

**ANCHOR INSTITUTE OF SOLAR ENERGY**

**GUJARAT POWER ENGINEERING & RESEARCH INSTITUTE**

**TENDER BOQ**

Sr No	Particular	Qty	Units	Rate (IN INR)	GST (IN INR)	Rate after GST (IN INR)	Amount (IN INR)
<b>1</b>	<b>A. ELECTRIC WORKS</b>						
<b>1</b>	<b>INTERNAL ELECTRIC SUPPLY</b> M & L for point wiring using IS: 694- 1990 marked, FIA/TAC approved, 1.1 kV grade single core FR-LHS flexible cable having multi-drawn thin strands of electrolytic copper conductors and insulation conforming to IS: 5831- 1984, type A/D, FR-LSH 70° C for phase & neutral and FIA/TAC approved, 1.1 kV grade single core FR-LHS flexible cable having multi-drawn thin strands of electrolytic copper conductors and insulation conforming to IS: 5831- 1984, type A/D, FR-LSH 70° C as earth continuity conductor connecting to earth dolly, drawn in surface/recessed medium grade UPVC conduits, conforming to IS: 9537 Part- 3, of appropriate size, colour-coded as specified in IS: 732- 1989 all as specified and directed.						
<b>1.1</b>	One light point or one fan point controlled by one switch with cables 1.5 sq mm size	109.00	Each				
<b>1.2</b>	One 6 A socket outlet, independent, with cables 1.5 sq mm size (Make:- RR Kable, POLYCAB, HAVELLS)	91.00	Each				
<b>1.3</b>	One 16 A socket outlet, independent, with cables 2.5 sq mm size (Make:- RR Kable, POLYCAB, HAVELLS)	55.00	Each				
<b>2</b>	S & F modular type 6 A one-way SP switch, conforming to IS: 3854- 1997 with finger proof terminal [Make: Legrand 6730 00 or equivalent]	200.00	Each				
<b>3</b>	S & F modular type 2/3 pin combined 6 A socket conforming to IS: 1293-1988 [Make: Legrand 6730 45 or equivalent]	91.00	Each				
<b>4</b>	S & F modular type 16 A one-way SP switch, conforming to IS: 3854- 1997 with finger proof terminal[Make: Legrand 6730 08 or equivalent]	55.00	Each				
<b>5</b>	S & F modular type 5 pin combined 6/16 A socket conforming to IS: 1293-1988 [Make: Legrand 6730 44 or equivalent]	55.00	Each				
<b>6</b>	S & F 415 V, 32 A, 3P + N + E combined unit with interlocked switched sockets and surface mounting box IP 66 with DIN rail. [Make: Legrand 0566 74 or equivalent]	19.00	Each				
<b>7</b>	S & F modular type hum-free step fan regular, conforming to IS: 11037-1984 [Make: Legrand 6730 77 or equivalent]	35.00	Each				

8	M & L for ceiling rose, 3-Ph/ PVC / polycarbonate, isolated body	109.00	Each				
9	S & F factory made sunken, galvanized, not less than 2.00 mm thick modular flush sheet metal enclosure having top, bottom, side and back wall knockout for conduit entry from any direction, conforming to IS: 14772- 2000 all as specified and directed.						
9.01	1 module [Make: Legrand 6890 07 or equivalent]	6.00	Each				
9.02	3 module [Make: Legrand 6890 08 or equivalent]	80.00	Each				
9.03	4 module [Make: Legrand 6890 09 or equivalent]	3.00	Each				
9.04	6 module [Make: Legrand 6890 10 or equivalent]	1.00	Each				
9.05	8 module [Make: Legrand 6890 31 or equivalent]	33.00	Each				
9.06	12 module [Make: Legrand 6890 11 or equivalent]	2.00	Each				
9.07	18 module [Make: Legrand 6890 12 or equivalent]	6.00	Each				
10	S & F factory made screwless, dust proof cover plates having superior finish, rounded corners, and solid strength supported by plastic frame behind with flexible wall alignment, horizontal adjustment facility all as specified and directed.						
10.01	1 module [Make: Legrand 6732 11 or equivalent]	6.00	Each				
10.02	3 module [Make: Legrand 6732 13 or equivalent]	80.00	Each				
10.03	4 module [Make: Legrand 6732 14 or equivalent]	3.00	Each				
10.04	6 module [Make: Legrand 6732 66 or equivalent]	1.00	Each				
10.05	8 module [Make: Legrand 6732 68 or equivalent]	33.00	Each				
10.06	12 module [Make: Legrand 6732 62 or equivalent]	2.00	Each				
10.07	18 module [Make: Legrand 6732 58 or equivalent]	6.00	Each				
11	S & F 42 W recessed mounted or suspended 4' X 1' LED Panel having extruded aluminium housing with PC diffuser and integrated electronic driver with high efficiency long life LED chips with a beam angle of 120° to ensure better lumen output, CRI ≥ 80, power factor ≥ 0.95, CCT 6500K, system luminous efficacy ≥ 80, 3 kV surge protection, operating voltage 220- 240 V, operating temperature -10° C to 45° C including electrical connection with 3 core flexible Cu conductor cable of appropriate size from ceiling rose to the fixture all as specified and directed. [Make: Jaquar LSVR03S042XC or equivalent]	20.00	Each				

12	S & F 20 W recessed mounted 1' X 1' LED Panel having extruded aluminium housing with PC diffuser and integrated electronic driver with high efficiency long life LED chips with a beam angle of 120° to ensure better lumen output, CRI ≥ 80, power factor ≥ 0.95, CCT 6000K, system luminous efficacy ≥ 75, 2.5 kV surge protection, operating voltage 220- 240 V, operating temperature -10° C to 45° C including electrical connection with 3 core flexible Cu conductor cable of appropriate size from ceiling rose to the fixture all as specified and directed. [Make: Jaquar LSVR01S020XC or equivalent]	34.00	Each				
13	S & F 90 W suspended triangle shaped pendent LED light having extruded aluminium housing with PC diffuser and integrated electronic driver with high efficiency long life LED chips with a beam angle of 120° to ensure better lumen output, CRI ≥ 80, power factor ≥ 0.95, CCT 6000K, system luminous efficacy ≥ 90, 2.5 kV surge protection, operating voltage 220- 240 V, operating temperature -10° C to 45° C including electrical connection with 3 core flexible Cu conductor cable of appropriate size from ceiling rose to the fixture all as specified and directed. [Make: Jaquar LTRS02T090XC or equivalent]	1.00	Each				
14	S & F 9 W recessed mounted LED light having die cast aluminium housing with PC diffuser and integrated electronic driver with high efficiency long life LED chips with a beam angle of 120° to ensure better lumen output, CRI ≥ 80, power factor ≥ 0.9, CCT 6500K, system luminous efficacy ≥ 75, 2.5 kV surge protection, operating voltage 220- 240 V, operating temperature -10° C to 45° C including electrical connection with 3 core flexible Cu conductor cable of appropriate size from ceiling rose to the fixture all as specified and directed. [Make: Jaquar LARV01R009XC or equivalent]	3.00	Each				
15	S & F 15 W recessed mounted COB based LED multiple zoom light with anodized reflector and tempered transparent glass diffuser and integrated electronic driver, die cast aluminium housing with CRCA frame, high efficiency long life LED chips with a beam angle of 120° to ensure better lumen output, CRI ≥ 80, power factor ≥ 0.9, CCT 6500K, system luminous efficacy ≥ 75, 2.5 kV surge protection, operating voltage 220- 240 V, operating temperature -10° C to 45° C including electrical connection with 3 core flexible Cu conductor cable of appropriate size from ceiling rose to the fixture all as specified and directed. [Make: Jaquar LZOMMLR115XC or equivalent]	16.00	Each				

16	S & F energy efficient high-speed ceiling fan, having 1200 mm blade sweep, speed not less than 350 RPM, air-flow not less than 230 CMM, operating voltage 220-240 V and frequency 50 Hz, including a download of suitable size and electrical connection with 3 core flexible Cu conductor cable of appropriate size from ceiling rose to the fan. [Make: Havells ES 40 or equivalent]	35.00	Each				
17	Supply, installation, commissioning and testing of L+P DB of suitable size, factory made, CPRI type tested, indoor, cubical compartmental type, double door, both side openable with hinged doors & locking arrangement, made out of 2.00 mm thick mild steel CRCA sheet, supported and fixed on structural frame of angle iron of suitable size, including earthing stud, labeling, painting to all internal & external exposed steel surfaces with powder coating paint (7 tank process), duly mounted on wall with danger notice plate of 1.6 mm thick mild steel sheet, vitreous enameled (white) with letters figures and conventional skull and bones in signal red colour, suitable for 3-Phase 4 Wire system, 500 V grade with necessary wiring, PVC sheathed stranded copper conductor of appropriate length size, including fixing lugs bolts, screws etc. complete all as specified and directed.	1.00	Each				
	The panel shall comprise of the following accessories:						
	<b>Busbar Chamber:</b>						
	[i] Copper busbar of rated capacity 250 A, covered with PVC insulated sleeves including insulator, nuts, bolts, etc. with complete connection- 01 Set (3P + N)						
	<b>Incoming:</b>						
	[i] 125 A, 415 V, Ics = Icu = 25 kA, 50 Hz MCCB with fixed magnetic settings and adjustable thermal setting (0.7 - 1 X In) TMD trip unit- 01 Nos.						
	[ii] LED phase indicators (Yellow, Blue, Red)- 01 Set						
	[iii] Digital voltmeter 0-500 V with selector switch flush mounting square type- 01 Nos.						
	[iv] Digital ammeter 0- 125 A with selector switch flush mounting square type with suitable CTs - 01 Nos.						
	[v] Energy meter conforming to IEC 61557- 12 of accuracy class Cl0.2S, having 2 ethernet + 1 RS485 port, 4th CT for neutral and ground current measurement, time stamping D/T for current and powers battery backed up real time clock						
	<b>Outgoing:</b>						
	[i] 63 A, 415 V, 10 kA, 50 Hz FP MCB (C-curve) - 04 Nos.						
	[ii] 32 A, 230 V, 10 kA, 50 Hz SPN MCB (C-curve) - 03 Nos.						

18	Supply, installation, commissioning and testing of AC DB of suitable size, factory made, CPRI type tested, outdoor, cubical compartmental type, double door, both side openable with hinged doors & locking arrangement, made out of 3.15 mm thick mild steel CRCA sheet, supported and fixed on structural frame of angle iron of suitable size, including earthing stud, labeling, painting to all internal & external exposed steel surfaces with powder coating paint (7 tank process), duly fixed in ground with PCC foundation (1:2:4) type B1, with danger notice plate of 1.6 mm thick mild steel sheet, vitreous enameled (white) with letters figures and conventional skull and bones in signal red colour, suitable for 3- Phase 4 Wire system, 500 V grade with necessary wiring, PVC sheathed stranded copper conductor of appropriate length size, including fixing lugs bolts, screws etc. complete all as specified and directed.	1	Each				
	The panel shall comprise of the following accessories:						
	<b>Busbar Chamber:</b>						
	[i] Copper busbar of rated capacity 250 A, covered with PVC insulated sleeves including insulator, nuts, bolts, etc. with complete connection- 01 Set (3P + N)						
	<b>Incoming:</b>						
	[i] 125 A, 415 V, Ics = Icu = 25 kA, 50 Hz MCCB with fixed magnetic settings and adjustable thermal setting (0.7 - 1 X In) TMD trip unit- 01 Nos.						
	[ii] LED phase indicators (Yellow, Blue, Red)- 01 Set						
	[iii] Digital voltmeter 0-500 V with selector switch flush mounting square type- 01 Nos.						
	[iv] Digital ammeter 0- 125 A with selector switch flush mounting square type with suitable CTs - 01 Nos.						
	[v] Energy meter conforming to IEC 61557- 12 of accuracy class Cl0.2S, having 2 ethernet + 1 RS485 port, 4th CT for neutral and ground current measurement, time stamping D/T for current and powers battery backed up real time clock						
	<b>Outgoing:</b>						
	[i] 63 A, 415 V, 10 kA, 50 Hz FP MCB (C-curve) - 03 Nos.						

19	Supply, installation, commissioning and testing of PDB of suitable size, factory made, CPRI type tested, indoor, cubical compartmental type, double door, both side openable with hinged doors & locking arrangement, made out of 2.00 mm thick mild steel CRCA sheet, supported and fixed on structural frame of angle iron of suitable size, including earthing stud, labeling, painting to all internal & external exposed steel surfaces with powder coating paint (7 tank process), duly mounted on wall with danger notice plate of 1.6 mm thick mild steel sheet, vitreous enameled (white) with letters figures and conventional skull and bones in signal red colour, suitable for 3-Phase 4 Wire system, 500 V grade with necessary wiring, PVC sheathed stranded copper conductor of appropriate length size, including fixing lugs bolts, screws etc. complete all as specified and directed.	3	Each				
	The panel shall comprise of the following accessories:						
	<b>Busbar Chamber:</b>						
	[i] Copper busbar of rated capacity 100 A, covered with PVC insulated sleeves including insulator, nuts, bolts, etc. with complete connection- 01 Set (3P + N)						
	<b>Incoming:</b>						
	[i] 63 A, 415 V, Ics = Icu = 16 kA, 50 Hz MCCB with fixed magnetic settings and adjustable thermal setting (0.7 - 1 X In) TMD trip unit- 01 Nos.						
	[ii] LED phase indicators (Yellow, Blue, Red)- 01 Set						
	[iii] Digital voltmeter 0-500 V with selector switch flush mounting square type- 01 Nos.						
	[iv] Digital ammeter 0- 63 A with selector switch flush mounting square type with suitable CTs - 01 Nos.						
	[v] Energy meter conforming to IEC 61557- 12 of accuracy class Cl0.2S, having 2 ethernet + 1 RS485 port, 4th CT for neutral and ground current measurement, time stamping D/T for current and powers battery backed up real time clock						
	<b>Outgoing:</b>						
	[i] 32 A, 415 V, 10 kA, 50 Hz FP MCB (C-curve) - 07 Nos.						
20	S & F 4 Pole changeover switch in SS enclosure for 63 A, 415 V, 50 Hz AC complete as specified and directed.	1	Each				
21	S & F vertical triple pole & neutral DB suitable for flush mounting & surface mounting with 250 A insulated & shrouded copper busbar for each phase, 2 fully insulated & shrouded neutral bar, 2 earth bar, wire set and cable ties for cable management, IP 54 & IK 09 protection with reversible metal door with provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP/TP MCBs as outgoing. (Make: LEGRAND or Equivalent)						

	VTPN DB, 4-way	1	Each				
22	S & F single pole & neutral DB suitable for flush mounting & surface mounting with 100 A insulated & shrouded copper busbar, fully insulated & shrouded neutral bar, earth bar, wire set and cable ties for cable management, IP 54 & IK 09 protection with reversible metal door with provision for DP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing. (Make: LEGRAND or Equivalent)						
	SPN DB, 8-way	3	Each				
23	S & F ISI marked MCB for AC applications till 63 A, having breaking capacity Icn = 10 kA, conforming to IS/IEC 60898-1-2002, sliding bottom clamp, colour coded on/off indication on dolly, biconnect IP 20 protected lower terminals and sliding shutters						
23.01	6- 32 A, SP MCB C- curve [Make: Legrand or equivalent]	36.00	Each				
23.02	6- 32 A, SPN MCB C- curve [Make: Legrand or equivalent]	3.00	Each				
23.03	40- 63 A, FP MCB C- curve [Make: Legrand or equivalent]	1.00	Each				
24	M & L for submain wiring using IS: 694- 1990 marked 1.1 kV grade single core HR-FR flexible cable having multi-drawn thin strands of electrolytic copper conductors and insulation for phase & neutral and earth continuity conductor connecting to earth dolly, drawn in medium grade non-metallic PVC conduit not less than 25 mm dia., colour-coded and making good of disturbed surfaces of wall/ceiling/floor complete all as specified and directed. [NOTE: Phase & neutral conductor, earth continuity conductor and concealed conduit shall be measured as one length.] ( RR Kable or Equivalent)						
24.01	2 X 6 SQ MM + 1 X 6 SQ MM	100.00	RM				
24.02	3 X 6 SQ MM + 2 X 6 SQ MM	350.00	RM				
24.03	3 X 10 SQ MM + 2 X 10 SQ MM	120.00	RM				
24.04	3 X 16 SQ MM + 2 X 16 SQ MM	50.00	RM				
25	M & L for IS 694 marked, stranded aluminium conductor (as per IS: 8130), XLPE insulated, extruded PVC type ST-2 (as per IS: 5831) sheathed, single layer of galvanized steel flat strip armoured cable of 1.1 kV grade, conforming to IS: 7098 (Part-2), including cable termination and cable glanding of following size all as specified and directed. ( Make : RR Kable or Equivalent)						
25.01	3.5 core, 70 SQ MM	100.00	RM				
25.02	3.5 core, 50 SQ MM	50.00	RM				
25.03	3.5 core, 35 SQ MM	50.00	RM				
<b>TOTAL AMOUNT FOR ELECTRIC WORKS (A):-</b>							

2		B. UPS					
1	Supply, installation, testing and commissioning of 20 kVA 3-Ph input & 3-Ph output DSP based double conversion online UPS with true galvanic isolation with required SMF batteries with racking and interconnecting link of following specifications as specified and directed. [Make: Sukam or equivalent]	1	Job				
	<b>[i] Input:</b>						
	No. of Phases: 3- Ph, 4- Wire						
	Voltage Range: 310 V- 480 V AC						
	Frequency Range: 47 Hz- 53 Hz						
	<b>[ii] Output:</b>						
	Power: 16 kW						
	Load PF range: 0.8 lagging						
	No. of Phases: 3- Ph, 4- Wire						
	Output Waveform: Pure Sine Wave						
	Voltage Range: 415 V $\pm$ 2% (P-P)						
	Frequency Range: 50 Hz $\pm$ 0.1 Hz						
	Load Crest Factor: > 3:1						
	Output Voltage THD: $\leq$ 3% on linear load						
	Loading Capacity: 110% for 8 minutes / 125% for 1 minute / 150% for 13 s						
	<b>[iii] Bypass:</b>						
	Capacity: 125% continuous						
	Maintenance Bypass: Available						
	<b>[iv] Batteries:</b>						
	No. of 12 V batteries: 30						
	Voltage: 360 V DC						
	Battery Charging Current: 10 A						
	Battery Recommendation: 42 Ah						
	Battery Self Test: Automatic & Manual						
	<b>[v] User Interface:</b>						
	Communication Port: RS-232 server & client						
	Operating System: Windows 95/98/NT/2000/XP						
	<b>[vi] General:</b>						
	Indication: LCD panel						
	Alarm: Mains Failure, Battery Low, Overload, Short Circuit						
	Protection: Short Circuit, Over Voltage & Under Voltage Protection						
	Cooling: Forced Air Cooling						
	UPS Efficiency: > 90%						
	Operating Temperature: 0° C to 45° C						
	Operating Humidity: 95% condensing						
	Acoustic Noise: < 45 dB at 1 m						
	Protection Class: IP 20						
<b>TOTAL AMOUNT FOR UPS WORKS (B):-</b>							



3	C. CCTV					
1	Supply, installation, testing and commissioning of CCTV camera along with storage LAN connection and other accessories required for working of CCTV surveillance system as specified and directed. ( Make: Cannon, Godhrej)					
1.01	IP based dome camera having 2.0 mega pixel (2048 X 1536) resolution or above, bit rate up to 16 mbps, true day/night clear vision, full HD1080p real time video- DWDR & 3D DNR & BLC, EXIR illumination up to 50 m.	10.00	Each			
1.02	16 channel IP camera NVR having following specifications:	1.00	Each			
	[i] General:					
	Main Processor: high performance dual core embedded microprocessor					
	Operating System: embedded LINUX					
	System Resources: pentaplex function: live, recording, playback, backup & remote access					
	Control Mode: front panel, USB mouse, IT remote control, keyboard, network					
	[ii] Video & Audio:					
	IP Camera Input: 16 channel					
	Video Output: 1 HDMI (video & audio), 1 VGA					
	Voice Intercom: 1 Channel Input, BNC, (200-2800 mV, 30 kΩ), 1 channel output, (200- 3000 mV, 05 kΩ)					
	[iii] Display:					
	Display Split: 1/4/8/9/16					
	Resolution: 1920 X 1080, 1280 X 1024, 1280 X 720, 1024 X 768					
	Tour Display: support					
	Privacy Masking: 4 self- defined four- sided zones for privacy masking for each camera					
	OSD: camera title, time, video loss, camera lock, motion detection, recording					
	[iv] Recording:					
	Compression: H.264/MPEG4					
	Recording & Resolution: 1080P (1920 X 1080) / 720P (1280 X 720) / D1 (704 X 576 / 704 X 480)					
	Recording Speed: up to 400/480 fps at (704 X 576 / 704 X 480), up to 200/480 fps at 720P, up to 100/240 fps at 1080P					
	Recording bit-rate: up to 32 mbps					
	Recording Quality: CBR, VBR					
	Recording Mode: manual, schedule (regular (continuous), MD (video detection, camera blank, video loss), alarm), stop					
	Recording Priority: Manual > Alarm > MD > Regular					

	Recording Interval: 1- 120 minute (default: 60 minute)						
	[v] Video Detection & Alarm:						
	Trigger Events: recording, PTZ movement, tour, alarm, email, FTP, buzzer & screen tips						
	Motion Detection: Zones: 396(22 X 18), Sensitivity: 1- 6 (level 6 is the highest)						
	Video Loss & Camera Blank: Support						
	Alarm Input: 16 channel						
	Relay Output: 6 channel						
	[vi] Playback & Stop						
	Playback Channel: 1/2/4/All						
	Search Mode: time/date, alarm, MD & exact search (accurate to second)						
	Playback Function: Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup, Digital Zoom						
	Backup Mode: flash drive/ USB HDD, USB CD & DVD / eSATA / built-in SATA burner / network DL						
	[vii] Network:						
	Ethernet: 2 X RJ 45 port (10 / 100M / 1000M)						
	Network Function: HTTP, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, IP, FILTER, PPPOE, DDNS, FTP, ALARM SERVER, IP SEARCH						
	Maximum Remote Users: 20 users simultaneously						
	Remote Operation: monitor, PTZ control, playback, system setting, file download, log information						
	[viii] Hard Disk Drive						
	Hard Disk: 8 SATA ports. 8 HDDs or 6 HDDs + 1 CD/DVD RW, up to 24 TB						
	eSATA: 4 external SATA ports, up to 12 TB						
	Space Occupation: maximum 3.6 GB/hr per channel						
	HDD management: HDD group, HDD hibernation technology, HDD faulty alarm & raid (redundancy)						
	[ix] Auxiliary Interface:						
	USB interface: 3 ports for mouse control & backup						
	RS232: keyboard, PC communication						
	RS485: PTZ control						
1.03	Monitoring screen for 16 channels (minimum 40" LED)	1.00	Each				
<b>TOTAL AMOUNT FOR CCTV WORKS (C):-</b>							

4		D. NETWORKING					
1	Supply, installation, testing and commissioning of local area networking (LAN) as specified and directed.						
1.01	Managed layer 3 switch with 48 ports of 10/100/1000 mbps with 4 additional 1 gbps SFP uplinks and future upgradable to SFP+ and stacking features	1.00	Each				
1.02	12U wall-mounted rack with accessories (cable manager- 02 Nos., PDU- 05 Nos., 6 A socket- 01 Nos., mounting hardware), 2 fans top-mounted	1.00	Each				
1.03	48 port CAT 6 patch panel	1.00	Each				
1.04	CAT 6 STP 1 m patch cord	48.00	Each				
1.05	CAT 6 STP cable	2500.00	RM				
1.06	Modular type 2 module RJ 45 socket	31.00	Each				
1.07	CAT 6 STP 2 m patch cord	31.00	Each				
2	Supply, installation, testing and commissioning of LCD projector with wireless & wired network functions and 16: 10 projector screen of size 90 type (inch), 2.3 m as specified and directed. [Make: Hitachi, Sony, EPSON]	4.00	Each				
	[i] Liquid Crystal Panel: 0.63 type (inch), 1.6 cm polysilicon active-matrix TFT X 3						
	[ii] No. of Pixels: 786432 pixels (H1024 X V768)						
	[iii] Resolution: 1024 X 768 colour pixels (XGA)						
	[iv] Manual Zoom: x1.2						
	[v] Lamp: 210 W UHP						
	[vi] Light output (Brightness): 4000 lumens						
	[vii] Contrast Ratio: 3000: 1 (presentation mode)						
	[viii] Audio: 16 W (mono 8 W X 2)						
	[ix] Keystone Correction: Auto Vertical Keystone						
	[x] Power Supply: AC 100-120 V/ AC 220- 240 V						
	[xi] Operating Temperature: 5°- 35° C						
	[xii] Input Signals: (a) Computer Input: VGA, SVGA, XGA, WXGA, WXGA+, SXGA, SXGA+, UXGA, MAC16" (b) Video Input: NTSC, NTSC4.43, PAL, PAL- M, PAL- N, PAL (60 Hz), 480i@60, 480p@60, 576i@50, 576i@50, 576p@50, 720p@50/60, 1080i@50/60, 1080p@50/60						
	[xiii] Input/Output Terminals:						
	[a] Video Input: S-Video: Mini Dip 4- pin X 1, Composite Video: RCA jack X 1, Component Video: RCA jack X 3						
	[b] Audio Input: Stereo Mini jack X 2, RCA jack X 2 (L/R)						
	[c] Computer Input: Analog RGB: 15- pn Mini-Dsub X 2						

	[d] HDMI Input: HDMI X 1 (HDCP compliant)						
	[e] Audio Output: RCA jack X 2 (L/R)						
	[f] Monitor Output: Analog RGB: 15-pin Mini-Dsub X 1						
	[g] USB: USB type A X 1 (for PC-less presentation or wireless adapter), USB type B X 1 (for USB display or USB mouse control)						
	[h] Control: 9-pin Dsub X 1 for RS232C						
	[i] Wireless Network: Option (Yes)						
	[j] Wired Network (LAN): RJ-45 X 1						
	[k] Mic Input: Mono Mini jack X 1 (compatible with dynamic microphones and unbalanced signal lines)						
	[ixv] Dimensions (W X H X D): 317 mm X 98 mm X 288 mm (approx)						
	[xv] Standard Accessories: Remote control with two AA batteries, Power cord , Computer cable, Adapter cover, Lens cover, User's manuals, Security label, Application CD						
	[xvi] Additional Accessories: Lamp: DT01021, Filter set: MU06481, Laser remote control: HL02651 (RC-R008), USB wireless adapter: USB-WL-11N						
<b>TOTAL AMOUNT FOR FURNITURE WORKS (D):-</b>							
<b>5 E. HVAC WORKS</b>							
<b>1</b>	Supply of VRF (VRV) Outdoor unit full INVERTER for minimum Cooling Capacity as below with R-410A Refrigerant (Total Capacity 54 HP) 'O' General 18 HP	3.00	Each				
<b>2</b>	Supply of 4 way cassette unit in door unit with factory charged refrigerant as per following capacity-						
<b>2.01</b>	1.57 TR.	2.00	Each				
<b>2.02</b>	2.29 TR	1.00	Each				
<b>2.03</b>	2.58 TR	3.00	Each				
<b>2.04</b>	3.20 TR	2.00	Each				
<b>2.05</b>	4.00 TR	6.00	Each				
<b>3</b>	Supply of Wireless Remote controller	14.00	Each				
<b>4</b>	Supply of Refnet Joints	16.00	Each				
<b>5</b>	Installation,Testing & Commissioning of VRF Outdoor Units with Rigging,Anchor Fasteners,Threaded Rods, 2 Layered thick Rubber Pads with 24 Guage GI sheet in between GI Nuts & Bolts, M S Stands etc. 54 HP	1.00	Job				
<b>6</b>	Installation,Testing & commissioning of VRF 4 way cassette indoor unit with below rating-complete With anchor fasteners, threaded Rods,Rubber Washer,GI Nuts & Bolts etc.						
<b>6.01</b>	1.57 TR.	2.00	Job				
<b>6.02</b>	2.29 TR	1.00	Job				
<b>6.03</b>	2.58 TR	3.00	Job				
<b>6.04</b>	3.20 TR	2.00	Job				
<b>6.05</b>	4.00 TR	6.00	Job				

7	Supply,Installation Testing & Commissioning of Copper Refrigerant Piping in Hard Drawn copper pipes,complete with GI slotted channel Supports with GI clamps,Anchor Fasteners,Threaded Rods etc.19 mm & 13 mm thick nitrile rubber insulation as per the specification .	150.00	RM				
8	Supply,Installation Testing & Commissioning of PVC-Drain piping complete with proper fitting (Elbows,Bends,Tee etc.) properly installed using GI slotted channel/GI Split Clamps supports with UPVC Drain piping insulation (25mm/32mm/50mm)	150.00	RM				
9	Installation,testing,commissioning of VRF 54 HP and pressure testing+nitrogen+flushing+gas charging+CM+1s	1.00	Job				
10	M & L for 2 mm thick hot-dip galvanized & powder coated perforated cable tray, conforming to IEC 6537, including accessories, supports and other sundry items of following sizes						
10.01	50 mm (W) X 25 mm (H)	20.00	RM				
10.02	200 mm (W) X 50 mm (H)	50.00	RM				
10.03	450 mm (W) X 50 mm (H)	20.00	RM				
<b>TOTAL AMOUNT FOR NETWORKING WORKS (E):-</b>							
<b>F. FURNITURE WORKS</b>							
6	Premium Suit	1.00	Each				
2	Halo Very high back Chair	1.00	Each				
3	Halo Revolving visitors Chair	7.00	Each				
4	Desking Premium finishes suit	2.00	Each				
5	Halo high back chair	1.00	Each				
6	Desking Executive series (Lead)	1.00	Each				
7	Tambour door unit	1.00	Each				
8	Midas Lounge 3 Seater	1.00	Each				
9	Midas Lounge 1 Seater	2.00	Each				
10	Glass Table	1.00	Each				
11	Conclave table 8 seater	1.00	Each				
12	Seating Premier (High back)	8.00	Each				
13	Display Storage Book case	2.00	Each				
14	Display storage Glass door units	2.00	Each				
15	Desking office Desk (S1070/71)	2.00	Each				
16	Storage Aisle and Back Storage (Tambour Door unit)	1.00	Each				
17	Vertical filling cabinet	1.00	Each				
18	Storage storwels (Storwel plain)	1.00	Each				
19	Desking Training Tables Unlearn	16.00	Each				
20	Desking office desks(S1070/71)	1.00	Each				
21	Premier High back	4.00	Each				
22	Desking Conference table (Encarta)	4.00	Each				
23	Premium Executive High back	64.00	Each				
24	Desking office Desk (S1070/71)	3.00	Each				
25	Lab Testing Table	65.00	Mtr				

	Corner Island Table offered come with locking arrangements with options of shutters being fit in benches. Further, their construction using thick and superior grade GI sheet also make these deliver optimum service life standards.							
	<b>Features:</b>							
	Center Island Tables available in a wide finish range							
	Centre island tables coming with shutters that fit in benches with hinges as well as shutter modules that feature removable shelves							
	Systems designed for fitment of sinks							
	Centre island table made using superior grade sheet in desirable thickness							
	Can manufacture these in different model options.							
<b>TOTAL AMOUNT FOR FURNITURE WORKS (F):-</b>								
<b>7</b>	<b>G. CIVIL WORKS</b>							
<b>1</b>	Falseceilling for lab	420	Sqm					
<b>2</b>	Aluminium Panelling for Partition wall	270	Sqm					
<b>TOTAL AMOUNT FOR CIVIL WORKS (G):-</b>								
<b>TOTAL AMOUNT FOR CIVIL, ELECTRIC, UPS, NETWORKING, HVAC AND FURNITURE WORKS</b>								