## **Technical Specifications of Items/BoQ**

S. No.	ltem	Description								
1.1	Indoor Camera	2 MP / 30M IR Fixed Bullet Network Camera • 1/2.8" CMOS • 1920 ×1080@30fps • fixed lens • H.265+ • Three streams • 120dB WDR • 2 Behavior analyses, and face detection • BLC/3D DNR/ROI • IP67 • Built-in micro SD/SDHC/SDXC card slot								
1.2	Outdoor Camera	2 MP / 80M IR Fixed Bullet Network Camera • 1/2.8" CMOS • 1920 ×1080@30fps • fixed lens • H.265+ • Three streams • 120dB WDR • 2 Behavior analyses, and face detection • BLC/3D DNR/ROI • IP67 • Built-in micro SD/SDHC/SDXC card slot								
2.1	16 channel NVR	4K NVR with 2 SATA interfaces  • Third-party network cameras supported  • Support 1-ch HDMI, 1-ch VGA, HMDI at up to 4K(3840x2160) resolution  • 160Mbps incoming bandwidth  • Support H.265/H.264/MPEG4 video formats								
2.2		4K NVR with 2 SATA interfaces  • Third-party network cameras supported  • Support 1-ch HDMI, 1-ch VGA, HMDI at up to 4K(3840x2160) resolution								

	32 channel NVR	256Mbps incoming bandwidth     Support H.265/H.264/MPEG4 video formats
2.3	64 channel NVR	4K NVR with 8 SATA interfaces  • Third-party network cameras supported  • Support 2-ch HDMI, 2-ch VGA, HMDI1 at up to 4K(3840x2160) resolution  • 320Mbps incoming bandwidth  • Support HDD hot swap with RAID0,1,5,6,10 storage scheme configurable  •Support H.265/H.264/MPEG4 video formats
3	Hard Disk	4TB Surveillance Hard Disk
4	Cabling	Pure Copper 23AWG CAT6 (ISO Certificated) Branded Power Cable 3/29 Black/Red, (ISO Certificated) including Branded PVC Pipe and Dura duck (ISO Certificated) /Running Foot (As per required)
5.1	Network Switch	Web-managed PoE switch with 8 100M ports PoE + 2 ports COMBO Power Switch max: 123W 802.3af/at PoE standard; Data monitor and control. VLAN configurable; Port trunk; STP, multicast and port mirroring. With 2U Rack and Power Extension Board, Etc
5.2	Network Switch	Web-managed PoE switch with 16 100M ports PoE + 2 ports COMBO Power Switch max: 230W 802.3af/at PoE standard; Data monitor and control. VLAN configurable; Port trunk; STP, multicast and port mirroring. With 2U Rack and Power Extension Board, Etc

5.3	Network Switch	5 Port Giga Switch 10/100/1000
6.1	LED 40"	40 Inch LED, 1920x1080 resolution with HDMI and official warranty
7.2	UPS / Battery	Branded 2 KVA UPS With 2 x Branded Acid Battery 230 Amp (27 Plats) with Installation 12U Cabinet Rack - Dust proof with Fan, power supply and all fitting arrangements.
8	Complete installation	IP CCTV Camera and Cabling electric wiring Installation, Testing, Commissioning, Staff Training, Delivery and Traveling, Programming and Handing Over of Complete System (Per Institute)

	Procurement of CCTV Surveillance system														
Department Requirments (Servey Report)		CCTV Camera's		Netwo	Network Video Recoder		Hard Disk	Network Switches			Power Backup		Display	Cable	
S.No	Name of Institute	Total No's of Camera	indoor Camera : 30M IR	Outdoor Camera : 80M IR	16 Channel NVR	32 Channel NVR	64 Channel NVR	4TB HD	08 Port Switches	16 Port Switches	Network 05 Port Switches	1 KVA UPS / 200Amp ×01 Batt	2 KVA UPS / 200Amp x2 Batt	40" LED	Approx; Cabling 90RFT Per Camera
1	GTVC(boys) summer bagh dir (lower)	30	20	10	×	1	×	2	×	2	1	×	1	1	2700
2	GTVC(boys) Ghaznikhel Lakki Marwat	14	10	4	1	×	×	1	2	×	1	1	×	1	1260
3	GTVC (boys) Dargai Malakand	39	27	12	×	×	1	2	1	2	1	×	1	1	3510
4	GTVC (W) Totanto Banda Swat	7	5	2	1	×	×	1	1	×	×	1	×	1	630
5	GTVC(women) timergara dir (lower)	10	8	2	1	×	×	1	2	×	1	1	×	1	900
	BoQ	100	70	30	3	1	1	7	6	4	4	3	2	5	9000