

केनरा बैंक  Canara Bank

TENDER FOR PROPOSED ELECTRICAL WORKS AT
2ND FLOOR V2 BUILDING, PROPERTY NO. 98/4,
AIRPORT ROAD, HUBBALLI-580030

: PRICE BID:

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ISSUED BY

DEPUTY GENERAL MANAGER
PREMISES & ESTATE SECTION
CANARA BANK CIRCLE OFFICE
52A, Shanbhag Building, Unkal Cross,
Sai Nagar Road, Hubballi-580031
Tel: 0836-2278860.
e-mail: pecohub@canarabank.com



TENDER BILL OF QUANTITIES FOR ELECTRICAL AND FIRE FIGHTING WORKS

SI.No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
PART - A					
A.	MV PANELS & DISTRIBUTION BOARDS				
1.0	Supply, installation, testing and commissioning of M.V. panels and switch gears suitable for 415V, 3 phase, 4 wire, 50Hz power distribution system. The panel shall be free standing Wall / floor mounting type 14G/16G sheet steel enclosed, flush front with single aluminium bus bars and separate earth bus to be provided through out the length of the panel. The incoming and out going feeders breakers, changer over switches, fuses indicating lamps shall be accomadated in a modular multitier arrangement. Minimum clearance of 400mm shall be provided from the floor level to the bottom most termination point adequate size cable alley and bus bar chamber shall be provided ,all round the panel and it shall be connected through solid bus bars. Flexible cable links are not acceptable .				
	Bus bars shall be provided with sleeves or heat resistant insulated paint. The paint shall be suitable for both top/bottom cable entry. The minimum fault rupturing capacity of all incoming and out going breakers/ switches shall be as per SLD only. The panel shall be painted in conformity with the relevant IS code. The panel shall be fabricated only after obtaining approval of the GA drawings. The rate shall also include cost of civil works including fixing accessories, all complete as required .				
1.1	Floor Distribution Panel	set	1		
	Incomer:				
	1No.250A,36KA,4P,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x lr				
	KWH Dual Source,Energy Meter, Counter type: 1 No.				
	MFM Meter:1				
	CTs : 6 Nos.				
	ELR with CBCT: 1 No.				
	Indicating Lamps:6 Nos..... 6A,TP,MCB....1No.				
	300A,TP+N,Aluminum Bus bars				
	Out Going:				
	2Nos.160A,25KA,TPN,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x lr				
	2Nos.100A,25KA,TPN,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x lr				
	2Nos.63A,25KA, TPN,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x lr				
	10Nos.63A,TPN,MCB,10KA				
1.2	UPS Output Panel	set	1		
	Incomer:				
	1No.160A,25KA,4P,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x lr				
	Indicating lamps:6 Nos..... 6A,TP,MCB....1No.				
	MFM Meter:1				
	CTs : 3 Nos.				
	Bus bar:200A,TP+2N,Cu, Bus bar				
	Out Going:				
	2Nos.63A,25KA, TPN,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x lr				
	5Nos.63A,TPN,MCB,10KA				
	All MCBs of D-Curve				
1.3	Supply and fixing CHANGE OVER PANEL - Manual	Set	1		
	2 SETS OF indicating Lamps for R/Y/B for EB and DG supply with fuses, 1 no.200Amps COS with complete enclosures				
	AC PANEL OUT DOOR WEATHER PROOF with Pedestal	set	1		
	Incomer:				
	1No.160A,25KA,4P,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x lr				
	ELR with CBCT, 1 No.				
	Indicating lamps:6 Nos..... 6A,TP,MCB....1No.				
	MFM Meter:1				
	CTs : 3 Nos.				
	Bus bar:200A,TP+N,Aluminum, Bus bar				
	Out Going:				
	5Nos.63A,TPN,MCB,10KA				



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2.0	MCB DISTRIBUTION BOARDS : ALL DOUBLE DOORS				
	Supply, installation, testing and commissioning of the following cubicle type 1.2 mm thick CRCA sheet steel enclosed powder coated with approved shade and partitions to segregate phase with approved covers, single / double door, factory made recessed in wall or surface mounted final distribution boards of the following description. All final DB's shall have outgoing with internal wiring brought upto terminal block for external cable connections.				
	NOTE : 1) Surface mounted DB's on walls shall be provided with suitable size frame work and neatly grouted on to wall and DB shall be fixed on to the frame work using bolts & nuts and other fixing accessories.				
	2) DB's conceald in wall shall include cut of necessary civil works and other fixing accessories.				
	3)The DB's shall be horizontal / vertical type as per configuration of incoming/outgoing feeders.				
	4)The DB's shall be factory made of approved make and necessary available higher size configured DB's shall be used.				
2.1	LDB				
	ETPN MCB DB-6 WAY				
	Incomer:				
	1No.32A, 4P, ELCB + MCB (0-30mA) (B curve)				
	Outgoing:				
	14 Nos. of 6/10/16A, SP, MCBs (B curve)	Set	4		
2.2	PDB				
	ETPN MCB DB-6 WAY				
	Incomer:				
	1 No. 60A. 4P. ELCB + MCB (0-100mA) (B curve)				
	Outgoing:				
	12 Nos. of 16/20/25/32 A, SP. MCBs (B curve)	Set	4		
2.3	ACDB				
	VTPN MCCB DB				
	Incomer:				
	1 No, 100A-4P MCCB				
	Outgoing:				
	14 Nos. of 25/32 A SP MCBs (C/D curve)				
	2Nos. of 32A TP MCBs (C/D curve),	Set	3		



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2.4	Computer DB - Type 1				
	4-VTPN MCB-DB				
	Incomer:				
	1 No. 40A, 4P, MCB (D curve)				
	Outgoing:				
	10 Nos. of 6/10 A SP MCBs (D curve)	Set	3		
2.5	Computer DB - Type 2				
	8-VTPN MCB-DB				
	Incomer:				
	1 No. 63A, 4P, MCB (D curve)				
	Outgoing:				
	18 Nos. of 6/10 A SP MCBs (D curve)	Set	1		
2.6	Computer DB Type-3, 4 WAY for Server DB, ELDB				
	ETPN MCB DB				
	Incomer:				
	1 No32.A, 4P MCB (D curve)				
	Outgoing:				
	...8... Nos. of 6/10 A SP MCBs (D curve)	Set	2		
4.0	MCCB/MCB with weather proof, MS BOX Enclosure				
a	125A TPN MCCB 25 KA with MS Enclosure Suitable	Set	1		
	for Terminating 1Rx3.5C X95 Sqmm AYFY Cable IN/OUT				
b	63/100A TPN MCCB 16 KA with MS Enclosure Suitable	Set	1		
	for Terminating 1Rx3.5C X25 Sqmm AYFY Cable IN/OUT				
c	32 to 63 A TPN MCB 10 KA with MS Enclosure Suitable	Set	4		
	for Terminating 1Rx4C X10 Sqmm AYFY Cable IN/OUT				
d	16 to 32 A TPN MCB 10 KA with MS Enclosure Suitable	Set	1		
	for Terminating 1Rx4C X6 Sqmm CU Cable IN/OUT				
e	16 to 32 A DP MCB 10 KA with MS Enclosure Suitable	Set	1		
	for Terminating 1Rx3C X4 Sqmm CU Cable IN/OUT				
	PART - A TOTAL AMOUNT				



Name of Work: ELECTRICAL AND FIRE ALARM WORKS OF 2ND FLOOR V2 BUILDING, PROPERTY NO. 98/4, AIRPORT ROAD, HUBBALLI-580030

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PART - B				
B.	LT CABLES AND CABLE END TERMINATION :			
1.0	Supply & Laying of 1100V grade, XLPE/ PVC insulated, PVC sheathed, Aluminium / copper conductor, steel armoured cables. The cable shall be laid in existing trench, cable tray / clamped on to the walls using necessary fixing accessories. The cable shall be provided with cable identification tags made out of Aluminium strip, engraved with cable size and the routing. (Note : cost of cable tray, supports, excavation, sand cushioning, brick protection and back filling measured separately).			
1.1	3.5C 240 Sq.mm XLPE Cable	M	60	
1.2	3.5C 185 Sq.mm XLPE Cable	M	60	
	3.5C 120 Sq.mm XLPE Cable	M	120	
1.3	3.5C 95Sq.mm XLPE Cable	M	10	
1.4	3.5C 70Sq.mm XLPE Cable	M	10	
1.5	3.5C 50Sq.mm XLPE Cable	M	10	
1.6	3.5C 35Sq.mm XLPE Cable	M	30	
1.7	4C x 25 Sq.mm XLPE Cable	M	300	
1.8	4 C 16Sq.mm AYFY Cable	M	240	
1.9	4 Core x 25 Sq. mm Copper Armoured Cable (PVC)	M	25	
1.10	4 Core x 16 Sq. mm Copper Armoured Cable (PVC)	M	120	
1.11	4 Core x 10 Sq. mm Copper Armoured Cable (PVC)	M	25	
1.12	1 Core x 50 Sq. mm flexible copper Cable (PVC)	M	50	
1.13	1 Core x 25 Sq. mm flexible copper Cable (PVC)	M	30	
1.14	1 Core x 16 Sq. mm flexible copper Cable (PVC)	M	40	
1.15	1 Core x 10 Sq. mm flexible copper Cable (PVC)	M	40	
1.16	1 Core x 6 Sq. mm flexible copper Cable (PVC)	M	40	
2.0	CABLE END TERMINATIONS:			
	Supply and providing end termination for below listed PVC insulated, PVC sheathed, aluminium conductor, steel armoured, 1100V grade, cable using brass cable glands and copper lugs etc. all complete as required.			
2.1	3.5C 240 Sq.mm XLPE Cable	set	2	
2.2	3.5C 185 Sq.mm XLPE Cable	set	2	
2.3	3.5C 120Sq.mm XLPE Cable	set	2	
2.4	3.5C 70Sq.mm XLPE Cable	set	2	
2.6	3.5C 35Sq.mm XLPE Cable	set	2	
2.7	4 C 16Sq.mm AYFY Cable	set	4	
2.8	4 C 10 Sq.mm AYFY Cable	set	4	
2.14	1 Core x 50 Sq. mm flexible copper Cable (PVC)	set	8	
2.15	1 Core x 35 Sq. mm flexible copper Cable (PVC)	set	8	
2.16	1 Core x 25 Sq. mm flexible copper Cable (PVC)	set	4	
3.0	Supply and fixing of hot dipped galvanized GI ladder type cable tray, conforming to IEC- 61537. The cable tray shall be supplied in standard length of 3000mm. The rate shall include cost of necessary fixing accessories like bends, off sets, collar, Tee, fish plate etc., as required. Note : The cost of supports shall be			
3.1	200mm width x 50 mm height x 1.5 mm thick	Rmtr	200	
3.2	300mm width x 50 mm height x 1.5 mm thick	Rmtr	250	



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4.0	Supply and fixing of 8mm threaded rod supports include bolts, nut & washer	Rmtr	100		
5.0	Supply and fixing of 16swg GI sheet perforated C channels 1" for horizontal support to carry pipes (support channel)	Mts			
6.0	Supply and fixing of UPVC trunking. The rate shall include cost of necessary fixing accessories as required.				
a)	UPVC Trunking 100 x 50 mm	Mts	50		
b)	UPVC Trunking 50 x 50 mm	Mts	50		
PART - B TOTAL AMOUNT					
PART - C					
C.	WIRING SYSTEM				
1.0	Supply & Wiring for Lights, Ceiling fans, exhaust fan and 6A socket outlets using 3 x 1.5 sqmm flexible copper, 1100 volts grade PVC insulated FRLS wires drawn through 2mm thick, suitable size FR PVC conduit in concealed manner using necessary conduit accessories like junction boxes, Switch boxes, modular double plate and inner plate shall be of metal, bends, collars, clamps, ceiling roses, 6A/16A switches, Fan regulator and hook boxes, etc., and shall be flush mounted in brick wall or in the built up furnitures or on the surface of wall for surface installation as required. The rate for point wiring shall include the wiring from first point (light/switch) and then looping between lights/fans/6A socket outlets etc., Also the rate shall include earthing of each light, fan outlet boxes, switch control boxes, 6A sockets. (switches & sockets shall be of Anchor roma make /equivalent). The rate shall also include cost of civil works involved in fixing of boxes, replastering of walls chased. All the switch / sockets shall have stickers for identification				
a)	Single light point controlled by a 6A SP switch.	Nos	123		
b)	Single light point controlled by 2nos. 2Way 6A SP switch.	Nos	4		
c)	Two light point controlled by a 6A SP switch	Nos	94		
d)	Two light point controlled by 2nos. 2Way 6A SP switch.	Nos	2		
e)	Three light points controlled by a 6A SP switch	Nos	20		
f)	Ceiling fan point controlled by a 6A SP switch and fan regulator. The rate shall include cost of stepped fan regulator, fan hook, switch outlet box etc., all complete as required.	Nos	11		
g)	Exhaust fan point (Single phase) controlled by a 6A SP switch and ceiling rose near the exhaust fan. /Wall Fan	Nos	35		
h)	Supply and wiring for call bell point with 3 x 1.5sqmm PVC insulated copper conductor FRLS wires in 20mm dia FR PVC conduit, including providing bell push with outlet box, inter-connection to the lighting circuit for power supply.	Nos	5		
2.0	LIGHTING WIRING / SUB MAINS :				
	Supply & Drawing power wiring circuit /sub mains using flexible, copper conductor, FRLS wires of 1100V grade, PVC insulated wires drawn in 2mm thick suitable size FR PVC conduit. The rate shall also include running of PVC insulated copper conductor as earth wire. All circuits starting from the respected db should have ferrulling arrangements.				
a)	3 x 1.5 sqmm Copper wires in 20 mm dia PVC conduit	Rmtr.	300		
b)	3 x 2.5 sqmm Copper wires in 20 mm dia PVC conduit	Rmtr.	1042		
3.0	POWER WIRING / SUB MAINS :				
	Supply & Drawing power wiring circuit /sub mains using flexible, copper conductor, FRLS wires of 1100V grade, PVC insulated wires drawn in 2mm thick suitable size FR PVC conduit. The rate shall also include running of PVC insulated copper conductor as earth wire. All circuits starting from the respected db should have ferrulling arrangements.				
a)	3 x 2.5 sqmm Copper wires in 20 mm dia PVC conduit.	Rmtr.	2208		
b)	3 x 4.0 sqmm Copper wires in 20 mm dia PVC conduit.	Rmtr.	1985		
c)	3 x 6.0 sqmm Copper wires in 32 mm dia PVC conduit	Rmtr.	100		
d)	2 x 10.0 sq.mm + 1 x 6.0 sq.mm copper wires in 32mm dia PVC conduit.	Rmtr.	20		
e)	6 x 4.0 sqmm Copper wires in 25 mm dia PVC conduit.	Rmtr.	20		
f)	6 x 6.0 sqmm Copper wires in 32 mm dia PVC conduit	Rmtr.	25		



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g)	4 x 10.0 sq.mm + 2 x 6.0 sq.mm copper wires in 38mm dia PVC conduit.	Rmtr.	50		
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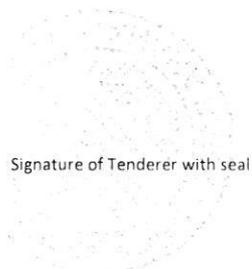
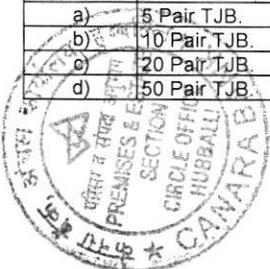


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4.0	POWER RECEPTACLES			
	DOMESTIC TYPE:			
	Supply & fixing of 3/5 pin, commerical combination type socket outlet with indicator mounted on a outlet box with necessary interconnection. The box shall be flush mounted in brick/stone wall. The switches shall be of type Anchor roma make / equivalent. The rate shall also include cost of civil works involved in fixing of boxes, replastering of walls chased. All the switch /			
4.1	RAW POWER SOCKET			
a)	6A socket outlet controlled by 6A SP Switch (Soc.type-1)	Nos.	129	
b)	2 Nos. 6A socket outlet controlled by 2 Nos. 6A SP Switch (Soc.type2)	Nos.	41	
c)	6/16A socket outlet controlled by 1 Nos. 16A SP Switch	Nos.	136	
d)	16A Master switch with indicator	Nos.	2	
e)	16A, socket outlet	Nos.	2	
f)	16A, switch	Nos.	2	
g)	16A, switch with indicator	Nos.	2	
4.2	UPS/ RAW POWER SOCKET			
a)	6A socket outlet controlled by 6A SP Switch with indicator	Nos.	2	
b)	2 Nos. 6A socket outlet controlled by 2 Nos. 6A SP Switch	Nos.	2	
c)	3 Nos. 6A socket outlet controlled by 1 Nos. 16A SP Switch with indicator	Nos.	186	
d)	6/16A socket outlet controlled by 1 Nos. 16A SP Switch with indicator	Nos.	1	
e)	2 Nos. 6/16A socket outlet controlled by 2 Nos. 16A SP Switch with indicator (Soc. Type-5)	Nos.	7	
f)	16A Master switch with indicator	Nos.	37	
g)	16A, socket outlet	Nos.	2	
h)	16A, switch with indicator	Nos.	2	
5.0	INDUSTRIAL SOCKETS :			
5.1	Supply, installation, testing and commissioning following sizes MCB in IP 65 Weather proof enclosure. The rate shall include cost of MCB isolator. The MCB shall be wall mounted using necessary brackets and fixing accessories.			
a)	63A, 4P MCB isolator (D curve)	Set	2	
a)	32A, 4P MCB isolator (D curve)	Set	2	
PART - C TOTAL AMOUNT				
PART - D				
D.	SUPPLY AND INSTALLATION OF LIGHT & FAN FIXTURES			
1.0	Supply, installation, testing and commissioning of following type light and fan fixtures with all necessary fixing accessories as required. The efficacy of the LED lamp shall be not less than 100lm/Watt			
1.1	1 x 20W, 4000K, 4 Feet LED tube, Surface/suspension light fixture of type REGALBATTENT 8UPTO1X22WSSBSWH + CRYSTAL 1213T8DSTL20WLED865SGLASS of similar to Havells make/equivalent.	Nos.	30	
1.2	2 x 20W, 4000K, 4 Feet LED tube, Surface/suspension light fixture of type REGALBATTENT 8UPTO2X22WSSBSWH + CRYSTAL 1213T8DSTL20WLED865SGLASS of similar to Havells make/equivalent.	Nos.	12	
1.3	15W-18W LED Recessed down Lighter of type ENDURANEODLR18WLED830S of similar to Havells make/equivalent.	Nos.	90	
1.4	15W LED surface down Lighter of type INTEGRANEOSURFA CEDLS15WLED857S of similar to Havells make/equivalent.	Nos.	23	
1.5	5W LED Recessed down Lighter of type ORBITDLR5WLED830S of similar to Havells make/equivalent.	Nos.	10	
1.6	42W, 4000K LED, square surface mounted Light fixture (2' x 2') of type PLUTOSURFA PLUTOSURFA CE2X2PLS42WLED857S of similar to havells make/equivalent.	Nos.	2	
1.7	36W, 4000K LED, square Recess mounted Light fixture (2' x 2') of type BZRSQ 36W GZI WH of similar to bajaj make/equivalent.	Nos.	205	



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1.8	Supply and Installation of LED STRIP indoor, 10W / meter including driver and necessary fixing accessories as required	Mts	50		
1.9	Supply and fixing of 1200mm sweep, ceiling fan without fan regulator and shall be of crompton /equivalent.	Nos.	11		
1.10	Supply and fixing of 400mm sweep, WALL fan of crompton /equivalent.	Nos.	27		
1.11	Supply and fixing of 150/225mm dia. single phase. exhaust fan with necessary angle iron bracket.	Nos.	8		
1.12	Supply & fixing of Timer for UPS room Exhaust Fans	Nos.	1		
PART - D TOTAL AMOUNT					
PART - E					
E.	EARTHING SYSTEM				
1.0	Supply & installation of 38mm dia, 2.5 Mtr. long G.I.pipe electrode earthing station complete with manholes, brick masonry chamber, heavy duty CI covers, funnel etc., The cost shall also include providing of salt and charcoal layer by layer, excavation and back filling etc., all complete as required and shall confirm to IS - 3043.	Set	2		
2.0	Supply & installation of 600 x 600 x 3 mm, copper plate earthing station complete with GI pipe, manholes, brick masonary chamber, heavy duty C I covers, funnel, etc., The cost shall also include providing of salt and charcoal layer by layer, excavation and back filling etc., all complete as required and shall confirm to IS - 3043.	Set	4		
3.0	Supply, installation & connecting of G.I.tape /wire being clamped to walls, cable trays, ladders, run in pipes with Sleeves etc , laid underground etc.,as required including interconnection between the earth stations etc.,all complete as required. (Note : The excavation and back filling is measured separately) .				
a)	25 x 6mm G.I. tape	M	60		
b)	25 x 3mm G.I. tape	M	400		
c)	25 x 3 mm Copper tape	M	8		
d)	10swg. Cu. wire	M	200		
e)	8 swg. G.I. wire	M	200		
PART - E TOTAL AMOUNT					
PART - F					
F.	TELEPHONE SYSTEM				
1.0	Supply and laying of 2mm thick FR PVC conduit with all necessary accessories like junction boxes, pull boxes. G.I fish wires and other fixing accessories as required. The rate shall also include chasing of walls, floor and plastering of the chased portion etc; all complete as required.				
a)	20mm dia	M	1500		
2.0	Supply and wiring for telephone outlet with 0.51mm dia, copper conductor, PVC insulated, unarmoured, telephone cable in existing conduit.				
2.1	2 pair	M	3660		
3.0	Supply and wiring of multicore 0.51mm, copper conductor, PVC Insulated, PVC sheathed, armoured telephone cable laid drawn through existing trench/cable tray / wall supports with all necessary accessories as required.				
a)	5 Pair Cable	M	10		
b)	10 Pair Cable	M	60		
c)	20 Pair Cable	M	70		
d)	50 Pair Cable	M	30		
4.0	Supply and installation of clip on plug type telephone outlet with interconnection of the outlet. The cover plate of telephone shall match with the other wiring accessories. (Telephone socket outlet shall be of modular of type Anchor roma / equivalent) .	Nos.	122		
5.0	Supply, installation, testing & commissioning of telephone junction box. The junction box shall be with sheet steel enclosure enclosing krone connector and shall be provided with padlock				
a)	5 Pair TJB.	Nos.	1		
b)	10 Pair TJB.	Nos.	2		
c)	20 Pair TJB.	Nos.	2		
d)	50 Pair TJB.	Nos.	1		



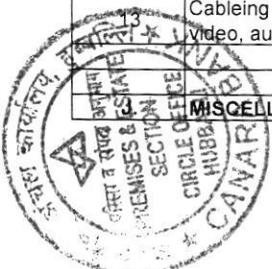
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6.0	Supply, installation, testing and commissioning of Analog table mounted telephone instrument of make Beetel B-11 / equivalent	Nos.	122	
PART - F TOTAL AMOUNT				
PART - G				
G.	DATA SYSTEM			
1.0	Supply and laying of 2mm thick FR PVC conduit with all necessary accessories like junction boxes, pull boxes. G.I fish wires and other fixing accessories as required. The rate shall also include chasing of walls, floor and plastering of the chased portion etc all complete as required.			
a)	25 mm dia	M	4900	
2.0	Supply, installation of Single RJ-45 , CAT -6 information outlet with necessary back mount box and other fixing accessories. (socket outlet shall be of modular of type Dilink / equivalent) .	Nos.	186	
3.0	Supply, drawing and connecting of cat-6, UTP cable in existing conduit for LAN network.	M	5580	
4.0	Supply and connecting of UTP CAT -6E mounting cords			
a)	1 mtr. Patch Cord	Nos.	186	
b)	3 mtr. Patch Cord	Nos.	186	
5.0	Supply, installation , testing & commissioning of patch panel with CAT-6 I/O mounted on existing rack with all necessary fixing accessories. The rate shall include cost of ferrule, numbering, stickering & necessary fixing accessories as required			
a)	24 port jack panel	Nos.	10	
6.0	Supply, installation , testing & commissioning of 600mm width, 500mm depth wall mounted, closed rack with 1 PDU 1 tray1 cable manager and all necessary fixing accessories as required.			
a)	9 U rack	Nos.	1	
b)	12 U rack	Nos.	1	
c)	24 U Rack	Nos.	3	
PART - G TOTAL AMOUNT				
PART - H				
H.	TV SYSTEM			
1.0	Supply and installation of T.V. Co-axial socket outlet with inter connection of the outlet The cover plate of T.V. Co-axial socket outlet shall match with other wiring accessories. (The socket outlet shall be of make Anchor roma /equivalent) The rate shall also include cost of civil works involved in fixing of boxes.	Nos	4	
2.0	Supply & drawing of RG 6 co-axial cable in existing conduit.	M	120	
3.0	Supply and laying of 2mm thick FR PVC conduit with all necessary accessories like junction boxes, pull boxes. G.I fish wires and other fixing accessories as required. The rate shall also include chasing of walls, floor and plastering of the chased portion etc all complete as required.			
a)	25 mm dia	M	100	
PART - H TOTAL AMOUNT				



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PART - I				
I.	PA SYSTEM			
1	Amplifier S & I of Central Music Station comprising of 1No. of 200 Watts Amplifier with CD player and micro phone all interconnected as directed (Philips)/BOASCH	No's	1	
2	Goose Mic	No's	1	
3	Ceiling Speakers 6watts LBD 8353	No's	15	
4	Mixer	No's	1	
5	Player	No's	1	
6	1.5Sqmm Cable	Mtr	450	
TOTAL PART-I				
PART - J				
J	CCTV SYSTEM			
1	Supply and Instalation of AHD Camera IR Bullet / Dome IRB AHD 2.4MP/BW-01/36L/6MM/20 METERS,PREMIUM SERIES - Day & night color mode STARLITE	Nos	12	
2	Supply and Instalation of AHD DVR 16CH - 4U / Recording 720P / Viewing 1080P Supports -> Analog + AHD + IP Camera + TVI(2.0 and further versions) + CVI	Nos	1	
3	Supply and Instalation of HDD 2 TB	Nos	1	
4	Supply and Instalation of of connectors accessories	Nos	30	
5	Supply and Instalation of of Power supply support SMPS	Nos	2	
6	Supply and drawing of 1.5 sq.mm. ATC Twin Core shielded Speaker Cable in PVC conduit	PRM	320	
7	PVC conduit supply and laying	Prm	150	
8	Supply and Instalation of of PVC box for Cameras	Nos	12	
9	S&I of 15" CRT CCTV Monitor 500 TVL	Nos	1	
TOTAL PART-J				
PART - K				
OHP SYSTEM AND TV				
1	Providing and Fixing Pull down screen Screen (100" Diagonal) with black border & tubular motor driving device with less noise and smooth function	No's	1	
2	Providing and Fixing Projector LCD Data projector with 4000 Hrs Lamp Life, integated,RJ45 connector for remote diagonistics (Acer X110 /Epson)	No's	1	
3	Providing and 2 core High performance Professional Speaker/Audio Cable for vedio conference room	Lumpsur	1	
4	Providing and Fixing Speaker 2 x 6" Low Frequency Driver With 1.5" Horn Loaded Compression Driver, Dispersion: 60° x 40°, Crossover: Passive - 1.65 kHz, Active - * LPF - / HPF - 90 Hz, Frequency Response (±3dB) : 80 Hz - 20 kHz, Max. SPL : 134 dB cont, 140 dB peak, Connectors 2 x 4 pole speakON® Connectors, Power 625 Watts @ 4 Ohms	No's	2	
5	Providing and Fixing Wireless Mic Wired Gooseneck Microphone, 18" Attached XLR Preamp, Shock and Flange Mount, Snapfit Foamwind Screen word. Shoure make	Nos	8	
6	Providing and Fixing Single point Video Conference Equipment with camera mic, speakers.	Nos	1	
7	Providing and Fixing Wired Mic with cable Gooseneck Microphone, 18" Attached XLR Preamp, Shock and Flange Mount, Snapfit Foamwind Screen word.	No's	2	
8	Providing and Fixing Amplifier 100 watts Central Amplifier Ahuja /BRITISH ACOUSTICS make, Chairman Unit has Priority Switch, Switchable send/return facility in Central Amplifier and 19" rack mountable	No's	2	
9	Providing and Fixing 1.5Sq mm armoured Cable	Mtr	40	
10	Providing and Fixing QLED Diagonal screen size 65"(Make - Sony /Samsung) as approved by Bank engineer and Architect.	No.	1	
11	Lighting control : 4 channel lighting control module with key pad	no	1	
12	LED tv 42" Samsung/Sony Make with Gibert indoor Connector	nos	1	
	Cableing and Installation : Cables & Connectors as required (VGA video, audio, LAN)	umpsur	1	
TOTAL PART-K				
PART - L				
MISCELLANEOUS WORKS:				



Name of Work: ELECTRICAL AND FIRE ALARM WORKS OF 2ND FLOOR V2 BUILDING, PROPERTY NO. 98/4, AIRPORT ROAD, HUBBALLI-580030

TENDER BILL OF QUANTITIES FOR ELECTRICAL AND FIRE FIGHTING WORKS

1.0	Electrical safety - RUBBER mats of 1.1kV grade 1.8mx.0.9m	Nos	2		
2.0	Supply and fixing : of 1nos First aid kit, Safety chart, Danger boards-2nos , No Admission boards-1nos	set	1		
3.0	Prepare As Build Drawing by Contracor	L.S	1		
TOTAL PART-L:-					
PART -M					
FIRE FIGHTING & ALARMING SYSTEMS					
B	Fire alarm system				
1	Supply, installation, Testing & commissioning (S/I/T/C) of microprocessor based automatic fire alarm panel of6 zone, having provision of fire & fault conditions complete with, battery charger facility complete with LCD display, m switch complete in all respect Zonal floor wise ,	2	No.s		
2	Main control panel as all above necessities req. (System sensor, Agni)	1	No.s		
3	S/I/T/C breaking type typical smoke detector ionization /photo electric type with lcd indicator (System sensor make)	180	No.s		
4	S & I of conventional heat detector , rate of rise cum fixed temp type	4	No.s		
5	S/I/T/C of Manual call Point Type with red LCD & front glass cover with chain hammer Agni / System sensor	8	No.s		
6	S/I/T/C of Electronic Hooter wall mounted type (Agni.system sensor ASE)	8	No.s		
7	S & I of response indicator	35	NOS		
8	Supply & Laying of 1.5MMX2 CORE. Sq. mm copper armouredcable complete with all required fittings & accessories as required (Finolex, Polycab.)	1800	Rmt		
9	S/I/T/C 12 volt battery 7 AH for panel battery backup Exide / Amror	8	No.s		
10	S/I/T/C main facp auto dialer with addressable control module connected to control panel with min. 10 telephone numbers connectivity including cable etc.complete.	1	nos		
Total PART M:-					
ABSTRACT					
PART - A	MV PANELS & DISTRIBUTION BOARDS				
PART - B	LT CABLES AND CABLE END TERMINATION :				
PART - C	WIRING SYSTEM				
PART - D	SUPPLY AND INSTALLATION OF LIGHT & FAN FIXTURES				
PART - E	EARTHING SYSTEM				
PART - F	TELEPHONE SYSTEM				
PART - G	DATA SYSTEM				
PART - H	TV SYSTEM WIRING				
PART - I	PA SYSTEM				
PART -J	CCTV SYSTEM				
PART -K	OHP SYSTEM & TV				
PART - L	MISCELLANEOUS WORKS:				
PART -M	FIRE ALARMING SYSTEMS				
		TOTAL			



