Supply & Installation of different types of Electricals work (CCTV, IT Networking, Light fittings etc.) at combined Agriculture Building at Mithapur, Patna

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
1	Supply and fixing Facade light BVP324 72LED RGBW 40K 220V 60 DMX with DMX SPLITTER & BOOSTER ,iplayer3 3M tubular PU coated pole with programming & commissioning (make: PHILIPS, Wipro, Havels ,EQUIVALENT as approved by Engineer In-Charge)	5	each		
2	DMX SPLITTER & BOOSTER (PHILIPPS OR EQUIVALENT As per direction of Engineer In-Charge)	1	each		
3	iplayer 3 (As per direction of Engineer In-Charge)	1	each		
4	3 mtr Tubular PU coated pole (As per direction of Engineer In-Charge)	5	each		
5	Charges for Labour <installation and="" as="" bvp32472="" comissioning="" different="" for="" led="" light="" of="" programming="" required<="" td="" testing=""><td>5</td><td>each</td><td></td><td></td></installation>	5	each		
6	Supply and fixing of 27W LED Post top of (philips BGP161) LED2500/NW PSU 220-240V 7043 (make: PHILIPS, Wipro, Havels and equivalent as per direction of Engineer In-Charge)	5	each		
7	3 metre Decorative pole fabricated out of mild steel & is single hot dip galvanized. (As per direction of Engineer In-Charge)	5	each		
CCT	V & NETWORKING	I			
P	a. CCTV Surveillance system				
8	Supply,Installation, Testing, Commissioning of 2 Megapixel Indoor Dome camera 1/3" Progressive Scan CMOS Image Sensor,with Fixed Lens Fixed Lens 2.8mm / 4mm /6mm F2.0 , Support ONVIF Profile , 30m IR (Make : Tyco/ Mobotix/ Hanwha and equivalent as per direction of Engineer In-Charge)	110	Nos.		
9	Supply , Installation, Testing, Commissioning of 2 Megapixel outdoor Bullet camera 1/3" Progressive Scan CMOS Image Sensor, with Fixed Lens Fixed Lens 2.8mm / 4mm /6mm F2.0 , Support ONVIF Profile, IP66 rated and mount, 30 Mtrs IR illuminator. (Make : Tyco/Mobotix/ Hanwha and equivalent as per direction of Engineer In-Charge)	4	Nos.		

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
10	Supply, Installation, Testing, Commissioning of Pure IP Outdoor PTZ Camera with1/2.8" Progressive Scan CMOS , 1920×1080 resolution ,H.264/MJPEG/MPEG4 ,digital WDR , IP66, , BLC/3D DNR/ROI , Smart encoding: Support low bit rate, low latency , Multiple network protocols. (Make: Tyco/ Mobotix/ Hanwha and equivalent as per direction of Engineer In-Charge)	4	Nos.		
11	WEATHERPROOF JUNCTION BOX FOR OUTDOOR WALL CAMERA LOCATION (As per direction of Engineer In-charge)	4	Nos.		
12	Supply, Installation, Testing, Commissioning of MS Pole 15 feet for Bullet Camera (As per direction of Engineer In-charge)	4	Nos.		
VIDE	O MANAGEMENT SOFTWARE & HARDWARE		<u> </u>		
13	Supply, Installation, Testing, Commissioning of 32 Ch NVR with 4 SATA interface (Make: Tyco/ Mobotix/ Hanwha and equivalent as per direction of Engineer In-Charge)	6	Nos.		
14	Supply, Installation, Testing, Commissioning of 4 TB surveillance Hard Disk (Make : WD / Seagate and equivalent as per direction of Engineer In-Charge)	18	Nos.		
15	Video Management Software for 200 camera (Make: Tyco/ Mobotix/ Hanwha and equivalent as per direction of Engineer In-Charge)	1	Nos.		
16	Supply, Installation, Testing, Commissioning of 55 inch ultra-narrow bezel LED monitor capable ,Resolution: 1920 x 1080, Video: 480i, 480p, 720p, 1080i, 1080p, Viewing Angle: H: 178°, V: 178°, Standard Inputs: 1x HDMI, 1x CVBS, 1x Digital DVI-I, Control: RS-232/RS-422/IR/ IP (Ethernet) (Make: Samsung /Panasonic/ LG and equivalent as per direction of Engineer In-Charge)	4	Nos.		
17	7+1 HDMI Switcher (as per direction of Engineer In-Charge)	4	Nos.		
18	HDMI Cable 20 Meter (As per direction of Engineer In-Charge)	5	Nos.		
19	Supply, Installation, Testing, Commissioning of desktop computer with all accessories for management:-core-i5 1TB HDD, 4GB RAM, DOS, windows 10 (Make: Dell / Lenovo /Hp and equivalent as per direction of Engineer In-Charge)	2	Nos.		

CI.	Description of items	041	Hois	Doto in	Data in Warda
SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
140.				uigits	
20	Supply, Installation, Testing, Commissioning of Gigabit	6	Nos.		
	Ethernet standalone chassis in a 1U form factor with 24				
	port 10/100/1000 BaseT PoE+ ports and 4 SFP uplink				
	ports, PoE. (Make: Alcatel Lucent/ Brocade / Cisco and				
21	equivalent as per direction of Engineer In-Charge) Supply, Installation, Testing, Commissioning of Gigabit	8	Nos.		
21	Ethernet standalone chassis in a 1U form factor with 8	0	1105.		
	port 10/100/1000 BaseT PoE+ ports and 2 SFP uplink				
	ports, PoE. (Make : Alcatel Lucent/ Brocade / Cisco and				
	equivalent as per direction of Engineer In-Charge)				
22	Supply, Installation, Testing & Commissioning of 42 U	1	Nos.		
	network rack suitable for outdoor use (Make: Rittal, MTS,				
	Valrack and equivalent as per direction of Engineer In-				
	Charge)				
23	24 port Patch Panel	14	mtr		
	(Make: Commscope/ D Link/ Panduit and equivalent as				
	per direction of Engineer In-Charge)				
24	Patch cord Cable	175	Nos.		
	(Make: Commscope/ D Link/ Panduit and equivalent as				
	per direction of Engineer In-Charge)				
25	12 Core Fiber Optical Single Mode	1800	mtr		
	(Make: Commscope/ D Link/ Panduit and equivalent as				
	per direction of Engineer In-Charge)				
26	Soft Surface digging, cable laying and back filling.	1800	mtr		
	Mechnically				
27	Hard Surface digging, cable laying and back filling.	400	mtr		
20	Mechnically	15	Noo		
28	LIU 12 Port Fully Loaded With Adaptor Panel And Couplers (Make : Commscope/ D Link/ Panduit and	15	Nos.		
	equivalent as per direction of Engineer In-Charge)				
29	SM Fiber Connectors Pigtel	30	Nos.		
	(Make :Commscope/ D Link/ Panduit and equivalent as				
20	per direction of Engineer In-Charge)	20	Naa		
30	SFP Module (Make: Commscope/ D Link/ Panduit and	30	Nos.		
31	equivalent as per direction of Engineer In-Charge) OFC LC To LC Patch Cord	30	mtr		
31	(Make: Commscope/ D Link/ Panduit and equivalent as	30	1110		
	per direction of Engineer In-Charge)				
32	Supply and Laying of STP(Armoured) CAT6 Cable	1700	mtr		
	(Make: Commscope/ D Link/ Panduit and equivalent as				
	per direction of Engineer In-Charge)				
33	Supplying of 2 x 1.5sqmm armoured Power cable in	1650	mtr		
	existing Conduit. (Make: Commscope/ D Link/ Panduit				
	and equivalent as per direction of Engineer In-Charge)				
34	6U Rack With Accessories	22	Nos.		
	(Make: Rittal /MTS / Valrack and equivalent as per				
	direction of Engineer In-Charge)				

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
35	9U Rack with Accessories (Make: Rittal /MTS / Valrack and equivalent as per direction of Engineer In-Charge)	1	Nos.		
36	Supply and fixing of Power socket (As per direction of Engineer In-Charge)	18	Nos.		
IP PE	BX SYSTEM				
37	Call Detail Recording software (As per direction of Engineer In-Charge)	1	Nos.		
38	4 port GSM gateway	1	Nos.		
39	Operator console with DSS key (Same make of PBX)	1	Nos.		
40	Digital Key phone 6 programable Key, speaker phone (Make: NEC/ Nortel/ Cisco and equivalent as per direction of Engineer In-Charge)	30	Nos.		
41	Digital Key phone 24 programable Key, speaker phone (Make: NEC/ Nortel/ Cisco and equivalent as per direction of Engineer In-Charge)	10	Nos.		
42	Speaker phone for Audio conference (Make: Panasonic / Cisco and equivalent as per direction of Engineer In-Charge)	3	Nos.		
43	Caller ID with speaker phone (Make: Beetel / Binaton / Panasonic and equivalent as per direction of Engineer In-Charge)	550	Nos.		
	ACCESSO	RIES		l.	
44	Rack 42 U With Accessories (Make: Rittal /MTS / Valrack and equivalent as per direction of Engineer In-Charge)	2	Nos.		
45	2 x 10GE SFP+ slots, 10 x GE RJ45 ports (including 1 x MGMT port, 1 X HA port, 8 x switch ports), 8 x GE SFP slots, SPU NP6 and CP9 hardware accelerated (Make: Fortinet / Checkpoint /Palo alto and equivalent as per direction of Engineer In-Charge)	1	Nos.		
46	Unified (UTM) Protection (24x7 plus Application Control, IPS, AV, Web Filtering and Antispam, FortiSandbox Cloud) (Make: Fortinet / Checkpoint /Palo alto and equivalent as per direction of Engineer In-Charge)	1	Nos.		
47	Centralized log & analysis appliance - 2 x GE RJ45, 4TB storage, up to 100GB/Day of logs. (Make: Fortinet / Checkpoint /Palo alto)	1	Nos.		
48	24x7 Service Remotely (Make: Fortinet / Checkpoint /Palo alto and equivalent as per direction of Engineer In-Charge)	1	Nos.		
DATA	A NETWORKING SOLUTION (LAN NETWOTK FOR DATA)				
49	Supply, Installation, Testing, Commissioning of 12 24-port 1 GbE switch, 3 modular slots for optional uplinks/stacking. Power supply, fan & modules need to be ordered separately (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	2	Nos.		
50	4-port 1/10GbE SFP+ Module (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	6	Nos.		

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
51	NON-POE 250W AC PSU, exhause airflow, front to back airflow (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	4	Nos.		
52	SINGLE 6 FOOT AC POWER CORD FOR INDIA (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	4	Nos.		
53	exhaust airflow fan, front to back airflow (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	4	Nos.		
54	LAYER 3 PREMIUM SOFTWARE LICENSE (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	2	Nos.		
55	ESSENTIAL NBD PARTS ONLY SUPPORT, 24p & 48p configurations (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	2	Nos.		
56	Supply, Installation, Testing, Commissioning of 12 Switch, 24x 10/100/1000 PoE+ ports, 2x 1G RJ45 uplink-ports, 4x 10G SFP+ uplink-ports, 370W PoE budget, L3 features (OSPF, VRRP, PIM, PBR) (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	28	Nos.		
57	SINGLE 6 FOOT AC POWER CORD FOR INDIA (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	28	Nos.		
58	USB 2.0 CABLE, TYPE-C TO TYPE-A, 1M (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	28	Nos.		
59	ESSENTIAL REMOTE SUPPORT, 24 & 48p (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	28	Nos.		
60	Direct Attached Sfpp Active Copper,1m,1-Pack (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	24	Nos.		
61	10GBASE-LR,SFPP SMF LC CONNECTOR 8-PACK (No TAA) (Make: Alcatel Lucent/ CISCO/ Brocade and equivalent as per direction of Engineer In-Charge)	3	Nos.		
62	Supply, Installation, Testing, Commissioning of 12 Core Matched Cladding Single Mode Fibre Cable. (Make: Commscope/ D Link/ Panduit and equivalent as per direction of Engineer In-Charge)	2000	Nos.		
63	24 port Patch Panel (Make: Commscope/ D Link/ Panduit and equivalent as per direction of Engineer In-Charge)	40	Nos.		
64	LIU 12 port fully loaded (Make: Commscope/ D Link/ Panduit and equivalent as per direction of Engineer In-Charge)	14	Nos.		
65	SM Fiber Connectors Pigtel (Make: Commscope/ D Link/ Panduit and equivalent as per direction of Engineer In-Charge)	28	Nos.		
66	OFC LC To LC Patch Cord (Make: Commscope/ D Link/ Panduit and equivalent as per direction of Engineer In-Charge)	80	Nos.		

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
67	Supplying of 2 x 1.5sqmm armoured Power cable in existing Conduit. (Make:Finolex / reputed and equivalent as per direction of Engineer In-Charge)	2000	Nos.		
68	15U Network Rack With Fan Cable Manager (Make:Rittal /MTS / Valrack and equivalent as per direction of Engineer In-Charge)	12	Nos.		
69	Supply, Installation, Testing & Commissioning of 42 U network rack suitable for outdoor use (Make:Rittal, MTS, Valrack and equivalent as per direction of Engineer In-Charge)	1	Nos.		
AUDI	O VIDEO SYSTEM AT SECOND FLOOR IN INSTITUTION	AL BLOC	K		
70	Supply, Installation, Testing, Commissioning of Embedded Conference System (Make:HEINRICH / Beyerdyanmic / Televic and equivalent as per direction of Engineer In-Charge)	1	Nos.		
71	Supply, Installation, Testing, Commissioning of Chairmen unit (Make:HEINRICH / Beyerdyanmic / Televic and equivalent as per direction of Engineer In-Charge)	2	Nos.		
72	Supply, Installation, Testing, Commissioning of Delegates unit (Make:HEINRICH / Beyerdyanmic / Televic and equivalent as per direction of Engineer In-Charge)	8	Nos.		
73	Supply, Installation, Testing, Commissioning of Connecting cables for Chairman and Delegates unit (Make:HEINRICH / Beyerdyanmic / Televic and equivalent as per direction of Engineer In-Charge)	12	Nos.		
74	Supply, Installation, Testing, Commissioning of Cable Cubby (Make:HEINRICH / Logic/ Bestnet and equivalent as per direction of Engineer In-Charge)	4	Nos.		
75	Supply, Installation, Testing, Commissioning of 4 HDMI and 4 VGA Input and 4 HDMI and 4 VGA output Switcher (Make:Crestron / milestone/Aten and equivalent as per direction of Engineer In-Charge)	1	Nos.		
76	Supply, Installation, Testing, Commissioning of Digital Signal Processor (make:Biamp/HEINRICH/BSS Audio and equivalent as per direction of Engineer In-Charge)	1	Nos.		
77	Supply, Installation, Testing, Commissioning of 20W Two way Ceiling speaker. (Make:HEINRICH/Sennheiser/Tannoy and equivalent as per direction of Engineer In-Charge)	6	Nos.		
78	Supply, Installation, Testing, Commissioning of 240W Power Amplifier (Make:HEINRICH/Labgruppen/Powersoft and equivalent as per direction of Engineer In-Charge)	1	Nos.		
79	Supply, Installation, Testing, Commissioning of Wireless Handheld Microphones Set (make:HEINRICH/ Beyerdyanmic / Sennheiser and equivalent as per direction of Engineer In-Charge)	1	Nos.		
80	Supply, Installation, Testing, Commissioning of Audio Deembededder (Make:Extron/kramer/Aten and equivalent as per direction of Engineer In-Charge)	1	Nos.		

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
81	Supply, Installation, Testing, Commissioning of Video Conferencing Powerful video collaboration for group conferences, Full HD 1080p60 Endpoint with (1+3) capability, Package shall include includes: Codec, Cable bundle, Remote control, Camera and Microphone (Make:Cisco / Polycom / Avaya and equivalent as per direction of Engineer In-Charge)	1	Nos.		
82	Supply, Installation, Testing, Commissioning of 85" Led Tv (Make:Samsung /Panasonic/ LG and equivalent as per direction of Engineer In-Charge)	1	Nos.		
83	Supply and laying of Microphone Cable (Make:Kremer/ bestnet / fenolex and equivalent as per direction of Engineer In-Charge)	150	Nos.		
84	Supply and laying of HDMI Cable 1.5 Meter (Make:Kremer/ bestnet / fenolex and equivalent as per direction of Engineer In-Charge)	5	Nos.		
85	Supply and laying of HDMI Cable 20 Meter (Make:Kremer/ bestnet / fenolex and equivalent as per direction of Engineer In-Charge)	4	Nos.		
86	Supply and laying of VGA Cable 20 Meter (Make:Kremer/ bestnet / fenolex and equivalent as per direction of Engineer In-Charge)	4	Nos.		
87	Supply and laying of Power cable (As per direction of Engineer In-Charge)	100	Nos.		
88	Supply and Fixing of XLR/MONO/PHENIX/ USB Cable connectors and Accesseries. (as per direction of Engineer In-Charge)	1	LOT		
89	Supply, Installation, Testing, Commissioning of 24 U Rack (Make:Rittal / MTS / Valrack and equivalent as per direction of Engineer In-Charge)	1	Nos.		
AUD	O VIDEO SYSTEM AT GROUND FLOOR IN INSTITUTION.	AL BLOC	CK		
90	Supply, Installation, Testing, Commissioning of Embedded Conference System (Make:HEINRICH / Beyerdyanmic / Televic and equivalent as per direction of Engineer In-Charge)	1	Nos.		
91	Supply, Installation, Testing, Commissioning of Chairmen unit (Make:HEINRICH / Beyerdyanmic / Televic and equivalent as per direction of Engineer In-Charge)	2	Nos.		
92	Supply, Installation, Testing, Commissioning of Delegates unit (Make:HEINRICH / Beyerdyanmic / Televic and equivalent as per direction of Engineer In-Charge)	10	Nos.		
93	Supply, Installation, Testing, Commissioning of Connecting cables for Chairman and Delegates unit (Make:HEINRICH / Beyerdyanmic / Televic and equivalent as per direction of Engineer In-Charge)	10	Nos.		
94	Supply, Installation, Testing, Commissioning of Cable Cubby (Make:HEINRICH / Logic/ Bestnet and equivalent as per direction of Engineer In-Charge)	4	Nos.		
95	Supply, Installation, Testing, Commissioning of 4 HDMI and 4 VGA Input and 4 HDMI and 4 VGA output Switcher (Make:Crestron / milestone/Aten and equivalent as per direction of Engineer In-Charge)	1	Nos.		

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
96	Supply, Installation, Testing, Commissioning of Digital Signal Processor (Make:Biamp/HEINRICH/BSS Audio and equivalent as per	1	Nos.		
07	direction of Engineer In-Charge)	-	.		
97	Supply, Installation, Testing, Commissioning of 20W Two way Ceiling speaker. (Make:HEINRICH/Sennheiser/Tannoy and equivalent as per direction of Engineer In-Charge)	6	Nos.		
98	Supply, Installation, Testing, Commissioning of 240W Power Amplifier (Make:HEINRICH/Labgruppen/Powersoft and equivalent as per direction of Engineer In-Charge)	1	Nos.		
99	Supply, Installation, Testing, Commissioning of Wireless Handheld Microphones Set (Make:HEINRICH/ Beyerdyanmic / Sennheiser and equivalent as per direction of Engineer In-Charge)	1	Nos.		
100	Supply, Installation, Testing, Commissioning of Audio Deembededder (Make:Extron/kramer/Aten and equivalent as per direction of Engineer In-Charge)	1	Nos.		
101	Supply, Installation, Testing, Commissioning of Video Conferencing Powerful video collaboration for group conferences, Full HD 1080p60 Endpoint with (1+3) capability,Package shall include includes: Codec, Cable bundle, Remote control, Camera and Microphone (Make:Cisco / Polycom / Avaya and equivalent as per direction of Engineer In-Charge)	1	Nos.		
102	Supply, Installation, Testing, Commissioning of 85" Led Tv (Make:Samsung /Panasonic/ LG and equivalent as per direction of Engineer In-Charge)	1	Nos.		
103	Supply and laying of Microphone Cable (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	150	mtr		
104	Supply and laying of HDMI Cable 1.5 Meter (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	5	Nos.		
105	Supply and laying of HDMI Cable 20 Meter (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	4	Nos.		
106	Supply and laying of VGA Cable 20 Meter (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	4	Nos.		
107	Supply and laying of Power cable (As per direction of Engineer In-Charge)	100	mtr		
108	Supply and Fixing of XLR/MONO/PHENIX/ USB Cable connectors and Accesseries. (As per direction of Engineer In-Charge)	1	LOT		
109	Supply, Installation, Testing, Commissioning of 24 U Rack (Make:Rittal / MTS / Valrack and equivalent as per direction of Engineer In-Charge)	1	Nos.		
AUDI	ORIUM SYSTEM IN INSTITUTIONAL BLOCK	1	1		
110	Supply, Installation, Testing, Commissioning of Embedded Conference System (Make:HEINRICH / Beyerdyanmic /Televic and equivalent as per direction of Engineer In-Charge)	2	Nos.		
111	Supply, Installation, Testing, Commissioning of Chairmen unit (Make:HEINRICH / Beyerdyanmic /Televic and equivalent as per direction of Engineer In-Charge)	4	Nos.		

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
				aigits	
112	Supply, Installation, Testing, Commissioning of Delegates	55	Nos.		
	unit (Make:HEINRICH / Beyerdyanmic /Televic and equivalent as per direction of Engineer In-Charge)				
113	Supply and Fixing of cables to connect Delegates 3m	69	Nos.		
	(Make:HEINRICH / Beyerdyanmic /Televic and equivalent		. 100.		
	as per direction of Engineer In-Charge)				
114	Supply and Fixing of cables for conference system		Nos.		
	connectivity 20m	4			
	(Make:HEINRICH / Beyerdyanmic /Televic and equivalent as per direction of Engineer In-Charge)				
115	Supply, Installation, Testing, Commissioning of Cable	2	Nos.		
	Cubby				
	(Make:HEINRICH / Logic/ Bestnet and equivalent as per				
110	direction of Engineer In-Charge)				
116	Supply, Installation, Testing, Commissioning of 4 HDMI and 4 VGA Input and 4 HDMI and 4 VGA output Switcher	1	Nos.		
	(Make:Crestron / Kramer/Aten and equivalent as per				
	direction of Engineer In-Charge)				
117	Supply, Installation, Testing, Commissioning of Audio	1	Nos.		
	Deembededder				
	(Make:Extron/kramer/Aten and equivalent as per direction				
118	of Engineer In-Charge) Supply Installation Testing & Commissioning of 3X3, 55"	1	Nos.		
110	Video Wall, 700 Nits, .88 mm B to B, WebOs, SOC	1	1105.		
	(Make:LG/Samsung/Panasonic and equivalent as per				
	direction of Engineer In-Charge)				
119	Supply Installation Testing & Commissioning of Installation	1	LOT		
	Bracket and Cabling accessories for Video Wall.				
120	(As per direction of Engineer In-Charge) Supply Installation Testing & Commissioning of 43" Full HD	2	Nos.		
120	LED display with TV Stand.	2	1105.		
	(Make:Panasonic/samsung/LG and equivalent as per				
	direction of Engineer In-Charge)				
121	Supply Installation Testing & Commissioning of 80W 8" + 2	8	Nos.		
	" two way wall mounted speaker with following features:-				
	Built-in 100 / 70 V Variable wattage tappings of 40W/ 80W Watt, SPL 1W/1m = 94dB , SPL@Full power = 113dB,				
	EASE/CATT/ULYSSYS DLL read, Frequency Response				
	100 Hz - 17 kHz, Speaker Drive - 8" + 1.5 ".				
	(Make:Tannoy/HEINRICH/Community and equivalent as				
400	per direction of Engineer In-Charge)	A	Nos		
122	Supply Installation Testing & Commissioning of 4"+1.5" Coaxial Ceiling speaker with ABS cover, 20W, 100V, &	4	Nos.		
	10W at 70 V cutout 180 mm, ABS baffle & back cover,				
	metal grille. The Speaker shall have following Feature:				
	Max SPL > 102 dB, Sensitivity 102dB (1W/1M), Frequency				
	Response 100-20kHZ.				
	(Make:Tannoy/HEINRICH/Community and equivalent as per direction of Engineer In-Charge)				
123	Supply Installation Testing & Commissioning of digital	1	Nos.		
120	power amplifier having 2X150Watt @8ohm & 2X250W		. 100.		
	@4ohm. The amplifier shall provide with short to ground,				
	short circuit detection & line impedence survellience up to				
	0.5% deviation.				
	(Make:HEINRICH/Labgruppen/Powersoft and equivalent as per direction of Engineer In-Charge)				
	as per unconon or Engineer in-onarys)		1		

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
124	Supply Installation Testing & Commissioning of 2 channel 240W Class D Power Amplifier (Make:HEINRICH/Labgruppen/Powersoft and equivalent as per direction of Engineer In-Charge)	2	Nos.		
125	Supply Installation Testing & Commissioning of Digital Podium.	2	Nos.		
126	(As per direction of Engineer In-Charge) Supply Installation Testing & Commissioning of 8-channel Phantom Power Microphone/Line input, 8- channel circuit Output; Loudspeaker Management System Frequency Response 20Hz ~ 20KHz, THD <0.003%, Channel Seperation >92dB,Seperate Mute Control each channel,CMRR>80dB, 8 independent parametric EQ, adjustable gain range up to 20dB, With, RS232 and internet to connect PC,High-speed processing DSP Chip, the new generation of AFC algorithm to eliminate the feedback faster and make system more stable.Application includes Auto Mixer (Limiter threshold and Gain), Routing, Audio Processing and special signal extension Processing. (Make:Biamp/HEINRICH/BSS Audio and equivalent as per direction of Engineer In-Charge)	1	Nos.		
127	Supply, Installation, Testing & Commissioning of handheld Wireless Mic system set with two transmitters dynamic microphone, Frequency Response 40Hz-15,000 Hz, Surge mode PLL Phase lock, Dynamic Range >90dB, THD < 0.5%, S/N ratio > 90dB, Carrier frequency range 720 - 830 MHz, Power Consumption < 85mA. (Make:Beyerdyanmic/HEINRICH/Shure and equivalent as per direction of Engineer In-Charge)	1	Nos.		
128	Supply Installation Testing & Commissioning of HDBaseT Transmitter (Make:Aten/Kramer/Heinrich and equivalent as per direction of Engineer In-Charge)	2	Nos.		
129	Supply Installation Testing & Commissioning of HDBaseT- Lite Receiver (Make:Aten/Kramer/Heinrich and equivalent as per direction of Engineer In-Charge)	2	Nos.		
130	Supply Installation Testing & Commissioning of Range Extender (Make:Aten/Kramer/Heinrich and equivalent as per direction of Engineer In-Charge)	1	Nos.		
131	Supply and laying of Microphone Cable (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	600	mtr		
132	Supply and laying of HDMI Cable 20 Meter (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	6	Nos.		
133	Supply and laying of VGA Cable 20 Meter (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	2	Nos.		
134	Supply and Fixing of XLR/MONO/PHENIX/ USB Cable connectors and Accesseries. (As per direction of Engineer In-Charge)	1	LOT		
135	Supply Installation Testing & Commissioning of 36U Rack (Make:Rittal / MTS / Valrack and equivalent as per direction of Engineer In-Charge)	1	Nos.		

SI.	Description of items	Qty	Unit	Rate in	Rate in Words
No.				digits	
VIDEO	O CONFERENCE SYSTEM AT SECRETARY, APC, MINISTER & '	VIDEO (CONF. ROC	M	
136	Supply, Installation, Testing, Commissioning of Video Conferencing Powerful video collaboration for group conferences, Full HD 1080p60 Endpoint with (1+3) capability, Package shall include includes: Codec, Cable bundle, Remote control, Camera and Microphone (Make:Cisco / Polycom / Avaya and equivalent as per direction of Engineer In-Charge)	3	Nos.		
137	Supply, Installation, Testing, Commissioning of 85" Led Tv (Make:Samsung /Panasonic/ LG and equivalent as per direction of Engineer In-Charge)	3	Nos.		
138	Supply and laying of HDMI Cable 15 Meter (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	3	Nos.		
LED					
139	75" LED TV For Reception for Training Center & Institutional Block (Make:Samsung /Panasonic/ LG and equivalent as per direction of Engineer In-Charge)	1	Nos.		
140	65" LED TV For Reception for Directors room (Make:Samsung /Panasonic/ LG and equivalent as per direction of Engineer In-Charge)	1	Nos.		
141	49" LED TV For Reception for Training Center & Institutional Block (Make:Samsung /Panasonic/ LG and equivalent as per direction of Engineer In-Charge)	1	Nos.		
	SS CONTROL SYSTEM		l Naa l		Γ
142	Supply installation Testing and Commissioning of Operator workstation Intel Core i7 or better Min 3.4 GHz, 8MB Cache or better with 16 GB RAM or better operator workstation. It should run on latest Windows® platform Enterprise 64-bit or latest. It should have 1TB storage. 1 DVI-I + 1 HDMI + 1 VGA, max 2 Monitor Output (Make:Dell, HP, Cisco, Fujitshu and equivalent as per direction of Engineer In-Charge)	1	Nos.		
READ	ER & CREDENTIALS				
143	Supply, Installation, Testing, Commissioning of multi-technology biometric fingerprint, contactless smart card keypad reader with display shall be designed to securely read, interpret, and authenticate access control data from 13.56 MHz contactless smart card credentials and process biometric data from an integrated biometric sensor shall utilize Secure Element Technology to protect keys and cryptographic functions to the international standard Evaluation Assurance Level (EAL) 5+. The biometric data encoding, that is protected by, but not limited to, encryption schemas associated with DES, 3DES, or AES-128 methods to provide high security assurance of data integrity, UL294,FCC, CE (EU), WPC (India) certified and specification as per technical specification.	8	Nos.		
	(Make:HID, IDEMIA, INDALA, Mercury and equivalent as per direction of Engineer In-Charge)				

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words
144	Supply, Installation, Testing, Commissioning of High Security 8K Contactless smart card can store data for multiple application, shall support multi-layered trusted management of secure identities using the portable Secure Identity Object data model, shall support traceable identifiers exchanged during card sessions, preventing data associated to a card from being divulged or cloned. badge must be available under the same technology both for passive 13.56 MHz contactless badges and for virtual badges hosted in smartphones operation via Bluetooth low energy or NFC interface. Support AES-128 bits cryptographic algorithms for data protection and specification as per technical specification. (Make:HID, IDEMIA, INDALA, Mercury and equivalent as per direction of Engineer In-Charge)	800	Nos.		
145	Supply, Installation, Testing, Commissioning of door lock suitable for double leaf door with holding force of 1200lbs as per technical specification. (Make:Bel, Deficus, Assa Abloy, Kaba and equivalent as per direction of Engineer In-Charge)	10	Nos.		
146	Supply, Installation, Testing, Commissioning of Exit Switch touch. (As per direction of Engineer In-Charge)	10	Nos.		
147	Supply, Installation, Testing, Commissioning of door monitoring sensor for monitoring door opening and closing as per technical specification. (Make:Honeywell, Sentrol, UTC, Bosch, Siemens and equivalent as per direction of Engineer In-Charge)	10	Nos.		
148	Supply, Installation, Testing, Commissioning of manual call point (green colour) for emergency opening the door as per technical specification (Make:Honeywell, Sentrol, UTC, Bosch, Siemens and equivalent as per direction of Engineer In-Charge)	10	Nos.		
CREA	TION BLOCK		1	Į.	
149	Digital Podium	1	Nos.		
150	240W Mixer Amplifer with 3 XLR and 2 Aux Input. (Make:HEINRICH/Honeywell/Labgouppen and equivalent as per direction of Engineer In-Charge)	1	Nos.		
151	45 Watt Wall Mount Speaker (Make:Tannoy/Sennheiser/HEINRICH and equivalent as per direction of Engineer In-Charge)	4	Nos.		
152	Wireless Handleld Micrphone Set (Make:Beyerdyanmic/HEINRICH/Shure and equivalent as per direction of Engineer In-Charge)	1	Nos.		
153	Microphone Cable (Make:Besnet/ Kramer / fenolex and equivalent as per direction of Engineer In-Charge)	100	mtr		
GYM /	AREA				
154	240W Mixer Amplifer with 3 XLR and 2 Aux Input. (Make:HEINRICH/Honeywell/Labgouppen and equivalent as per direction of Engineer In-Charge)	1	Nos.		
155	30 Watt Wall Mount Speaker (Make:Tannoy/Sennheiser/HEINRICH and equivalent as per direction of Engineer In-Charge)	6	Nos.		
156	Blue Ray CD player (Make:Philips/sony/Panasonic and equivalent as per direction of Engineer In-Charge)	1	Nos.		

SI. No.	Description of items	Qty	Unit	Rate in digits	Rate in Words	
CABL	NG & ACCECCORIES					
157	8 Core X 22 AWG Shielded Cable- Extra item (As per direction of Engineer In-Charge)	1300	Mtr			
158	Supply and fixing of 3X3 MS Box and mounting accessories (As per direction of Engineer In-Charge)	800	Nos.			
159	Supply and fixing of MS Band connectors (As per direction of Engineer In-Charge)	1800	Nos.			
provid	ling fixing installation and comissioning of Fountain & Light	ing work	s as deta	ails		
160	Geyser jet creates white water -inlet 25mm height 135 mm of brass /Gunmetal with shine chrome. (As per direction of Engineer In-Charge)	10	Nos.			
161	verticle jet nozzle 8-10 ft(Brass with shine chrome) (As per direction of Engineer In-Charge)	1	Nos.			
162	underwater recessed light (IP-68) all complete (27 w in 12 v) (As per direction of Engineer In-Charge)	14	Nos.			
163	underwater recessed light (IP-68) all complete(36 w in 12 v) (As per direction of Engineer In-Charge)	4	Nos.			
164	FRP 3D Dolphin (supply and fixing 6 - 8 feet (As per direction of Engineer In-Charge)	2	Nos.			
165	Module Controller (As per direction of Engineer In-Charge)	1	Nos.			
166	Control panel Box (control penel Box L&T Bar, Zeamer MCB all complete. (As per direction of Engineer In-Charge)	1	Nos.			
167	Submersible Pump 5HP three Phasewith filter basket (As per direction of Engineer In-Charge)	1	Nos.			
168	All Plumbing material required for fixing (As per direction of Engineer In-Charge)	1	Nos.			
169	Glass Mosaic Tiles work (Random mix) on fountain tiles size 20mmX 20mm thick all complete (As per direction of Engineer In-Charge)	110	sqm			
170	Electricl material (necessary electrical work within pond area)all complete job. (As per direction of Engineer In-Charge)	1	job			
ТОТА	TOTAL AMOUNT (Rs.)					