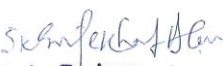


ESTIMATE					
(Estimate No- 76/EE/BIT of 2025-26)					
Name of Work:	SITC of CCTV Surveillance system within campus of Chhatna Chandidas Mahavidyalaya,Bankura.				
Ref:	Memo No :CCMV/PWD/02/2026 ,Date: 13.02.26 from Principal,Chhatna Chandidas Mahavidyalaya,Bankura.				
Report:	This estimate has been prepared to meet the probable expenditure on the basis of requirement sent from Chhatna Chandidas Mahavidyalaya. In This Estimate CCTV Surveillance- 32 Nos, and other necessary IT equipments/ accessories are considered to suit the requirement. Broadband/Leased line for internet connectivity is to be arranged locally by the authority. As per site requirement, the following major items are proposed to be installed: 8 Port Network Switch (PoE) – 8 Nos.(For CCTV System) 16 Channel NVR with 4 SATA bays – 2 Nos 10 TB Surveillance Grade Hard Disk – 4 Nos. The proposed IT infrastructure will improve operational efficiency, strengthen security arrangements and support smooth digital functioning of Chhatna Chandidas Mahavidyalaya Building. In view of the above, the estimate has been prepared as per PWD norms and prevailing market rates and is submitted for administrative approval and necessary sanction.Raw power supply to the equipments at different places inside the building is also beyond the scope of present work. Hence this estimate is forwarded for administrative approval & financial sanction.				
Item Sl.No.	Item	Quantity	Rate (Rs)	Unit	Amount (Rs)
	PART-A: CCTV SYSTEM				
1	SITC of 1/2.8" Progressive Scan CMOS, Dome camera 1920 × 1080 at 25fps, 2.8 mm / 4mm Fixed lens, 0.002 Lux at F1.4, 0 Lux with IR on, ICR, ONVIF (PROFILE S, PROFILE G, PROFILE T), support H.265, H.264, MJPEG, 120db WDR, 3D Digital Noise Reduction, Three individually configurable stream, 12 VDC & PoE, IR range: 40m, Support on-board storage up to 256 GB (SD card not included), IP67, IK 10, Supports Built-in Microphone,Edge Analytics- Line crossing detection, Intrusion detection, Motion detection, Scene change detection, Face capture, Region entrance detection, Region exiting detection, Video tampering, audio exception detection, Focus on human and vehicle targets classification based on deep learning UL, CE, FCC,BIS certified. Min. Illumination Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR, Warranty 03 years onsite comprehensive OEM warranty with parts and service. (Make: HIKVISION/Dahua /ALCONLINK/Matrix)	20	₹ 12,800.00	Each	₹ 256,000.00
2	SITC of 1/2.7" , 2.7mm to 13.5mm Motorized varifocal lense, Progressive CMOS,Bullet Camera ICR, Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR, Bullet camera 1920x1080:25fps, H.265,H.264,MJPEG, Three Streams, 3D DNR, ROI, 120dB WDR, BLC, IR range: up to 40m, Support on-board storage up to 256 GB (SD card not included), Audio and Alarm : 1 input, 1 output, , Edge Analytics- Motion Detection, Line crossing detection, Intrusion detection,video tampering alarm,DC12V & PoE; IP67; UL, CE, FCC, BIS Certified. Warranty 03 years onsite comprehensive OEM warranty with parts and service. . (Make: HIKVISION/Dahua /ALCONLINK/Matrix).	12	₹ 12,800.00	Set	₹ 153,600.00


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Item Sl.No.	Item	Quantity	Rate (Rs)	Unit	Amount (Rs)
3	SITC of IP Enable Network Video Recorder having minimum technical specification: Video Input: 16 Channel IP Fully Featured NVR; Audio Input/Output: 1 Channel Input/2 Channel Outputs, RCA; Display Interface: 2 HDMI (1 HDMI up to 3840 × 2160); 2 VGA; Display Split: 1/4/8/9/16/25/32; OSD: Camera title; Time; Video loss; Camera lock; Motion detection; Recording; Compression: H.265/H.265+; Resolution support: 2MP or higher, upto 12 MP; Frame Rate: 1–25/30 fps; Record Bit Rate: 320Mbps or 256Mbps(when RAID is enabled); Bit Rate: 16 kbps ~ 20 Mbps, per channel; Recording Mode: Schedule (Regular/Continuous, Motion Detection, Alarm); Manual; Stop; Trigger Events: Recording; PTZ; Tour; Alarm; Video Push; Email; FTP; Snapshot; Buzzer; Video Detection: Motion Detection—MD Zones: 396 (22 × 18); Video Loss; Camera Blank; Relay Output: 6 Channels; Storage: Internal HDD: 4 SATA ports (minimum), HDDs expandable: minimum 80 TB or higher (10 TB each or higher, Hard Disk Not Included); Sync Playback: 1/4/8/16/32 (maximum 4-ch @ 8MP, 8-ch @ 4MP, or 16-ch @ 1080p simultaneous playback); Search Mode: Time/Date; Alarm; Motion Detection (MD); Exact Search (accurate to a second); Smart Search; Playback Function: Play; Pause; Stop; Rewind; Fast play; Slow play; Next File; Previous File; Next Camera; Previous Camera; Full Screen; Repeat; Shuffle; Backup selection; Digital Zoom; Network: Ethernet: 2 x RJ-45 port (10/100/1000Base-T Mbps); Supported Protocols: HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, P2P; Network Throughput: Input 320Mbps; Output 320Mbps; Cascading: Built-in CMS to Monitor and Manage Multiple Matrix NVRs; ONVIF and Major Camera Brands Support; Usb Port: 4; RS232: 1 port (for PC communications and keyboard). Temperature: -10 oC ~ +55 oC; REGULATORY: CE, FCC, UL, ONVIF, BIS; Including Centralised VMS Software with perpetual License, HDMI Cable, Wireless Mouse and Keyboard and others accessories as per site requirement. Ref. (Make: HIKVISION/Dahua /ALCONLINK/Matrix). Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service	2	₹ 28,600.00	Nos	₹ 57,200.00
4	SITC of 10TB Surveillance Hard Drive. Make: Seagate, WD, HP. Warranty 03 years onsite comprehensive OEM warranty with parts and service.	4	₹ 38,600.00	Nos	₹ 154,400.00
5	SITC of best quality wireless Optical mouse with suitable battery Make: Logitech, HP, Lenovo. Warranty 03 years onsite comprehensive OEM warranty with parts and service.	2	₹ 850.00	Nos	₹ 1,700.00


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Item Sl.No.	Item	Quantity	Rate (Rs)	Unit	Amount (Rs)
6	SITC of Non-Touch Commercial LED UHD Display (Indoor Type) having minimum technical specification: Size (diagonally): 43-inch or higher; Effective Display Area (W x H): as per OEM; Panel Technology: Vertical Alignment, Type: IPS Panel/D-LED(Full Array LED)/Edge LED, Resolution: 3840 x 2160 pixels @ 50 Hz or higher, Aspect Ratio: 16:9, Colors: 2 Million Colors or higher; Brightness: 440cd/m ² or nits or higher, Contrast Ratio (Static): 1200:1, Viewing Angle: 178° Vertical / 178° Horizontal Display; Response Time: 8 ms(Typ) or less, Operation Hour: 24Hr x 7; Frequency: 50Hz ± 2% or better, OS: Android; Audio: 20Watt (10W + 10W); Networking Interface: Integrated Gigabit 10/100/1000 & Dual Band Wi-Fi 802.11 a/b/g/n/ac; Inputs and Outputs: Composite Video Input(s): 1 x (Side); HDMI Connection(s) (Total): 4 x (4 Side); Analog Audio Input(s) (Total): 1 x (Side); Digital Audio Output(s): 1 x (Side); USB: 2 x (Side); Ethernet Connection(s): 1 x (Side); Power consumption typical (w/h): as per OEM, Operating Temperature: 0°C~ 40°C, Humidity: 10~80%, IP Rating: IP 5x; Others: auto source switching; Regulatory approvals: Regulatory approvals: CE, CB, EAC. Including HDMI Cable and Wall mount fixing arrangement with All other Accessories as per site requirement. Ref. Make: Sony, Delta, Nec, Sharp, Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service except force majeure.	2	₹ 46,500.00	No	₹ 93,000.00
7	SITC of HDMI Cable 5Mtr(Make:Aten/Honeywell/Krystal/RR Cable)Warranty 03 years onsite comprehensive OEM warranty with parts and service.	2	₹ 1,200.00	Lot	₹ 2,400.00
8	SITC of outdoor type PVC box (6"x4") with necessary water sealing compound & SF of RJ45 keystone for fitting cameras including screws, nuts, bolts, plates etc as per direction of the EIC.	32	₹ 350.00	Each	₹ 11,200.00
9	Supply, Erection, Grouting and Earthing of 4 MTRS GI Octagonal / Round POLE FABRICATED PART AS PER STANDARD DIMENSION:THICKNESS - 3mm,BASE PLATE - 220 mm x 220 mm x12 mm.. FOUNDATION BOLT -M20 x 700 mm x 4 nos 'J' type bolts or As per Choice of EIC.(Make-Subham/Jindal/Bajaj/Utkarsh).Warranty 03 years onsite comprehensive OEM warranty with parts and service. & mugging of 1M high with 300mm x 300mm area of cross section & grouting the same in earth for minimum 1.5 m depth (Make:Jindal/Bansal/Utkarsh)	4	₹ 10,400.00	Each	₹ 41,600.00
	PART-B: Active and Passive IT Components				


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Item Sl.No.	Item	Quantity	Rate (Rs)	Unit	Amount (Rs)
10	SITC of Layer 2, PoE enabled, with PD: minimum 120 Watt Smart managed only, 1RU, GE Switch to be operated on 200-240VAC, 50 Hz Supply, with perpetual license of OEM, having minimum technical specification:a) 8 x 10/100/1000Base-T Mbps PoE enabled host ports (Minimum); b) 2x 1GBase-F SFP uplink port; c) Forwarding performance/stacking bandwidth/ backplane speed (Minimum) of 14.9 Mpps; d) Fanless operation with operating temperature up to 50°C; e) DRAM and Flash RAM as per OEM; f) Software support with IPv4 routing (542 routes), multicast routing (IGMP) including necessary software license; g) Minimum switching capacity of 20 Gbps; h) Number of VLAN Supported: 32 (Minimum).; i) Total number of MAC Address: 8,000 (Minimum); j) Minimum Security: User privilege management and password protection, DoS attack defense, ARP attack defense, and ICMP attack defense, Binding of the IP address, MAC address, interface, and VLAN, Port isolation, port security, and sticky MAC, MFF, Blackhole MAC address entries, Limit on the number of learned MAC addresses, 802.1x authentication and limit on the number of users on an interface, AAA authentication, RADIUS authentication, HWTACACS authentication, and NAC, SSH v2.0, Hypertext Transfer Protocol Secure (HTTPS), CPU defense, Blacklist and whitelist; Access Security: DHCP Relay, DHCP Server, DHCP Snooping, DHCP Security; k) Others: Applicable standards: IEEE 802.1p: CoS prioritization , IEEE 802.1Q: VLAN tagging, IEEE 802.1X: Port Access Control, IEEE 802.3: 10BASE-T, IEEE 802.3u: 100BASE-T,IEEE 802.3ab: 1000BASE-T, IEEE 802.3z: 1000BASE-X,IEEE 802.3af: Power over Ethernet, IEEE 802.3at: Power over Ethernet Plus, IEEE 802.3x: Pause Frames/Flow Control, IEEE 802.1D: Spanning Tree Protocol, IEEE 802.1s: Multiple instances of Spanning Tree Protocol (MSTP), IEEE 802.1w: Rapid reconfiguration of Spanning Tree Protocol, IEEE 802.3ad: Link Aggregation Control Protocol; l) REGULATORY: RoHS, WEEE, IEC 61000-4-2:2008, CISPR Class, ICES-003 Class A,UL,CSA 22.2,FCC,EN 300 386, CCC, ICES -003, CB. The OEM should have 24x7 TAC support center with India toll free number reflected in official website. Ref. (Make- Netgear/Zyxel/Cisco.) Warranty: 03 (Three) years onsite comprehensive OEM warranty including parts, and	6	₹ 36,500.00	Each	₹ 219,000.00
11	SITC of outdoor type / UV protected, antirodent, antitermite ARMoured CAT 6 Networking Horizontal Cable, 1000Base-T (Gigabit Ethernet), 100Base-T (Fast Ethernet), 10BaseT (Ethernet), 1-500 MHz (Minimum), Category 6, 4-Pair, SFTP, 23 AWG solid bare copper conductors with Fluorinated Ethylene Propylene insulation,polyester separator, OUTER sheath COVER as to standard of ISO/IEC. Make: 3C3/Derwiser/Polycab/R& M/Legrand. Warranty 03 years onsite comprehensive OEM warranty with parts and service.	3850	₹ 72.00	Mtr.	₹ 277,200.00


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Item Sl.No.	Item	Quantity	Rate (Rs)	Unit	Amount (Rs)
12	SITC OF 6 Core SM Outdoor Armoured OFC Cable : 6 Fiber Multi Mode, Armoured, Unitube, Gel filled cable complying to ISO.IEC 11801 - 2nd Edition, type OS2; AS/ACIF S008; AS/NZS 3080,ITU-T REC G 652D,AS/NZS 3080; IEC 60332-1; suitable for use in direct burial, outdoor ducts and backbone cabling; Corrugated Steel Tape Armour -Thickness > 0.125mm; Loose tube material : Single PBTP Loose tube filled with water blocking Thixotropic gel; Jacket material: UV Stabilised Polyethylene (HDPE); Operating Temperature : -10 Degree C to +70 Degree C; Tensile Strength : 1000N; Crush Resistance : 2000N/10 cm. Make: 3C3/Derwiser/Polycab/R& M/Legrand. Warranty 03 years onsite comprehensive OEM warranty with parts and service.	750	₹ 120.00	Mtr.	₹ 90,000.00
13	SITC of PATCH CHORD Category 6, 4-Pair,CAT6 SFTP Patch cord (1Mtr) - Conductor size: 24 AWG stranded; copper wire; Nom. O.D.: 5.9mm; Sheath: LS0H; Bend radius: 4X O.D; Operating temperature range: -25°C to +55°C; CSA FT1, IEC 60332-1,IEC 61034; ISO/IEC 11801:2002/Amd 2:2010; Cat 6-, TIA-568.2-D Cat 6, EN 50173-1:2011 Class E, ETL Verified AS/CA S008:2020. Make: 3C3/Derwiser/Polycab/R& M/Legrand. Warranty 03 years onsite comprehensive OEM warranty with parts and service.	70	₹ 180.00	No	₹ 12,600.00
14	SITC of CAT 6 U/UTP 8 Port fully loaded patch Panel ISO 11801 AMD 1 Class EA TIA-568-C.2 Cat 6 ANSI/EIA-1069-A IEC 60603-7 Ref. Make: 3C3/Derwiser/Polycab/R& M/Legrand. Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service except force majeure.	6	₹ 5,500.00	No	₹ 33,000.00
15	SITC of WALL Mounted Cross Connect Equipment's 12U x 600 x 500 Rack - Front Glass Door with Cam Lock - Fan Unit of 90CFM / 230 Volt - 1no - 6 Way 5A PDU, along with input Cable - 1no . Hardware packet of 20-3 No., Ref. Make: Tata, Vertiv, Netrack, Valrack, Rittal, APW, MRS Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service except force majeure.	6	₹ 12,500.00	No	₹ 75,000.00
16	SITC of Single Mode LIU, 12F, 1U Drawer shelf, Fully loaded with SC, OM3 Pigtails, Adapters, Splice Trays, Fiber Management Rings and Splice Sleeves. Ref. Make: 3C3/Derwiser/Polycab/R& M/Legrand. Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service except force majeure.	6	₹ 10,231.00	No	₹ 61,386.00
17	SITC of OFC Joint and Closer including all accessories (Splicing, Pigtails, etc) as per sites requirements Ref. Make: 3C3/Derwiser/Polycab/R& M/Legrand. Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service.	6	₹ 250.00	No	₹ 1,500.00


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Item Sl.No.	Item	Quantity	Rate (Rs)	Unit	Amount (Rs)
18	SITC of 10Gb Duplex Single Mode 50/125 OM3 LSZH Armoured Fiber Patch Cable, SC-SC/ SC-LC/ LC-LC as per sites requirements - 3 MTR Ref. Make:3C3/Derwiser/Polycab/R& M/Legrand. Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service except force majeure.	12	₹ 2,480.00	No	₹ 29,760.00
19	SITC of 1GBase-F Single Mode modular and field replaceable SFP module of same rating of Ethernet Switch and OEM Ref. Make: 3C3/Derwiser/Polycab/R& M/Legrand. Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service except force majeure.	12	₹ 5,400.00	No	₹ 64,800.00
	PART - C: UPS System , Electrical Connections SPD & earthing				
20	SITC 600 VA (0.6/68 (KVA/VAH)) Line-Interactive UPS having minimum technical specification: 600VA /360 Watt Line Interactive Micro Processor Controlled UPS; Input Volt. Range: 140-300V (Full Load); Nominal Input Freq: 50Hz; Output Volt. Range: 230V +/- 10%(Batt. Mode); Output Freq. Range: 50Hz +/- 1%; Receptacle: 3 x Indian Socket; Internal Batt: 2 x 7AH/9AH; 90% Batt. Recharge: 4-6Hrs; Inverter Efficiency (%): >= 70%; Cold Start: Require; Operating Temp: 0-40°C; Surge Protection: Inbuilt; BIS Certification Require; Type Test Report; ISO 9001, ISO14001, OSHAS18001; Special battery terminal insulation cover and other accessories. Make: APC, DELTA, Eaton, Numeric, Orion; Make Battery: Amara Raja- Quanta/Exide, Model: Tower Mount. Warranty 03 years onsite comprehensive OEM warranty with parts and service.	5	3850	Each	₹ 19,250.00
21	Supply of 1KVA Offline ups / Power Factor 0.8 ,INPUT:Voltage (VAC) 100~300VAC,Over Voltage Transfer (Adjustable) :270V / 280V AC Frequency (Hz) 50 / 60Hz ± 10Hz Auto Sensing ,OUTPUTVoltage AVR Mode 200~245V,Voltage Battery Mode 230VAC ±10%, Frequency (Hz) on Battery 50/60Hz ± 0.1Hz, Waveform Simulated Sine Wave or better,No. of PC Support (LCD Monitor) 2 Nos. or higher,Transfer Time (ms) 4-8 ms Typical or better, Battery with sufficient backup time for 1 Hour minimum on full load. Battery Type Sealed Maintenance Free Lead Acid VRLA, Recharge Time 6-8 Hours to 90% of full charge After Complete DischargeDC Start. Protections :- Battery Low, Overload, Short Circuit, Spike and Surge Protection for voltage 1.2/50 µs for current 8/20 µs and Fault conditions Audible Alarms Low Battery, Overload, Short Circuit and Fault ConditionsAC Mode Green Lighting , Battery Backup Mode Orange Lighting Fault Mode Red Lighting. Communications RS-232 / USB (Optional),Outlet 3 Socket,Certifications Quality/ Safety / Performance ISO 9000, ISO 14001, OHSAS 18001, ISO 27001, BIS and RoHS IEC/EN62040-1 IEC/EN62040-2, IEC/EN62040-3, Complying to CE Temperature Operating: 0~45°C, Storage: -10°C ~ 55°C Humidity / Altitude / Noise 0~95% RH Non-condensing / <1500 M / Low Audible Noise Level.(Make-Numeric/ Vertiv /APC/Delta) , (Battery AMCO/Exide POWER SAFE/Amara Raja) with battery rack. Warranty: 03 (Three) years onsite comprehensive OEM warranty with parts and service.	1	10865	Each	₹ 10,865.00


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