## BOQ OF ELECTRICAL & AC WORKS IN NEW PREMISES OF "RBO" AT AMBIKAPUR, C.G.

S.No.	Description of Item	Qty	Unit	Rate	Amount
A	Part A : Electrical Works :	Qiy	Oilit	rato	Amount
1	ELECTRICAL WIRING  Providing, fixing, testing and commissioning of POINT WIRING of any length for light point/Wall fan point/Exhaust fan point/ Call bell point/ including call bell/ including fan box( if required), 'S' type fan hook etc with 3 X 1.5 Sq.mm(P/N/E) PVC 650V/1100V Grade FRLS WIRE insulated copper conductor single core multi strended wire in 16 SWG(Medium Gauge) stove enamelled rigid steel conduit 20mm/25mm with conduit accessories like bend, junction box etc in concealed/surface manner as per site requirment with suitable Modular Switches/Sockets with plate and Metal/PVC box,Scaddle, angle bracket (if required), 3 plate ceiling rose/bulb holder etc. The floor/roof/wall junction box shuold be of MS(heavy duty) box of suitable size and covered with Steel finish Steel cover sheet by screw tight and gasket to avoid water/dust insertion. The item includes Circuit wiring from DB to the switch board with 3x2.5 Sq.MM. The above wiring carried out surface or recess in wall/floor/roof should be cutting by cutter/chiesling, replastering, curing, painting with uniform and smooth finish by specilised workman ship and making the surface neat afterwards complete in all respect as per direction of Bank Engg. (EACH Circuit to take NOT MORE than 7-8 points) The conduit/ Flexible conduit/junction box/metal modular box etc must be joined by gland and check nut at both ends. (each circuit to be controlled by one MCB). The colour code of wire are as under:  Phase-Red, Neutral-Black, Earth-Green  Make of Material for items of BOQ:-  (i) Modular Type Switch/socket/step electronic fan regulator, plate, box, TV/telephone, bulb holder/3 pin ceiling rose with all accessories:-Lergand/ Anchor(Roma)/MK/ Crabtree  (ii) Ms conduit/PVC conduit with all accessories:-BEC/AKG/NIC/Precision  (iii) PVC insulated copper wire(FR) 650V/1100 V grade:- Finolex/RR cable/ Havells				
i	Providing and fixing of point wiring with above specifications. <b>One light point</b> controlled by one switch.	82	Nos.		
ii	Providing and fixing of point wiring with same above specifications. <b>Two light points</b> to be controlled by one switch.	15	Noc		
	Providing and fixing of point wiring with same above specifications.	15	Nos		
iii	Three light points to be controlled by one switch.	10	Nos		
iv	Call bell point with ceiling rose/ 6amp. 3 pin socket controlled by one 6 amp. Push Modular switch. With call bell		Nos		
v	Providing and fixing of <b>Ceiling fan</b> point controlled as under (i) one 6 amp switch (ii) one no stepped electronic regulator of two module type.	21	Nos.		
vi	Providing and fixing <b>6 Amps Plug Points</b> with same specs as above and install along with same light switchboard	50	Nos		
vii	<b>6 amp. Modular switch</b> as serial no <b>1 on seperate Board</b> using 2*2.5 + 1*2.5 Sqmm Copper Conductor FRLS wires from DB to first 6A, 5 Pin modular socket controlled by one 6A switch and looped to the nearest second point with same 2*2.5 + 1*2.5 Sqmm copper conductor wires FRLS insulated 1100V grade (max 3 points per circuit).		Nos		
	10 11 11 11 11 11 11 11 11 11 11 11 11 1	45	Nos		
xiii	Same as serial no.1, but wiring for 16 Amp, 6-pin sockets by using 2*4	40	1103		

2	SPECIAL POINTS: (For Computers). Supply, fixing, testing and commissioning of following Modular type switch socket with cover plate, PVC modular box on Surface / sheet steel box in concealed manner I/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as per site requirement and as directed. 2 Nos. 6 A Switch + 3 Nos. 6 A, 3 pin Socket (Minimum two and Maximum three points are loop with one circuit as mentioned beolw)		Nos	
3	AC & Power Point (Single Phase). Supply, Installation, Testing and commissioning of the surface / recess mounting A.C. / GEYSER power point with the followings: Metra Plug and Socket DBs with one Nos 20 Amp SP MCB, 20 Amp plug and socket with complete Enclosur plate and box 1 set i/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as required as per site requirement and as directed by Bank Engineer. OR Modular 32A DP 1 way switch with plate & box 1 set. + 25A & 10A twin socket (Only one point is connected with one circuit as mentioned below)			
	AC Point (Three Phase). Supply, Installation, Testing and commissioning of the surface / recess mounting A.C. Cassette power	28	Nos	
4	point with the followings:  Metal enclose Four way with one Nos 32 Amp FP MCB with complete Enclosur plate and box 1 set i/c electrical connections and making good all the damages, painting, cleaning the site etc complete as required as per site requirement and as directed. (Only one point is connected with one circuit as mentioned below) including 5 X 4 Sqmm. Copper multistrend FRLS wire in suitable size of 16 SWG (MMS) steel conduit (For Cassettee AC)		Nos	
5	CIRCUIT WIRING:(FRLS WIRE) Supply, installation, testing & commissioning of FRLS circuit wiring measured in numbers with suitable size of MS conduit 1.6 mm thick and 25mm dia. The wiring in MS conduit is as per IS code. The average length of wiring around between(25-30) Mtr.			
а	3 X 2.5 sqmm(For UPS Circuit/6 amp Separate Board)in suitable size of 16 SWG (MMS) steel conduit as per IS code.	20	Nos	
b	3 X 4.0 sqmm ( For 1 ton, 1.50, 2.00 & 2.00 Cassette AC / PowerCircuit ) in suitable size of 16 SWG (MMS) steel conduit as per IS code.	28	Nos	
С	5 X 4 Sqmm. Copper multistrend wire in suitable size of 16 SWG (MMS) steel conduit ( For 3 TON Cassettee AC)	60	R.Mtr	
	MAIN DANIEL AND METER ROADS			
6	MAIN PANEL AND METER BOARD  All MCB to be "C" series			
	Supply, installatin, Testing and commissioning of the surface/recess			
	mounting following ways MCB DB's 230/415 Volts with tinned copper, busbar, neutral bar, earth bar, din bar detachable gland plate, interconnection and making good all the damages, painting, cleaning the site etc complete as required as per site requirement. All MCCB has braking capacity is 25KA and ALL MCB/ELCB has breaking capacity has 10 KA. Make of Materials.  Panel-As per IS Standards/CPRI Tested.  DBs/MCCB/MCBs- Legrand/Siemens/Hagger/Schneider only.			
	(Note:- Before Placing the Panel order,firstly it Passed by the Bank Authority, otherwise it will not be considered)			

	Supplying, installation testing and commissioning of indoor type, sectionalised, compartmentalized, MV Panel board of suitable size fabricated from CRCA sheet of 2 mm thick for frame work enclousure and doors, 3mm thick for gland plates with stiffers where required, having vibration free structure chemically treated with seven tank process before painting for surface treatmentand powder coated, with aluminum busbar with DMC / SMC busbar supports suitable for 3 phase 415 V 50 Hz AC supply i/c providing and fixing the following switchgear mounted thereon complete with gaskets and interconnections, connection as per specification complete as required. (The board shall be dust & vermin proof with suitable degree of IP protection)  NOTE: All switchgears Ics shall be equal to 100% Icu Sheet 14 swg: panel side upper, lower and Ft. doors. Sheet 16 swg: back side and compartments. Gland plates: 3 mm thick. Cable entry: Provision at bottom and upper sides. The above panel belongs following as under: A. 4 Nos. 300 Amp. Electrolytic grade Aluminum Bus Bars insulated with colored Heat Shrinkable PVC Sleeves & duly supported on SMC/DMC molded supports with Antitracking barriers. B. INCOMING SWITCHGEARS: (RYB LED Indicators for Both Main/DG) (i) 1 no. FP. 250 A, 25 KA MCCB with thermal magnetic trip unit WTH DigitalVoltmeter & Digital Ammeter suitable size of CTS, selector switches etc. – energy meter C. OUTGOING SWITCHGEARS: (i) 1 Nos – 160 Amp TP MCCB for main with 300 amp bus bar with indicator (AC) (ii) 200 amp onload changeover with 1 Nos. 160 amp 25 KA TP MCCB for DG supply with 300 amp bus bar with indicator ( Light & Power) (iii) 300 amp bus bar for parallel connection with DG changeover output ( Note: Before Placing the Panel order, firstly it Passed by The Bank Authority, otherwise it will not considered)	1	Set	
_	SDP/Surga Protector Davieva)	1	Sat	
а	SDP(Surge Protector Devicve)	1	Set	
	Supply & Installation of SDP(Surge Protector Devicve) for general protection of main Distribution Board Legrad Make Cat No. 412247 (3P+N), 40 KA, T2- Imax 40KA/pole with complete wiring.			
b	6-way TPN DB (LIGHT DB)	2	Set	
	Incomer:-			
	1 No. 32 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each phase			
	Outgoing:-			I
	outgoing			
	10-12 Nos.6/10/25 Amp (10 KA) SP MCB			
	10-12 Nos.6/10/25 Amp (10 KA) SP MCB	2	Set	
С	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB ( POWER DB)	2	Set	
С	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB ( POWER DB)  Incomer:-	2	Set	
С	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB ( POWER DB)  Incomer:- 1 No. 63 Amp TPN (10 KA) MCB	2	Set	
С	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB ( POWER DB)  Incomer:- 1 No. 63 Amp TPN (10 KA) MCB  Outgoing:-	2	Set	
c	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB ( POWER DB)  Incomer:- 1 No. 63 Amp TPN (10 KA) MCB	2	Set	
	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB ( POWER DB)  Incomer:- 1 No. 63 Amp TPN (10 KA) MCB  Outgoing:- 10 Nos.16 Amp (10 KA) SP MCB			
	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB ( POWER DB) Incomer:- 1 No. 63 Amp TPN (10 KA) MCB  Outgoing:- 10 Nos.16 Amp (10 KA) SP MCB  4-way V-TPN DB (LIGHT )	2	Set	
	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB (POWER DB) Incomer:- 1 No. 63 Amp TPN (10 KA) MCB  Outgoing:- 10 Nos.16 Amp (10 KA) SP MCB  4-way V-TPN DB (LIGHT) Incomer:-			
	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB ( POWER DB) Incomer:- 1 No. 63 Amp TPN (10 KA) MCB  Outgoing:- 10 Nos.16 Amp (10 KA) SP MCB  4-way V-TPN DB (LIGHT ) Incomer:- 1 No. 80 Amp 4 Pole (16 KA) MCCB			
	10-12 Nos.6/10/25 Amp (10 KA) SP MCB  4-way TPN DB (POWER DB) Incomer:- 1 No. 63 Amp TPN (10 KA) MCB  Outgoing:- 10 Nos.16 Amp (10 KA) SP MCB  4-way V-TPN DB (LIGHT) Incomer:-			

	4			
	5 Nos. 25 Amp (10 KA) SP MCB			
е	8-way V-TPN DB (AC )	2	Set	
	Incomer:-			
	1 No. 80 Amp 4 Pole (16 KA) MCCB			
	Outgoing:-			
	4No. 40 Amp (16 KA) TP MCB			
	5 Nos. 25 Amp (10 KA) SP MCB			
f	4-way TPN DB UPS ROOM	2	Set	
	Incomer:-			
	1 No. 63 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each			
	phase			
	Outgoing:-			
	2Nos. 40 Amp (10 KA) DP MCB, For UPS outgoings tto individual SDB			
g	12-way SPN DB (For UPS Sub DB)	2	Set	
	Incomer:-			
	1 No. 40 Amp DP (10 KA) MCB with 25 A DP RCCB (100 MA)			
	Outgoing:-			
	8-10 Nos.6/10Amp (10 KA) SP MCB			
	,			
h	KIT KAT 300 AMP.	1	Set	
<del>- ''-</del>	Providing and fixing of Kit Kat Rewirable Porcelian fuse carrier & base	· ·		
	with wooden frame of 300 amp/415 Volt near meter box			
7	CABLES			
	Supplying, unloading, storage, laying, testing and commissioning of PVC/XLPE insulated (Heavy Duty) Al/Cu conductor armoured cable suitable for working voltage upto and including 1100 V grade, laid and tied on existing overhead cable trays, or laid and tied over MS supports in masonry trenches with copper/al cable lugs, single compression brass cable glands, tapping, crimping etc. as required and all cables run with double run( 2 No.) of GI wire of 8 SWG size. The size of cables are as under:- Make of Material:- (i) PVC/XLPC Armoured cable:- Finolex, Havells, RR cable, CCI(Cable Corp. of India) (ii) Cable Termination:- Dowells, Comet			
i	3.5 X 50 Sq.mm XLPE. Al. armoured Cable (AC VTPN, BUS BARS & A.C. DB )/Main cable	30	Mtr	
ii	Supplying, laying, testing & commissioning of <b>4 C X 10</b> sq.mm. at 1100 volts grade PVC insulated <b>copper conductor</b> armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification from <i>Main board to UPS Room</i>		Mtr	
iii	Supplying, laying, testing & commissioning of <b>4 C X 25</b> sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification <i>Pane to (POWER/UPS) DB</i>	90	Mtr	
iv	Supplying, laying, testing & commissioning of <b>4 C X 16</b> sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification <i>(Light DB)</i> .		Mtr	

v	Supplying, laying, testing & commissioning of <b>4 C x 50</b> sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification <i>(Mains)</i> .	20	Mtr	
8	EARTHING			
а	COPPER PLATE EARTH STATION:  Preparation of the Plate Earth Station:( As per IS:3043)  (a) Excavation of hard rocky earth, soft murrum, hard murrum etc and back filling with black cotton soil for the earth station, the earth pit size is 1000 mm X 1000 mm X 2500 mm.  (b) Supply and fixing of Copper Plate of Size 600 mm X 600 mm X 3.0 mm thick.  (c) Fixing of 50 mm X 6 mm, 3 Mtrs copper strips from Copper Plate to earth terminal including brazing/welding at plate etc.  (d) Supply and laying in position 19 mm, 2 Mtrs G.I "B" Class pipe for watering with reducer/funnel with mesh.  (e) Supply and Fixing of the following in the earth station.  (i) 75 Kg. Charcoal.  (ii) 15 Kg. Original Salt.  (iii) Black Cotton soil of adequate amount.  (f) Construction of earth pit chamber including necessary brick work concrete, plastering, S/F of C.I Cover of size 12" X 12" complete as per site requirment.		Nos	
b	G.I.PLATE EARTH STATION:  Preparation of the Plate Earth Station: (as per IS:3043)  (a) Excavation of rocky earth, soft murrum, hard murrum etc and back filling with black cotton soil for the earth station, the earth pit size is 1000 mm x 1000 mm x 2500 mm deep.  (b) S/F of G.I. plate of size 600 x 600 x 6.0 mm thick.  (c) S/F fixing 50 mm x 6 mm, 3 mtrs G.I, strips from G.I.plate to earth terminal including brazing / welding at plate etc.  (d) Supplying and laying in position 19 mm, 2 mtrs G.I. `B' class pipe for watering.with reducer/funnel with mesh.  (e) S/F of the following in the earth station.  75 Kg. Charcoal, 15 Kg. Original Salt. and Black Cotton soil of adequate amount.  (f) Construction of earth pit chamber including necessary brick work concrete, plastering, S/F of C.I. Cover of size 12" x 12" complete as per site req.and marking its value & identification etc.		Nos	
d	Providing and fixing of Copper / GI strips in surface or in recess for loop earthing etc. as required.		1100	
i	25 mm x 3 mm copper strip with proper clamps	70	Mtr	
l ii	25 mm x 5 mm GI strip	60	Mtr	
iii	Providing and fixing 2 X 8 SWG dia. Cu earth wire in PVC conduit on surface or in recess for loop earthing along with the existing surface/recess cable as required.		Mtr	
e	OCCUPANCY SENSORS:- Supply, installation, testing and commissioning of occupancy sensor surface/recess mounted as per site condition complete with all wiring/conduit/Switch etc complete in all respect as per site condition as required Honeywell Make K5015/16, Siemens/Johnson Control OR Equivalent as per Bank's approved.	10	Nos	
	TELEPHONE POINT			
9	TELEPHONE POINT			

Two pair. 0.6 ft mm dia. telephone cable inned copper conductor, P.V.C. insulated and sheathed, fire retarding, and tremite, colour coded wissed pairs and rip cord, Double outlet The length of telephone cable upto 35 meter fength or less as per site condition with shutter modular type Telephone Outlets (RJ — 11) with suitable size MS / PVC modular boxes and it laving, findin, using and commissioning in suitable size 20/25 mm dia file SWG Medium Gauge) thickness rigid PVC conduit with conduit accessories libe bendityluricho box. Cover plate? FVC modular with conduit accessories libe bendityluricho box. Cover plate? Swide of the selection of the						
Supplying and fixing of krone telephone tag block on surface/ recess mounted with its accessories suitable for the multi core telephone cable and shall accommodate tin-plated phosphor bronze connectors, the connectors shall splice unskinned cables up to 0.61 mm dia and shall be terminate both incoming and out going lines, the tag blocks shall be mounted inside, water proof box and locking arrangement and shall be telly accessible (A) 20 pair tag block  10 DATA CABLING FOR LAN  Providing, fixing, testing and commissioning of all nodes of four pair UTP CAT 6 LAN cables length upto 30 meter length or less as per site conditionin suitable size 20/25 mm dia, 16 SWG wall thickness rigid PVC conduit with conduit accessories like bendly incolon box fan box etc on surface/recessed manner and making good all the damages, painting, cleaning the site etc complete as required Junction box shuld be covered with Stainless steel plate with screw with gasket for protection of water/dust. Providing, fixing, testing and commissioning of modular type Information Outlets with suitable size of MS/PVC modular boxes complete, all accessories with insulation displacement connectors etc suitable for CAT 6 UTP cabling with RJ-45 socket with testing and commissioning of STP cabling with RJ-45 socket with testing and commissioning of STP cabling with RJ-45 socket with testing and commissioning of STP cabling with RJ-45 socket with testing and commissioning of STP cabling with RJ-45 socket with testing and commissioning for STP cabling with RJ-45 socket with testing and commissioning for STP cabling with RJ-45 socket with testing and commissioning for STP cabling with RJ-45 socket with testing and commissioning for STP cabling with RJ-45 socket with testing and commissioning for STP cabling with RJ-45 socket with testing and commissioning of STP cabling with RJ-46 soched with testing and commissioning of STP cabling with RJ-46 (A) Day Brown RJ-47 (A) Day Brown R	(i)	pairs and rip cord, Double outlet The length of telephone cable upto <b>35</b> <i>meter length</i> or less as per site condition with shutter modular type Telephone Outlets (RJ — 11) with suitable size MS / PVC modular boxes and it laying, fixing, testing and commissioning in suitable size 20/25 mm dia,16 SWG (Medium Gauge) thickness rigid PVC conduit with conduit accessories like bend/junction box / cover plate/ sheet steel/PVC box on surface/ concealed manner i/c electrical connections and making goods all the damages, replastering, painting, cleaning the site etc complete as required as per site condition. The floor/roof/wall junction box shuold be of MS(heavy duty) box of suitable size and covered with Steel finish Steel cover sheet by screw tight and gasket to avoid water/dust insertion.	25)	Nos		
Providing, fixing, testing and commissioning of all nodes of four pair UTP CAT 6 LAN cables length upto 30 meter length or less as sper site conditions insultable size 20/25 mm dia, 16 SWG wall thickness rigid PVC conduit with conduit accessories like bend/junction box/ fan box etc on surface/recessed manner and making good all the damages, painting, cleaning the site etc complete as required as per site condition and as directed as required. Junction box shuld be covered with Stainless steel plate with screw with gasket for protection of water/dust, Providing, fixing, testing and commissioning of modular type Information Outlets with suitable size of MS/PVC modular boxes complete, all accessories with insulation displacement connectors etc suitable for CAT 6 UTP cabling with RJ-45 socket with testing and commissioning of STP cabling with scanner for all the nodes/switches/jack panel complete (Each point/circuit/cable from both load and source end to be marked with ferrules.)  Make of Material:  (i) Data Cable, Cat 6 cable, Switch, Jack panel, Rack, Patch cords & Other accessories: D-Link, Legrand  Providing and fixing Patch Panels 30 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)  Providing, assembling, fixing, testing and commissioning Floor/Wall mounted RACKS for gig switches, patch panels etc including cooling DUAL fan trays, a 10 Point PDU, Fixed Trays as necessarycomplete. 9 U wall mounted RACK  d Romple with connector on both side.)  for 1 Mt. long  Providing, fixing,testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16sWG conduit including all accessories to interconnect the switches from different location.  TV POINT:-Supply, installation, testing and commissioning of TV point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect  4 Nos	(ii)	mounted with its accessories suitable for the multi core telephone cable and shall accommodate tin-plated phosphor bronze connectors, the connectors shall splice unskinned cables up to 0.61 mm dia and shall be terminate both incoming and out going lines, the tag blocks shall be mounted inside, water proof box and locking arrangement and shall be				
Providing, fixing, testing and commissioning of all nodes of four pair UTP CAT 6 LAN cables length upto 30 meter length or less as sper site conditions insultable size 20/25 mm dia, 16 SWG wall thickness rigid PVC conduit with conduit accessories like bend/junction box/ fan box etc on surface/recessed manner and making good all the damages, painting, cleaning the site etc complete as required as per site condition and as directed as required. Junction box shuld be covered with Stainless steel plate with screw with gasket for protection of water/dust, Providing, fixing, testing and commissioning of modular type Information Outlets with suitable size of MS/PVC modular boxes complete, all accessories with insulation displacement connectors etc suitable for CAT 6 UTP cabling with RJ-45 socket with testing and commissioning of STP cabling with scanner for all the nodes/switches/jack panel complete (Each point/circuit/cable from both load and source end to be marked with ferrules.)  Make of Material:  (i) Data Cable, Cat 6 cable, Switch, Jack panel, Rack, Patch cords & Other accessories: D-Link, Legrand  Providing and fixing Patch Panels 30 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)  Providing, assembling, fixing, testing and commissioning Floor/Wall mounted RACKS for gig switches, patch panels etc including cooling DUAL fan trays, a 10 Point PDU, Fixed Trays as necessarycomplete. 9 U wall mounted RACK  d Romple with connector on both side.)  for 1 Mt. long  Providing, fixing,testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16sWG conduit including all accessories to interconnect the switches from different location.  TV POINT:-Supply, installation, testing and commissioning of TV point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect  4 Nos	10	DATA CABLING FOR LAN				
b patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)  Providing, assembling, fixing, testing and commissioning Floor/Wall mounted RACKS for gig switches, patch panels etc including cooling DUAL fan trays, a 10 Point PDU, Fixed Trays as necessarycomplete. 9 U wall mounted RACK  Providing and fixing of flowing factory fabricated Patch cords. (UTP/CAT 6 complte with connector on both side.)  i) for 1 Mt. long  for 2 Mt. long  Providing, fixing, testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.  TV POINT:-Supply, installation, testing and commissioning of TV point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect  Supply and installation of Vinyl sticker for on Electrical DBs like, "Switch		Providing, fixing, testing and commissioning of all nodes of four pair UTP CAT 6 LAN cables length upto 30 meter length or less as per site conditionin suitable size 20/25 mm dia, 16 SWG wall thickness rigid PVC conduit with conduit accessories like bend/junction box/ fan box eto on surface/recessed manner and making good all the damages, painting, cleaning the site etc complete as required as per site condition and as directed as required. Junction box shuld be covered with Stainless steel plate with screw with gasket for protection of water/dust. Providing, fixing, testing and commissioning of modular type Information Outlets with suitable size of MS/PVC modular boxes complete, all accessories with insulation displacement connectors etc suitable for CAT 6 UTP cabling with RJ-45 socket with testing and commissioning of STP cabling with scanner for all the nodes/switches/jack panel complete (Each point/circuit/cable from both load and source end to be marked with ferrules.)  Make of Material:-  (i) Data Cable, Cat 6 cable, Switch, Jack panel, Rack, Patch cords & Other accessories:- D-Link, Legrand	50	Nos		
mounted RACKS for gig switches, patch panels etc including cooling DUAL fan trays, a 10 Point PDU, Fixed Trays as necessarycomplete. 9 U wall mounted RACK  Providing and fixing of flowing factory fabricated Patch cords. (UTP/CAT 6 complte with connector on both side.)  i) for 1 Mt. long  i) for 2 Mt. long  Providing, fixing, testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.  TV POINT:-Supply, installation, testing and commissioning of TV point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect  Supply and installation of Vinyl sticker for on Electrical DBs like, "Switch	b	patch/jack panel with connector, out lets and necessary connectivity		Nos		
i) for 1 Mt. long i) for 2 Mt. long Froviding, fixing,testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.  TV POINT:-Supply, installation, testing and commissioning of TV point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect  Supply and installation of Vinyl sticker for on Electrical DBs like, "Switch	С	mounted RACKS for gig switches, patch panels etc including cooling DUAL fan trays, a 10 Point PDU, Fixed Trays as necessarycomplete. 9 U wall mounted RACK		Nos		
ii) for 2 Mt. long  Providing, fixing,testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.  80 Mtr  TV POINT:-Supply, installation, testing and commissioning of TV point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect  Supply and installation of Vinyl sticker for on Electrical DBs like, "Switch	d					
ii) for 2 Mt. long  Providing, fixing,testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.  TV POINT:-Supply, installation, testing and commissioning of TV point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect  Supply and installation of Vinyl sticker for on Electrical DBs like, "Switch"	i)	for 1 Mt. long	50	Nos.		$\neg$
Providing, fixing, testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.  TV POINT:-Supply, installation, testing and commissioning of TV point (Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect  Supply and installation of Vinyl sticker for on Electrical DBs like, "Switch	ii)	for 2 Mt. long	50	Nos		$\neg$
11 point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect 4 Nos  Supply and installation of Vinyl sticker for on Electrical DBs like, " Switch	,	Providing, fixing,testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.		Mtr		
	11	point(Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all accessories complete in all respect	4	Nos		
	12			Nos		

13	Making & Providing of 3 sets of Asbuilt Drawing with coloured print for entier Electrical work (Power/UPS/Light/Data/ Telephone/AC etc.) as advised by the Bank's Authority.	1	Lum sum	
	Description of light /fan fixture			
14	LED LUMINARES:- 2' x2' (FULL GLOW TYPE)  LED light fittings (600 X600mm) dimension suitable for grid/gypsum ceiling complete with its electrionic driver as required per instruction of Bank's Model No are as under:-  PHILIPS:- RC380B G2 LED 35S-6500 PSU OD WH LED (FULLGLOW)  WIPRO:- CRCO1ORO 38 HP57  HAVELLS:- LHECDIL7IL1W036 (Edge- Lit)  CG:- LCTAR3-40-CDL			
		60	Nos	
15	LED DOWNLIGHTER: 15 Watt, recessed mounted circular down lighter, 6" dimension with complete its electronic driver are as under:- PHILIPS:- GREENLED-DN193B LED-12S-6500 PSU WIPRO:- IRIS LED LD 71-121-XXX-50-XX HAVELLS:- LHEBJNP ZPZ 1W 015(ENDURA LOW DEPTH) CG:- LC DD-15-CDL,	39	Nos	
16	LED Spot Light, 3 Watt, 2/3"(Inches) size as per site requirment.			
<u>-</u>	PHILIPS, WIPRO, HAVELLS, CG	14	Nos	
17	LED COVE / STRIP LIGHT WITH ITS ELECTRONIC DRIVER( BLUE COLOUR):- Supply, installation, testing and commissioning of bright LED strip light with its electronic driver complete as required. PHILIPS, WIPRO, HAVELLS, CG	150	Mtr	
18	Providing & fixing of "Digital Clock" /Digital Panel indicating Time, Day, Date, Temperature at outside of big size,(Ajanta - OLC-1070) as suitable over the facade as advised by the Bank with standard power			
	back up. Make:- Ajanta, Titan	1	Nos	
19	BOX TYPE LUMINAIRES: LED TUBE FITTINGS, 1200mm, 18/20 Watt - PHILIPS/WIPRO/HAVELLS/CG	28	Nos	
20	CEILING FAN: FIVE STAR RATING BLDC FAN Single phase heavy duty grease filled double ball bearing, aerodynamically designed heavy gauge aluminium blades, copper wounded and impregnated silicon stamping motors etc 1200 mm sweep, brilliant white CG/ USHA/ ORIENT/ HAVELLS	21	Nos	
21	WALL FAN:-( Only Metallic Body ) Oscillating wall fan with regulator i/c coonections etc complete as required as per approved make, Sweep 400/450 mm, RPM 1300 make are as under: CG/USHA/ ORIENT/HAVELLS	10	Nos	
22	EXHAUST FAN:- Single phase, 300mm sweep, 900 rpm, metallic exhaust fan of the following single phase Exhaust fan continuously rated, capacitor start and run type, totally enclosed and ruggedly built, pre lubricated double ball bearing, copper wounded, A & E class insulation, dynamically balanced, below 40 db sound level etc, front cover with grill/gravity louver for protection purpose with 12 mm plywood complete in all respect make as under: CG/USHA/ ORIENT/HAVELLS/ALMONARD/ALSTOM		Nos	
	Sub Total : Part A (Electrical Works)	12	1403	
В	Part B: Air Conditioning Works:			
	Supply, installation, testing and commissioning of following AIR CONDIRIONERS as under. The Rate shall be inclusive of all taxes excluding GST. GST will be paid additionally by the Bank as applicable subject to GST Number. and system has complete one year warranty & If any additinal warranty provided by company/vendor in any specific part like compressor etc that is acceptable, please mentioned it.			

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23	Supply, installation, testing and commissioning of Higher Efficient models of SPLIT AC FIVER* STAR INVERTER RATING OF BEE AIR CONDITIONERS 2.0 TON Machines confirming to latest Indian Standards and suitable for operation on 230 Volts + 10 %, single Phase, 50 Hz AC supply with rotary compressor, Refrigerant and capable to perform cooling, dehumidifying, Air Circulating, auto mode, auto swing, anti bacteria filtering, ventilation and with remote control with Cool/Fan/Dry/Auto mode, sleep mode & on/off timer with suitable thermostat. The rate should include installation charges after making appropriate changes in existing false ceiling. Heavy ready made/fabricated M S Stand to house the out door unit as per site conditions including carpentry work, minor civil work and material including copper piping of hard & prime quality of min. 22 G upto 3 metres with class "o" Nitrile insulation 12mm, cabling from indoor to outdoor unit, heavy gauge PVC drain piping with insulation as per site requirement. The copper piping, drains piping and electrical cabling should be fixed with clamps and no loose piping/cabling is allowed. The out door unit should be anti-rust powder coated. Indoor unit should have LED display. The rates inclusive of all repairs of civil and carpentry work The cost includes original fill and additional top up of refrigerant gas as per site condition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. Make of ACs:- Daikin/Hitachi/Voltas/Bluestar/Carrier only			
		2	Nas	
24	Supply, installation, testing and commissioning of Higher Efficient models of <u>CASSETTE A.C. FIVER* STAR OF AIR CONDITIONERS 3.0 TON</u> Machines confirming to latest Indian Standards and suitable for operation on 415 Volts + 10 %, three Phase, 50 Hz AC supply with Scroll compressor, Refrigerant and capable to perform cooling, dehumidifying, Air Circulating, auto mode, auto swing, anti bacteria filtering, ventilation and with remote control with Cool/Fan/Dry/Auto mode, sleep mode & on/off timer with suitable thermostat. The rate should include installation charges after making appropriate changes in existing false ceiling. Heavy ready made/fabricated M S Stand to house the out door unit as per site conditions including carpentry work, minor civil work and cabling from indoor to outdoor unit, heavy gauge PVC drain piping with insulation as per site requirement. The copper piping, drains piping and electrical cabling should be fixed with clamps and no loose piping/cabling is allowed. The rates inclusive of all repairs of civil and carpentry work The out door unit should be anti-rust powder coated. The cost includes original fill and additional top up of refrigerant gas as per site condition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work.  Make of ACs:- Daikin/Hitachi/Voltas/Bluestar/Carrier only		Nos	

25 Supply, installation, testing and commissioning of Higher Efficient models of CASSETTE AC, EVERS "TSAR PAIR COMDITIONERS 2.0 TOM Machines confirming to latest Indian Standards and suitable for operation on 15 Volts 1 "10", three Phase, 50 Hz AC supply with Scroll compressor, Refrigerant and capable to perform cooling, dehumidifying, Air Circuisting, auto mode, auto swing, and bacteria filtering, rentilation and with remote control with Cool-Far/DryAuto model, sieep mode & conditioner with suitable hermonatal. The rate should include mailation and with remote control with Cool-Far/DryAuto model, sieep mode & conditions including caperparty work minor civil work and cabiling from indoor to outdoor until, heavy gauge PVC drain piping with insulation as per site requirement. The copper piping, drains piping and electrical cabiling should be fixed with clamps and no loose pipingcabling is allowed. The rates inclusive of all repairs of civil and carpentry work. The out door unit should be anti-rust powder coated. The cost includes original fill and additional top up of refrigerant gas as per site condition. The rates inclusive of all chaisel work, plastering, finishing, painting & all civil related work perfaing to mentioned work. Make of ACs. Daikin/Hitachii/Otlas/Bluestar/Carrier only  26 Supply and installation of soft & prime quality of min. 22 G Copper pipe for "Spit AC only" with cass "o" Nitrie insulation of minimum 12mm for spit air conditioner including liner connection, power communication required additionally, payment will make as per actual installation. The rate inclusive of all chiesel work, plastering, finishing, painting & all civil related work perfaing to mentioned work. Make of cable. Finolex/RR/Havells  27 Supply and installation of hard & prime quality of min. 22 G Copper pipe for "Spit AC only" with ciase "o" Nitrie insulation of minimum 12 min for 3 / 4 f at on cassette year and continued may be a considered with a per actual installation. The retail inclusive of all chiesel work, plasterin		9				
26 Supply and installation of soft & prime quality of min. 22 G Copper pipe for "Split AC only" with class "o" Nitrile insulation of minimum 12mm for split air conditioner including inter connection power/ communication cable between indoor & outdoor unit as per site requirement. ( If required additionally, payment will made as per actual installation. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. Make of Insulation:—Superlon/Affex/Armacell/Kflex Make of cable:—Finolex/RR/Havells  27 Supply and installation of hard & prime quality of min. 22 G Copper pipe for "Cassette AC Only" with class "o" Nitrile insulation of minimum 12 mm for 3 / 4 ton cassette type air conditioner including interconnection power/ communic cation cable between indoor and outdoor unit as per site requirement. ( If required additionally, payment will made as per actual installition.) The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. Make of Insulation:—Superlon/Aflex/Armacell/Kflex. Make of cable:Finolex/RR  28 Drain Pipe ( If Required additional) Applicate to both ACs(Cassette & Split AC). Supply and laying of heavy gauge PVC drain piping of 40mm with insulation as per site requirement with its all accessories like bend, solution etc as per site condition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. ( If required additionally, payment will made as per actual installition.) Make:-Kasta/supreme  29 Providing & fixing of 4/5 KVA Voltage stabilizer with time delay option including all accessories with installation at site ( For 1Tr /1.5Tr Split AC & 1.5 Tr Cassette AC) Make:-Microtek, V-Gards (Voltage Range 150-280 Volts)  3 Nos  3 Nos  3 Nos  3 Nos  3 Nos  3 Nos:-The rates quoted includes all other taxes,duties, loading, unloading,transportation,other expenses etc to site.	25	models of <u>CASSETTE A.C. FIVER* STAR OF AIR CONDITIONERS 2.0 TON</u> Machines confirming to latest Indian Standards and suitable for operation on 415 Volts + 10 %, three Phase, 50 Hz AC supply with Scroll compressor, Refrigerant and capable to perform cooling, dehumidifying, Air Circulating, auto mode, auto swing, anti bacteria filtering, ventilation and with remote control with Cool/Fan/Dry/Auto mode, sleep mode & on/off timer with suitable thermostat. The rate should include installation charges after making appropriate changes in existing false ceiling. Heavy ready made/fabricated M S Stand to house the out door unit as per site conditions including carpentry work, minor civil work and cabling from indoor to outdoor unit, heavy gauge PVC drain piping with insulation as per site requirement. The copper piping, drains piping and electrical cabling should be fixed with clamps and no loose piping/cabling is allowed. The rates inclusive of all repairs of civil and carpentry work The out door unit should be anti-rust powder coated. The cost includes original fill and additional top up of refrigerant gas as per site condition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work.	121	Nec		
for "Split AC only" with class "o" Nitrile insulation of minimum 12mm for split air conditioner including inter connection power/ communication cable between indoor & outdoor unit as per site requirement. (If required additionally, payment will made as per actual installition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. Make of Insulation:—Superion/Aflex/Armacell/Kflex Make of cable: Finolex/RR/Havelis  27 Supply and installation of hard & prime quality of min. 22 G Copper pipe for "Cassette AC Only" with class "o" Nitrile insulation of minimum 12 mm for 3 / 4 ton cassette type air conditioner including interconnection power/ communi cation cable between indoor and outdoor unit as per site requirement. (If required additionally, payment will made as per actual installition.) The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. Make of Insulation:—Superion/Aflex/Armacell/Kflex . Make of cable-Finolex/RR  28 Drain Pipe (If Required additionally) Applicate to both ACs(Cassette & Split AC). Supply and laying of heavy gauge PVC drain piping of 40mm with insulation as per site requirement with its all accessories like bend, solution etc as per site rondition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. (If required additionally, payment will made as per actual installition.) Make: -Kasta/supreme  29 Providing & fixing of 4/5 KVA Voltage stabilizer with time delay option including all accessories with installation as title (For 1Tr /1.5Tr Split AC & 1.5 Tr Cassette AC) Make:-Microtek, V-Gards (Voltage Range 150-280 Volts)  Sub Total : Part B (Air Conditioning Works)  Total : Part (A + B)  Note:-The rates quoted includes all other taxes,duties, loading, unloading,transportation,other expenses et to site.	<u> </u>		13	INOS		
27 Supply and installation of hard & prime quality of min. 22 G Copper pipe for "Cassette AC Only" with class "o" Nitrile insulation of minimum 12 mm for 3 / 4 ton cassette type air conditioner including interconnection power/ communi cation cable between indoor and outdoor unit as per site requirement.( If required additionally, payment will made as per actual installtion.) The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. Make of Insulation:- Superlon/Aflex/Armacell/Kflex . Make of cable:Finolex/RR 290 Mtr  28 Drain Pipe ( If Required additional) Applicale to both ACs(Cassette & Split AC). Supply and laying of heavy gauge PVC drain piping of 40mm with insulation as per site requirement with its all accessories like bend, solution etc as per site condition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. ( If required additionally, payment will made as per actual installition.) Make:- Kasta/supreme 280 Mtr  29 Providing & fixing of 4/5 KVA Voltage stabilizer with time delay option including all accessories with installation at site ( For 1Tr /1.5Tr Split AC & 1.5 Tr Cassette AC) Make:-Microtek, V-Gards (Voltage Range 150-280 Volts) 3 Nos  Sub Total : Part B (Air Conditioning Works) Total : Part (A + B)  TOTAL  GRAND TOTAL COST  Note:- The rates quoted includes all other taxes,duties, loading, unloading,transportation,other expenses etc to site.	26	for "Split AC only" with class "o" Nitrile insulation of minimum 12mm for split air conditioner including inter connection power/ communication cable between indoor & outdoor unit as per site requirement. ( If required additionally, payment will made as per actual installtion. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. Make of Insulation:-	50.	Mtr		
28	27	for "Cassette AC Only" with class "o" Nitrile insulation of minimum 12 mm for 3 / 4 ton cassette type air conditioner including interconnection power/ communi cation cable between indoor and outdoor unit as per site requirement.( If required additionally, payment will made as per actual installtion.) The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. Make of Insulation:- Superlon/Aflex/Armacell/Kflex . Make of				
Split AC). Supply and laying of heavy gauge PVC drain piping of 40mm with insulation as per site requirement with its all accessories like bend, solution etc as per site condition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. (If required additionally, payment will made as per actual installition.) Make:- Kasta/supreme  29 Providing & fixing of 4/5 KVA Voltage stabilizer with time delay option including all accessories with installation at site ( For 1Tr /1.5Tr Split AC & 1.5 Tr Cassette AC) Make:-Microtek, V-Gards (Voltage Range 150-280 Volts)  3 Nos  Sub Total: Part B (Air Conditioning Works)  Total: Part (A + B)  TOTAL  GRAND TOTAL COST  Note:- The rates quoted includes all other taxes, duties, loading, unloading, transportation, other expenses etc to site.	20	Drain Pine / If Peguired additional Applicate to both ACa/Cassetta 9	290	IVILI		
including all accessories with installation at site ( For 1Tr /1.5Tr Split AC & 1.5 Tr Cassette AC) Make:-Microtek, V-Gards (Voltage Range 150-280 Volts)  Sub Total: Part B (Air Conditioning Works)  Total: Part ( A + B)  TOTAL  GRAND TOTAL COST  Note:- The rates quoted includes all other taxes, duties, loading, unloading, transportation, other expenses etc to site.	20	Split AC). Supply and laying of heavy gauge PVC drain piping of 40mm with insulation as per site requirement with its all accessories like bend, solution etc as per site condition. The rate inclusive of all chisel work, plastering, finishing, painting & all civil related work pertaing to mentioned work. ( If required additionally, payment will made as per	280	Mtr		
Total : Part ( A + B)  TOTAL  GRAND TOTAL COST  Note:- The rates quoted includes all other taxes, duties, loading, unloading, transportation, other expenses etc to site.	29	including all accessories with installation at site (For 1Tr /1.5Tr Split AC & 1.5 Tr Cassette AC) Make:-Microtek, V-Gards (Voltage Range 150-280 Volts)	3	Nos		
TOTAL		·				
Note:- The rates quoted includes all other taxes, duties, loading, unloading, transportation, other expenses etc to site.		Total : Part ( A + B)				
Note:- The rates quoted includes all other taxes, duties, loading, unloading, transportation, other expenses etc to site.						
Note:- The rates quoted includes all other taxes, duties, loading, unloading, transportation, other expenses etc to site.					TOTAL	
unloading,transportation,other expenses etc to site.		GRAND TOTAL COST				
unloading,transportation,other expenses etc to site.						
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		GST WIII be paid additionally as applicable				

	Seal & Signature of Contractor