RENOVATION OF SCIENCE COLLEGE KOHIMA BRANCH

BOQ FOR ELECTRICAL AND AIR CONDITIONING INSTALLATION WORKS

SL No	DESCRIPTION	UOM	QTY	Rate (Rs.) (Exclusive of GST on work contract)	Amount (Rs.) (Exclusive of GST on work contract)
1	**a. Main Panel** :- Supplying, Installing, testing and commissioning of factory fabricated 2MM thick CRCA, floor mounted cubicle type distriction Panel Board with 150 MM X 75 MM X 6MM ISMC base channel, suitalbe for 415 V TPN comprising of 300A **suitable double copper bus** bars with color codded heat shrink insulation with the followings: 200, 4P MCCB, 35 kA with adjustable overload, short circuit, groud fault, as incommer, R-Y-B LED indicating lamps, Digital multifunction meter of minimum size 150 MM X 150 MM to measure Voltage, Current, PF etc with all excessories Outgoing: 63 A 4P MCCB, 35kA for AC -1 Nos, 63 Amp 4P MCCB, 35kA for UPS - 1Nos, 63 Amp 4P MCCB, Capacitor Panel & Light DB's - 2 No, 63 Amp 4P MCCB, 35 kA for Spare -1 Nos. All MCCBs are should be thermally and magnitically adjustable only. All outgoing must be in compartmentalized chamber fully isolated with 2 mm thick CRCA and 3 mm steel channel painted with 2 coats of red oxide primer paint followed by finishing paint with interconnection etc. as required.	Set	1		
	b. Capacitor Panel: Supply and installation of 10 KVAR APFC panel, floor/wall mounted front operated totally enclosed vermin proof, indoor non-drawout-cubicle type power panel fabricated out of 16 SWG thick CRCA sheet having gasketed hinged cover on each cubicle fully powder coated with suitable bus bar for connecting the contactors, MCB's, Capacitors, etc with the following acessories A set of R-Y-B LED indicating lamp at incomer 40 A, TPN MCB, as incomer - 1No 1 Nos. 32A 3P contactor for 5 KVAR, 2 Nos, 25A, 3P contactor for 2 KVAR and 1 No, 16A, 3P contactor for 1 KVAR 1 Nos. 5 KVAR, 2 Nos. 2 KVAR and 1 No. 1 KVAR. 1 no. 6-step APFC relay of minimum size 150 MM X 150 MM suitable for above arrangement ON/OFF push button for each capacitor ON/OFF LED type indication lamp for each capacitor		1		
2	Supply ,installation ,testing and commissioning of distribution board manufactures made sheet steel enclosure With the following MCBs (DB,MCB and MCCB Make- Legrands/ Havells/ L&T/ SIEMENS or equivalent) and connecting the same to the system.				
i)	Computer/Raw power DB, 8-way, SPN double door with 40A (30mA)DP RCCB as incomer & 6 nos 10A SP MCB as outgoing.	No.s	2		
ii)	DB with 40A DP MCB.	No.s	4		
iii)	DB with 16A DP MCB.(Security light, signboard and fire)	No.s	3		
iv)	63amp 4P isolator with encloser (Isolator at Exit Gate)(Light DB/ Power)	No.s	1		
v)	4-way, TPN Double Door Distribution Board with 63 A 4 Pole MCB as incomer 12 Nos. 40 A SP MCB's at outgoing (UPS)	Set	1		
vi)	4-way, VTPN Double Door Distribution Board with 63A 4 Pole MCCB (36kA) as incomer and 12 nos of 32 A SP MCB.	Set	1		
vii)	Light DB, 8-way, SPN double door with 40A (30mA)DP RCCB as incomer & 6 nos 10A SP MCB as outgoing.	No.s	2		
VIII)	63A 4P Onload chnageover with enclosure.	No.s	1		
ix)	DB with 32A DP RCCB.	No.s	1		
x)	DB with 40A DP MCB changeover	No.s	1		

3	Supplying, installing and commissioning of PVC Armored cable complete with proper cable glands and two nos. of 8SWG GI wire (Havell's/Richa/RR kebel/KEI or equivalent) alongwith all the other materials required including proper connection in complete as required from main Panel,Power Distribution Board to various DBs .				
i)	With 3.5 core x 25 sq. mm cable for (UPS & Light VTPN)	RM	60		
ii)	With 3.5 core x 50 sq. mm cable(main cable)	RM	40		
4	Supply, installing and commissioning of earth station including digging and refilling back the pit with black soil and with 3.15mm, 300x300mm size copper plate duly tinned through out the surface of the plate, placed at least 2 Mtr,below the ground level with 2 nos 25x3 mm copper strip, 40 mm GI pipe fixed to the plate and providing 40mm,2mtr,long GI pipe with reducer and funnel at top for watering pipe with supplying and laying earth continuity wire of in heavy duty 2 nos 25x3 mm on the wall from earth plate to starting point of the line earth connector with proper earth pit with brick and motar. **(Picture of eathing plate inside the pit for all the earthing)**	Nos.	4		
	i) Supplying and fixing 25x3 mm copper strip, insulated by heat pressurized heavy gauge PVC sleeve, duly jointed by full lap brazing and drawn underground in 40 mm class B GI pipe from the inspection pit to the inside of the branch premises.(earthing pit to main panel)	RM	30		
	ii)Supplying and fixing 2X8 SWG dia copper earth wire in PVC conduit on surface or in recess for loop earthing from panel to DB	RM	120		
5	Computer/Raw Power point wiring in MS conduit of IS specification of proper size with 3nos 2.5sq.mm single core PVC insulated stranded copper wire 1.1KV grade(Finolex/Havells/Polycab/ RR Kabel/ Richa/KEI or equivalent) and with all material supply installation and commissioning complete from /PDB(Raw) .The wiring shall be carried out on surface above false ceiling by chiseling the existing surface and plastering the same with cement etc. after fixing the MS conduit with all accessories like saddles screws, bends T-joint etc. 2 coats of painting Matching to the surface including supply installing, testing, commissioning of modular plate type switch and socket (Legrands / MK or equivalent) for computer terminal on sheet steel enclosure (cadmium plated),duly fitted with screw to the steel conduit and fixed to the wall partition furniture with all interconnection and proper earthing .All the opening shall be covered with blank plate and be sealed to make the box vermin proof.B48(maximum three points in single circuit)				
i)	With 3nos 6A socket with single 16A switch.	No.s	12		
ii)	With 2nos 16A socket with individual switch.	No.s	9		
iii)	With 1nos 16A socket with individual switch.	No.s	3		
6	Supply & Fixing of 15Watt commercial down lights of **system efficacy >100lm/W**. The light should be recessed mounted slim circular type LED panel with **die-cast aluminium housing** and smooth powder coated finish with anti glare UV stabilized diffuser and separate energy efficient electronic driver having inbuilt surge protection upto 2.5kV. (Make - as in tender make list)	Nos	32		
7	Supply, installation testing and commissioning of surface mounted circular LED downlighter with 15W LED lamp. Make :- Bajaj/Havels/Phillips/Wipro /Crompton or equivalent. (Make - as in tender make list)(Cash room & record room)	Nos	8		

8	Supply and fixing of 2'x2' LED commercial Luminaire of 36 Watt with **system efficacy of 110lm/W.** The light should be recessed mounted type and low depth with CRCA poweder coated housing, high transmittance diffuser for sysmmetric light distribution with non-integral enegy efficient isolated electronic driver and inbuilt surge protection upto 3kV. (Make - as in tender make list)	Nos	28		
9	Supply and fixing of LED commercial batten Single Tube light fittings with 20W with glare free light distribution wall mounted at ceiling/false ceiling level/. (Make - as in tender make list)	Nos	8		
10	Supply and installation of Wall Mounted fan 450 mm full Metallic body and metallic Blade, 1400 rpm crompton/ bajaj/ usha/ orient make	No.s	6		
11	Supply and installation of 5 star BLD Ceiling fan 1200 mm crompton/ bajaj/ usha/ havells make (Make - as in tender make list)	No.s	2		
12	Supply and installation of heavy duty Exhaust Fan 300 mm crompton/ bajaj/ usha/ havells make	No.s	4		
13	Supplying, installation,testing & commissioning of Security ligh with 25W LED lamps with pressure die cast housing with epoxy coated dark graphite grey colour finish and prismatic polycarbonates cover with individual LED lenses, including necessary GI bracket with clamp. Make :- Bajaj/ Havels/ Phillips/ Wipro/ Crompton or equivalent	Nos.	5		
14	Supply and installation of 5 Meter roll 55W, IP20 Flexible LED Strip surface mounted alongwith required LED Driver as back lighting. Havells or equivalent make.	No.s	5		
15	Wiring for light/fan/exhaust fan points using 3 X 1.5 1.1 kV grade PVC insulated stranded copper conductor wire (Finolex/ Havell's/ Richa/ RR kebel/ KEI or equivalent) for phase, neutral and earth in 25 mm dia heavy duty MS conduit along with associated accessories like MS junction boxes, bends, saddles, screws et. concealed in wall, floor, under flooring, below false ceiling or on surface as well as suspended from ceiling with 25mm X 3 mm MS flat suspenders duly painted above false ceiling from individual light/Fan/Exhaust Fan point outlet. etc. to individual modular type switch boards, 10 Amp modular plate type switches etc.(MK/Legrands/Havel's or equivalent), as required complete including circuit wiring with 3 X 2.5 sqmm. 1.1 kV grade PVC insulated stranded copper conductor wire and as per site requirement and as instructed by SBI Engineer.				
i)	Light/fan point (Two downlighter/ 2"X 2" rececced light fittings to be connected through one point)	No.s	45		
ii)	Light/fan point (four downlighter/ two 2"X 2" rececced light fittings to be connected through one point)		15		
iii)	6A socket & switch at same board	No.s	7		
iv)	Fan Point with electronic modular type regulator.	No.s	2		
v)	16A, 5 pin plug & Socket with 25 A MCB protected (for Safe room & Record room) with **3 meter 3 core 6 sqmm armour copper cable**	Nos.	2		
vi)	Modular type with 6A SP MCB at switch board and 6A socket near wall fan.	No.s	6		
vii)	Modular type with 6A SP MCB at switch board and ceiling rose for Exhaust	No.s	4		
vii)	Electronic Timer for alternate operation of Exhaust Fan at UPS Room	No.s	1		
	Sub Total-A				
	LAN NETWORK				
16	Supply, Installation, commissioning & Testing dual port of LAN I/O box (CAT 6)	No.s	8		
17	Supply of CAT-6 LAN cable(4 pair) (305 Meter per box)	No.s	1		
18	Supply, installation & Testing of company Made CAT 6 Patch cord with RJ 45(Company make)				

i)	1 Meter length	No.s	24		
ii)	2 Meter length	No.s	16		
19	Laying, instllation & testing of LAN cable in PVC conduit from switch to each node.	RM	260		
20	Supply, Installation & Testing CAT-6 patch panel of 24 Port	No.s	1		
21	supply and installation of wall mounting server 12 U steel rack	No.s	1		
22	Preparation of LAN Diagram and Electrical Single Line Diagram of Branch as per work execution as per Bank's format (**Hand drawn not acceptable**) of Branch to be submitted alongwith bill(Mandatory).	lot	1		
	Sub Total-B				
	AIR CONDITIONING WORK				
1	Supply Installation testing and Commissioning of 1.5 TR Capacity Hi Wall mounting 5-star rated Inverter Split AC(2026 model) with cordless remote and Copper Condensor Coil. AC Make, Voltas/Bluestar /Carrier/Daikin /LG/Godrej(INCLUDING 3 M COPPER PIPES)(refrigerant (R32 or R 410A) **with outdoor stand to withstand the out door unit)**	Nos.	1		
2	Supply and Installation of 5 KVA Stabilizer for 2.0 TR Split type Acs(voltage range 120V to 270V)	Nos.	1		
	Sub Total-B				
	Total (A+B+C)				

GST on work contract will be extra as applicable.