

Sr.	Description	Unit	Round off qty	Rate		Amount
				In words	In fig	
1	Supplying & erecting reverse osmosis (RO) water purification system with M.S. powder coated pedestal frame, prefilter housing carbon filter suitable buster DC pump, auto low & high pressure switches with following size of LPH capacity & erected as directed [D] 100 LPH with 1 phase / 3 phase Raw water pump of 500LPH @ 2.5kg/cm2 - (1No - Kirloskar /CRI/Lubi), Dual media filter 10"x54" - (1 No), Micron cartridge filter 20" x 2.5" (1No), High pressure pump 500LPH @ 10kg/cm2 - (1No - Shimga /CRI /Lubi), RO Membrane housing with RO membrane of 40*40 - (1No), RO pressure tube 4" x 1E - (1No), 0 - 1200LPH Rotameter -(2 Nos), with Recovery Rate 50%.	Ea.	1.00			
2	Supplying & erecting carbon dioxide (CO2) fire extinguisher user of following capacity with necessary clamps made from 50 x 6 mm M.S. Flat with nut & bolts grouted in wall complete. [A] For 4.5 Kg Capacity	Ea	7.00			
3	Supplying & erecting ABC powder type 'Ceasefire' type Fire extinguisher as per IS 13849 or 1 Kg capacity with necessary clamp for erection on wall	Ea	7.00			
4	SITC of Analogue Addressable Manual Call Point with Integral Short Circuit Isolator, Analogue Addressable Protocol having, Bi-coloured status LED (red for alarm, amber for (short-circuit), Non-frangible element fitted as standard (conforms to EN54), pulsing/non-pulsing can selectable via panel, Electronically addressed, Approved by LPCB. (Including Five year free maintenance with guarantee)	Ea	2.00			
5	SITC of addressable loop powered Base sounder with integral Beacon, includes 51 user-selectable tones (all tones EN54-3 compatible), variable sound output 50 ~ 98 dB(A) (±2 dB(A)) output at 1 metre, Auto shut down feature prevents noise pollution, 'O' rated beacon to EN-23, IP21 rated for internal use, sounder and beacon can operate independently, Approved by LPCB (Including Five year free maintenance with guarantee)	Ea	2.00			
6	SITC of Microprocessor based Net-workable Analogue Addressable Fire Alarm Control Panel. The Panel shall be compliant with EN54-2, EN54-4 and approved by LPCB. The Fire Alarm Control Panel shall have inbuilt 3 loops and expandable upto 4 Loops. The Panel must have large graphic display. The Panel must also have the capability to take Addressable Intelligent Wired and Wireless Devices on same loop. Each loop shall have a capacity of 127 analogue Addressable devices and 127 Base sounders/Base Sounder	Ea	1.00			
7	Supplying and erecting approved make online Un-interruptible Power Supply system comprising flat cum-boost charger with IGBT base rectifier & Inverter & sealed maintenance free SMF batteries. The charger having operating capacity for input 160-270V AC & inverter having output 230V,50 Hz Ac with 0.8 load power factor with battery, over/under voltage output with over load & short circuit protection equipment. The system housed in CRC sheet duly powder coated paint with following power backup.with MS painted batteries stand, 10% Overload capacity for momentary load. (D) 5 KVA with 1Hr Backup	Ea	1.00			
8	Supply, Installation, Testing and Comissioning of 4MP Varifocal Lens Dome Type Camera, H.265 4MP IR Turret Dome N/W Camera, Manual Varifocal 2.8-12mm, 50M, Micro SD, DC12V/PoE, IP67/IK10, Basic IVA, 4MP resolution (2560 × 1440), True day/night, Digital WDR, 3D DNR, HLC & BLC, Triple streams, Smart codec by ROI, Built in MIC, Cyber Security, Basic intelligent video analytics, Audio In, NDAA Compliance, UL, CE, FCC Certified (Including Five year free maintenance with guarantee)	Ea	29.00			
9	Supply, Installation, Testing and Comissioning of 4MP Varifocal Lens Bullet Camera, H.265 4MP IR Bullet N/W Camera, Manual Varifocal 2.8-12mm, 50M, Micro SD, DC12V/PoE, IP67/IK10, Basic IVA, 4MP resolution (2560 × 1440), True day/night, Digital WDR, 3D DNR, HLC & BLC, Triple streams, Smart codec by ROI, Cyber Security, Basic intelligent video analytics, NDAA Compliance, UL, CE, FCC Certified (Including Five year free maintenance with guarantee)	Ea	3.00			

10	Supply, Installation, Testing and Commissioning of 32 Channel Network Video Recorder (NVR), Dual OS design, HDD Hot Swap with RAID support, N+1 hot spare configuration, Support 16CH@2MP, H.265/H.264 Video Compression, HDMI, VGA output, upto 8 SATA interface each with max 10 TB support and 1 eSATA, 16-ch synchronous playback at up to 1080p resolution, Gigabit Ethernet network interfaces, bandwidth 320 mbps, CE FCC, BIS, Operating Temp -10 deg to 50 deg C, USB and serial Interface, RAID supported (Including Five year free maintenance with guarantee)	Ea	1.00			
11	SITC of SCREEN SIZE 80 cm diagonal (32" INCH), RESOLUTION HD (1366*768), USB INPUT (2.0 SUPPORT) 2*Side(USB2.0), HDMI INPUT 3*Side(HDMI 1.4), USB DEVICE SUPPORT USB Supported HDD, HOTEL MODE Yes, Basic, BLUETOOTH Yes (Ver. 4), WIFI TYPE(STANDARD) 802.11a/b/g/n 2.4G 2T2R, Built-in, WIFI BAND TYPE 2.4GHz, OS & VERSION INFO Android 'P' - 9.0, MEMORY FLASH 8GB EMMC, RAM 1.5GB , DDR3 2133 Mhz. (Including Five year free maintenance with guarantee)	Ea	1.00			
12	SITC of 8 x 10/100/1000BASE-T PoE ports 2 x Gigabit SFP ports Advanced L2 switching and security features L2+ Static Routing Optional "standard mode" or "surveillance mode" management user interface 65W PoE budget [Approved by Competent Authority i.e. not Below the rank of Executive Engineer ]	Ea	2.00			
13	Supply, Installation, Testing and commissioning of 4 TB Surveillance Series Hard disk supporting 24X7 operational efficiency	Ea	1.00			
14	Providing & Erecting Network rack with following capacity with Necessary cooling fan, Cable manager, 6A PDU, equipment rack with necessary mounting accessories. (B) 9 U	Ea	2.00			
<b>Part C - VRV Air Conditioner System</b>						
1	Supply Installation, Testing & Commissioning of modular type Variable Refrigerant Volume air cooled Outdoor units suitable for cooling and heating, having all hermetically sealed inverter type Scroll Compressor(s), microprocessor based Controller, top discharge type condensing unit(s), with R410 A Refrigerant (Or Eco Friendly Green Gas if any), vibration isolators, with suitable foundation, MS Stand for Unit with necessary paint etc. complete as required. The unit shall deliver the rated capacity at AHRI Conditions and work even at 50°C ambient temperature without tripping. The unit shall be suitable to work on 400V +/- 10%, 3 Phase, 50Hz AC power supply. The unit shall be filled with first charge of the refrigerant and ready for use as required. The COP at AHRI conditions shall not be less than 3.1 and IEER not less than 6.5. (Design should be got approval before execution from engineer in charge)	Per Hp	66.00			
<b>INDOOR UNIT-CASSETTE TYPE</b>						
2	Supply, installation, testing and commissioning of following minimum capacity 4-way/2 way/radial flow as per approval VRV Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V ± 10%, 50Hz AC supply, max noise level 60dB @ 400 cfm per TR(minimum) complete, as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature fresh air provision compatible for Remote Operation System (B) 1.0 TR	Ea.	2.00			
3	(E) 2.0 TR	Ea.	7.00			
4	(G) 2.8 TR	Ea.	7.00			
5	(H) 3.2 TR	Ea.	1.00			
6	(J) 4.0 TR	Ea.	6.00			
<b>INDOOR UNIT-HIGH WALL TYPE</b>						
7	Supply, installation, testing and commissioning of following minimum capacity VRV High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with noise level maximum 60 dB @min 400 cfm /dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V ± 10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature. (B) 1 TR	Ea.	3.00			
<b>COPPER REFRIGERANT PIPING</b>						

