE DONE AT PREM	AISES OF	HARIPAL	BRANCH	
SI	Item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	MAIN SWITCH				
	Supply and fixing of Switch Fuse Unit (SFU) with				
	HRC fuse in sheet steel enclosure on M.S. angle				
	frame / M.S. legs on wall complete with				
	interconnection, mending good damages to				
	original finish, painting, etc. as required.				
)	63 A TPN SFU with HRC fuses.	Each.	1		
ii)	32 A TPN SFU with HRC fuses.	Each.	2		
2	CHANGE OVER SWITCH (COS)				
	Supply, installation, testing and commissioning of 63A 4P On load front operated change over switch in sheet steel enclousure on M.S legs on wall complete with interconnection, mending good damages to original finish, painting etc. as required.	Each	1		
3	MCB DISTRIBUTION BOARD				

	Supply, installation, testing and commissioning		1		
	of following MCB Distribution Board in sheet				
	steel enclosure with double door and suitable				
	for mounting on wall by chase cutting and				
	flushed with finished level to the position shown				
	•				
	in the Electrical Layout complete in all respect, mending good all damages to the original				
	finish, painting, interconnection, etc. as				
	required. Short circuit I.C. of all MCBs should be				
	10 KA (minimum) and RCBO should have earth				
	leakage, overload and short circuit protection.				
	Name plate of DB's to be fixed / written on				
	front door alongwith switch board numbers /				
	DB's at the outgoing.				
a)	MAIN DISTRIBUTION BOARD (MDB)				
<u> </u>	TPN 6 way vertical type MCB DB complete				
	with busbar and the following MCBs:				
	Incoming				
	1 no.: 63A 4P MCB Iso.				
	Outgoing:				
	1 no. : 415V,32A TP, MCB				
	6 nos. : 240V, 20-25A SP MCB				
	3 nos.: 240V,16A SP MCB				
	Complete board as above	Each.	1		
b)	Lighting Distribution Board (LDB)	Lacii.	'		
<i>D</i>)	TPN 4 way vertical type MCB DB complete				
	with busbar and the following MCBs:				
	Incoming				
	1 no. : 40A FP MCB				
	Outgoing:				
	3 Nos. : 25A TP MCB				
	2X32A DPMCB				
	Complete board as above	Each.	1		
c)	12 way Horizontal type SPN DB	Lucii.	1		
<u>C)</u>	Incoming:				
	1 No. 32 A DB MCB (20 KA)				
	Outgoing:				
	10x6/10a SPMCB	Each	1		
4)	•	Edcii	I		
d)	MCB FOR GLOW SIGN BOARD Supply and fixing of 20A SPN MCR 8 20A	Each.	1		
	Supply and fixing of 20A SPN MCB & 20A timmer with 40A DP contractor suitable	EUCH.	'		
	enclosure on wall for enclosure on wall for				
	Glow Sign board connection.				
4	DISTRIBUTION CABLE:				
a)	SUPPLYING & LAYING OF CABLE :				
<u> </u>	Supplying of 1.1 KV grade following PVC				
	insulated and PVC sheathed armoured				
	aluminium conductor cables conforming of				
	IS:1554 (Part-I):				
i)	3.5 core 35 Sq.mm.	Mtr.	50.00		
'1	5.5 5516 66 6q.mm.	77111.	00.00	İ	I

ii)	4 core 16 Sq.mm.	Mtr.	75.00	
")	Laying of above cable from metre to MDB on	74111.	70.00	
	wall/column/as per side condition including			
	supply and fixing of M.S. clamps/galvanised			
	bar saddles @ 300 mm apart, making holes			
	and mending good damages or partly			
	through pre-laid pipe.			
<u></u>	CABLE GLAND AND FINISHING THE END			
c)				
	Supplying and fixing of compression type brass cable gland alongwith rubber rings for dust			
	and moisture proof entry of following 1.1 KV			
	grade aluminium conductor PVC insulated			
	and PVC sheathed armoured cable and			
	finishing the end by crimping method including			
	supply and fixing of "Dowell" make solderless			
	117			
	socket, tapes and jointing materials as required			
i)	to be completed in all respect. 3.5 core 35 Sq.mm.	Set	2	
ii)	4 core 16 Sq.mm.	Set	6	
5	·	<u>3⊡</u> 1	U	
3	SUBMAIN WIRING Submain wiring with following sizes 1100 V			
	grade, single core, PVC insulated flexible FRLS			
	copper conductor wire (IS:694) through suitable size PVC. conduit (ISI marked			
	embossed on conduit surface)/ flexible PVC			
	conduit complete with junction box, circular			
	box, elbows, bends and other accessories on			
	surface above false ceiling or concealed by			
	chase cutting on wall/in wooden furnitures, as			
	per site condition, mending good all damages			
	to original finish, interconnection, painting etc.			
	as required to be completed in all respect. All			
	connections of wires to be done by means of			
	"Wago" type connectors:			
i)	With 2 Nos. 6 Sq. mm + 1 No. 2.5 Sq. mm (green	Mtr.	95.00	
'/	colour for earth) PVC insulated Copper	17111.	/3.00	
	wire.(For Glow Sign Board)			
6	AC POINT WIRING (UPTO 2.0 TON)			
i)	A.C. power point wiring from Main DB to A.C.			
'/	Power points with 1100 volt grade following			
	rating (Green colour for earthing) PVC			
	insulated flexible FR copper conductor cable			
	through suitable size PVC conduit (ISI marked			
	embossed on conduit surface) complete with			
	junction box, circular box, elbows, bends,			
	couplers and other accessories surfaced on			
	wall above false ceiling or concealed by			
	chase cutting on brick / wooden wall. The work			
	includes supply & fixing by chase cutting on			
	wall, 'North-West' make A.C. power unit			
	having suitable rating socket with plug,plug-			
L	Liaving sullable falling socket with blug,blug-			

	top & starter in sheet steel enclosure complete with interconnection, mending good all damages to original finish, painting etc. as required. All connections of wires to be done			
	by means of 'Wago' type connectors.			
	With 2 nos. 4 sq.mm. + 1 no. 2.5 sq.mm. (green colour for earth) PVC insulated copper wire in 25 mm dia PVC conduit / casing caping. (for AC unit)	Each.	4	
7	6 / 16A SOCKET OUTLET POINT WIRING			
	Power point wiring for 6 pin 6/16 A shuttered socket outle wiring with controlling switch from DB with 1100 volt grade 2 Nos. single core 2.5 sq.mm. + 1 No. 1.5 sq.mm. (Green colour for earthing) PVC insulated flexible FRLS copper conductor wire (IS:694) through suitable size PVC. conduit (ISI marked embossed on conduit surface) complete with junction box, circular box, elbows, bends, couplers and other accessories on surface above false ceiling or concealed by chase cutting on wall. The work includes supply & fixing of modular type 6/16A 6 pin shuttered socket outlet with controlling switch, suitable size mounting box and front plate for socket outlet flushed with finished wall, mending good all damages to original finish, interconnection, painting, etc. as required to be completed in all respect. All connections of wires to be done by means of 'Wago' type connectors.	Each	4	
8	POINT WIRING			
	Point wiring with 1100 V grade 3 nos. single core 1.5 sq.mm. (1 for phase, 1 (black colour) for common neutral by looping method and 1 (green colour) for common earth by looping method) PVC insulated flexible FRLS copper conductor cable (IS:694) through suitable size PVC. conduit (ISI marked embossed on conduit surface) complete with junction box, circular box, elbows, bends, couplers and other accessories on surface above false ceiling or concealed by chase cutting on wall from light & fan switch board to light, fan & 6A socket outlet on the same switch board or separately mounted switch board. The work includes supply and fixing of all materials such as modular type 6A switch for each light and fan point, 6A 2/3 pin shuttered socket outlet with switch, 3 plate ceiling rose / angle or batten holder etc. as required.			

	The point wiring also includes circuit wiring with			
	1100 V grade 2 nos. single core 2.5 sq.mm. (1			
	for phase and 1 (Black colour) for neutral) + 1			
	no. single core 1.5 sq.mm. (Green colour for			
	earth) PVC insulated flexible (FRLS) copper			
	conductor cable (IS:694) through suitable size			
	PVC. conduit as described above from DB to			
	switch board, interconnection, mending good			
	all damages to original finish, painting etc. as			
	required to be completed in all respect. All connections of wires to be done by means of			
	"Wago" type connectors. (All wiring in strong			
	room, locker room, records & stationery room			
	will be of surface conduit type).			
i)	1 light control by 1 switch.	Each	19	
ii)	2 light control by 1 switch.	Each	5	
iii)	Wall Bracket fan point with 2/3 pin socket to	Each.	10	
''''	be installed at fan height and switch at the	LUCII.	10	
	switch board			
iv)	Exhaust fan point	Each	3	
v)	Ceiling fan	Each	1	
vi)	Call bell point with bell push	Each	1	
vii)	1x6A 2/3 pin shuttered socket with switch on	Each	12	
,	separate switch board other than light / fan	20011		
	switch board			
∨iii)	2/3 pin 6A switch shuttered socket outlet with	Each	7	
,	switch on light and fan switch board.			
ix)	UPS point	Each	4	
9	Connecting the main switch to MCB DB by	Mtr.	70.00	
	supply and fixing of 6 SWG G.I. wire along the			
	cable with G.I. staples, bolts, nuts, washers, etc.			
	and mending good all damages to original			
	finish.			
10	Supply and fixing of 16A modular type master	Each	1	
	controlling switch with indicator in mounting			
	box and front plate on wall for controlling			
	external light fittings including interconnection,			
1.1	etc. as required.			
11	Earthing (General)	Га I-	1	
	Earthing the installation as per I.E Rules	Each	1	
	conforming to I.S: 3043 - 1987 or its latest			
	ammendment by making earth sation with 3 meter long 50 mm dia G.I earth Pipe (Partly			
	Perforated) to be installed such that its top			
	end shall be at 300 mm below ground level			
	after preparation of ground with charcoal &			
	Salt and connecting with 25 mm x 6 mm G.I			
	earth lead-in-strip upto 10 metre length by			
	bolting and then brazing, complete with nut,			
	bolt, washer etc. as required. The earthing			
	station shall be provided with 300 mm x 300			

	mm x 300 mm inside dimension masonry inspection Pit with C.I. hinged cover.			
12	Extra for earth lead-in-strip exceeding 10 meter as mentioned in above Item with supply and fixing of 25mm x 6mm G.I Strip to be fixed on wall or directly buried in ground including connection complete.	Mtr	25.00	
13	Supplying and fixing of 16 A plug top with 1100 V grade 3 core 2.5 sq. mm PVC insulated copper cable of 1.5 mtr. length one metre to be permanently fixed to the Switch Board of Locker Room, complete in all respects.	Each	1	
14	Supply & fixing of 415V,40A 4P MCB in suitable size M.S. Box same for Light cut off switch in Main Gate.	Each	1	
15	Bifarcation work : (ensure for Light/fan cutoff after branch closed)			
a)	Supplying and fixing of 32A DP MCB enclosure for 5KV or 32 A TPN MCB 10 KV UPS with enclosure.			
b)	Submain wiring (2x4+1x2.5) Sqm. wire for incoming enclosure to socket cluster.			
c)	Socket cluster 6A x 2 nos. 16A x 1 no. 5 pin socket with 16A x 1 no. switch for HUB/FIRE/CAMERA 3 set.	Each	1	
16	Supply and instatllaton of light and electrical fittings including lamp and all necessary accessories:			
a)	Surface mounted / Suspended luminaries			
i)	1x22 watt Led Light fittings of approved make.	Each	8	
17	Recessed mounted luminaries			
i)	LED based luminaries 1x32 watt LED based square light fittings of approved make.	Each	9	
ii)	Down lighter 1x15 W LED down lighter fittings of approved make .	Each	12	
iii)	Supply and installation LED Bulb for bifarcation.	Each	1	
18	Supply and installation of fan fittings with all necessary accessories, but except regulator.			
i)	Wall bracket fan			

	400 mm dia. of approved make.	Each	10		
	400 mm dia. of approved make.	Lacii	10		
ii)	Exhaust Fan				
•	300 mm dia without mounting ring & louvre	Each	3		
	complete of approved make.				
19	SUPPLY & FIXING OF CALL BELLS				
	Supplying and fixing on wall call bell buzzer (Each.	1		
	approved by Consultant) suitable for 240 volt	Lucii.	'		
	single phase A.C. supply including				
	interconnection, etc. as required.				
1	INDUSTRIAL TYPE SOCKET AND PLUG DB				
	_				
	Supply and installation of following Legrand				
	make universal mounting DB with Industrial type socket and match plug for UPS incoming				
	& outgoing only:				
	a congoing only .				
i)	32A, 3P+N+E, 5 pin industrial type socket with	Each	2		
	matching plug and 25A, TP MCB control				
	including interconnection.(for UPS incoming)				
::1	20 A ODUE 2 rein in deathful burn a sealach wille	□ -: - l-			
ii)	32A, 2P+E, 3 pin industrial type socket with matching plug and 25A, DP MCB control	Each	2		
	including interconnection.(for UPS outgoing)				
iii)	Supply and installation of 2 no 32A 4P on load	Each	1		
	cahnge over switch,100A copper busber, 2 nos				
	32A SP MCBs etc. in sheet steel enclosure for				
	computer distribution system.				
2	COMPUTER DISTRIBUTION BOARD (CDB)				
	COMI OTER DISTRIBUTION BOTTLE (CDD)				
	Supply and installation of following MDS make				
	metallic double door MCB Distribution Board				
	with MCB having short circuit breaking				
	capacity of 10 KA (minimum) and RCBO of 300				
	mA sensitivity having overload, short circuit				
	and earth leakage protection complete with busbar, interconnection, mounted on flat iron				
	frame on wall/flushed with finished wall by				
	chase cutting, mending good to original finish,				
	painting, etc. as required. Name plate of DB is				
	to be fixed up on front door of DB for its				
	identification.		+		
	SPN 12 way SPN MCB DB complete with busbar		+		
	and the following MCBs./ RCBO:				
	INCOMING:				
	·		•	•	•

				=
	1 No. 040 V 054 DD 140D			
	1 No. 240 V 25A DP MCB			
	<u>OUTGOING</u> :			
	10 Nos. 240 V 6A SP MCB	Each	2	
3	COMPUTER SOCKET OUTLET CLUSTER POINT			
	WIRING			
	Computer socket outlet cluster point wiring			
	with 1100 V grade 3 nos. single core (1 for			
	earth, green colour) 2.5 sq.mm. PVC insulated			
	flexible FRLS copper conductor cable			
	conforming to IS: 694 through suitable size			
	PVC.conduit (ISI mark embossed on conduit			
	surface) and conduit accessories partly			
	concealed in wall/ embedded in floor, partly			
	on surface above false ceiling and partly			
	, ,			
	through partition or through flexible conduit from DB to computer socket outlet cluster as			
	detailed below and upto connection of 2 nos.			
	•			
	socket clusters in 1 (one) circuit connecting by			
	looping method. The work includes supply and			
	fixing of socket outlet clusters component/ sets			
-,	as detailed below :			
i)	Each computer socket outlet cluster			
	comprising the following:			
	2 nos. 6A 5 pin modular type shuttered socket.			
	(below table)			
	2 no. 6/16A 6 pin modular type shuttered			
	socket. (below table)			
	2 no. 16A modular type controlling switch with			
	indicator. (above table)			
	1 no. Front Plate of suitable size.			
	1 no. Mounting box of suitable size.	Each	12	
4	SUBMAIN WIRING:			
	Submain wiring with following size 1100 V			
	grade, single core, PVC insulated flexible			
	copper conductor cable conforming to IS: 694			
	through PVC.conduit (ISI mark embossed on			
	conduit surface) and conduit accessories			
	partly on surface (above false ceiling) with M.S.			
	bar saddles, partly through partition and partly			
	concealed in wall / embedded in floor by			
	chase cutting, mending good all damages,			
	painting, etc. as required to be completed in			
	all respect.			
i)	From Main DB to UPS Incoming and UPS	Mtr	150.00	
''	outgoing to CDB with 2 nos. 6 Sq.mm. + 1 no.			
	2.5 Sq.mm. (Green colour for earth) PVC			
	insulated flexible copper conductor cable in			
	insulated liexible copper conductor cable in		j	

	25 mm dia. M.S.conduit			
ii)	With 2 nos. 2.5 sq.mm. + 1 no. 1.5 sq.mm. (green colour for earth) PVC insulated copper wire in 20 mm dia PVC conduit / casing caping. (for each computer power point)	Mtr	240.00	
5	EARTHING (COMPUTER)			
	Earthing the installation as per I.E. rules conforming to IS:3043-1987 or its latest amendment by making earth station with 450mm x 450mm x 6mm (minimum) thick copper plate electrode to be installed such that its top edge shall be at a minimum depth of 3.0 metre below ground level after preparation of ground with charcoal and salt and connecting the earth lead-in-wire by bolting and then brazing to the copper plate complete with copper bolts of suitable length double nuts and washers, copper lugs including supply and fixing of 50mm dia. partly perforated G.I. pipe with funnel for watering arrangement.			
i)	The earthing installation should be provided with 300mm x 300mm and 300mm depth inside dimension masonry inspection pit with C.I. hinged cover having locking arrangement and restoring the surfaces duly rammed.	Each	1	
ii)	Supplying and fixing of 1 x 10 Sq.mm PVC insulated copper wire through suitable size PVC conduit to be fixed on wall surface with bar saddles / clamps at an interval of 300mm etc. as required to be completed in all respect. The underground portion of earth lead-in-wire to be laid at an average depth of 500 mm below ground level.	Mtr.	35.00	
A	TOTAL EXCLUSIVE OF GST			
В	DISCOUNT IF ANY			
С	TOTAL AFTER DISCOUNT (A-B)			
D E	GST 18%			
	TOTAL INCLUSIVE OF GST (C + D)			

APPROVED MAKE OF MATERIALS

1	Switch fuse units (HRC)	LEGRAND / SEIMENS / 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	FINOLEX /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 / SEIMENS / HAVELLS
13	Moulded case circuit breaker	LEGRAND / SEIMENS / HAVELLS
14	RCCB / ELCB	LEGRAND / SEIMENS / HAVELLS
15	Switch fuse with rewirable fuses. (6A & 32A TPN)	LEGRAND / SEIMENS / HAVELLS
16	Isolator	LEGRAND / SEIMENS / HAVELLS
17	Changeover switch (on load type)	LEGRAND / SEIMENS / HAVELLS
18	MCB distribution board	LEGRAND / SEIMENS / HAVELLS
19	6/16 Amp modular type switch / flushed type plug socket	Gold Medal /CRABTREE
20	6/16 Amp modular switch / socket, module plate & mounting M.S. / PVC box.	Gold Medal / CRABTREE
21	16/25 Amp., 2 module electronic regulator	Gold Medal /CRABTREE
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 / ORIENT / HAVELL'S
30	Exhaust fan	CROMPTON / ORIENT / 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