CADET COLLEGE LARKANA

Name of Work   :   **Information & Computing Technology and Security System**

Sr#	BRAND / MODEL	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	**Language Laboratory System** JCOM/WICOM OR EQUIVELLENT	Supply & Installation of SOFTWARE + HARDWARE based Language Laboratory Solution for 1 Teacher + 48 Students. The solution should meet all specifications of WICOM JMC-5000 Laboratory Solution. The solution should Include: * All furniture required for 48 Students + 1 Teacher including Teacher/Student Platforms * All Computer Hardware including 19" LED Monitors, headset, keyboard, mouse Etc. for 48 Students + 1 Teacher (as per specification given beneath) * All Software complete with life time licenses for 48 Students + 1 Teacher including English Language Learning Software 1. Talk Now ! 2. Talk Business ! 3. World Talk ! 4. Talk More ! The Solution will be complete in all aspects including supply & installation of Teacher PC, Visual Presenter, Interactive board with short through projector, LED TV, DVD player, Floor Stand Air Conditioners, Master recorder, Power supply, Student Recorder, Computer Console, Students display, printer, Complete class room furniture (teacher & student), LAN infrastructure, electrical work, JCOM Software System, English Language Software System, Headsets, Interior Cosmetic works (PVC wall paneling, false ceiling, blinds, ceiling lights, fans, speakers, floor tiles etc.)	1	Job		

2	**Chinese Language Learning Software Solution**
	
	Euro Talk
		Supply & Installation of Chinese Language learning software installed at Teacher and Students PC and managed and touch through Language Laboratory System Software 48+1.
		
		   1) Talk More Chinese
		   2) Talk the Talk
		   3) Travel Mate book
		   4) 100 Word Exercise book
		
		The solution will be complete in all aspects including Supply, Installation, and training to the faculty.
			1	Job		

| 3 | **Smart Science Laboratories**

Physics, Chemistry, Biology | Supply ,Installation Testing and Commission of state of the Art Practical Laboratory Solution ,including furniture , Hardware and software.

The solution will be completed in all aspect including:
Lab Software
3D software for School Laboratory to create an innovative and interactive classroom, enabling the teacher to give awareness pf today and tomorrow, enabling the teacher and the students to always think about a way to revolutionize educational env ___ ent , enabling digital environments an ___ focused on 3D educational technology, used as tools to facilitate the construction of knowledge for this new world . keeping in view the potential of 3d as an effective innovation environment in education, The software must be an innovative solution for education directed to k12 schools with 3D contents in Science, Biology, Geography and Chemistry. The solution must be complete in all aspect for a classroom environment including all accessories and platform, including 7th generation Core i7 Desktop Machine with 500Gb HDD and 4 Gb ram 21inche monitor wall mounted
Furniture
Wall bench, single gas outlet, sockets, island benches, steel and wood structure, storage cabinets, lab stools, digital microscope on each practical table, all physics laboratory practical apparatus, including False ceiling, electrical work, Data nodes, flooring, wall paneling etc. | 3 | Job | | |
| 4 | **Smart Interactive White Boards**

Genius / IE Board/ASK proxima | Supply and installation of Interactive With Board Complete with Short throw Projector and branded desktop computer with latest configuration

"82 inch IR Interactive Smart Whiteboard Multi-touch
• Resolution 32767 x 32767 (Interpolation)
• Linearity error 1.5mm
• Response time 8ms
• Response speed < 20ms
• Input method : finger ,teaching point or opaque object
• Touch times : unlimited | 5 | Nos. | | |

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		• Touch activation force: no minimum touch activation force is required with IR touch technology • Min object touch : 5mm • Ratio : 4:3 • Touch technology : IR • Interface : USB • Size : 1722x1241x38 mm • Active area : 1606.5x1126.5mm				
5	**Desktop Computers** HP or Equivellent	Supply and installation of Desktop PC Core i7, HDD 1TB Sata, Memory 4GB DDR3, DVD/RW. With 19'' LED Monitor, keyboard and mouse	20	Nos.		
6	**Walk through Gate**	Supply & Installation of Walkthrough Gates Electric current: AC100V~240V 50/60Hz Power: 10W ☆ Work environment: -20℃~+45℃ ☆ Gross Weight: 70kg ☆ Outer frame: 2220mm (h) x 820mm (w) X 500mm (d) ☆ Inner frame: 2000mm (h) X 700mm (w) X 500mm (d) ☆ Multi Pinpoint zones to precisely identify multiple target locations from head to toe ☆ Advanced broadband detection technology: can detect ferrous and non-ferrous articles. ☆ Sensitivity adjustable from Level 0 to 299 (300 levels) High: Can detect a clip ☆Low: Detect big metal articles such as: knife, gun, and copper, aluminums, zinc (more than 150g), ignoring metal in belt button, shoes. ☆ Shock proof to avoid false alarm ☆ Sound and light alarm ☆ Intelligent traffic and alarm counters that calculate traffic flow and resultant alarms. * Tensile Strength of the steel structure component must be 480-600 n/nm sq. ; * Wall thickness of structure components 10-20mm ; * Blocking height above road level 700mm; * The Electro hydraulic drive unit as well and the electrical PLC -Control must be weather proof locale steel casing for outdoor installation on concrete base (max 20m distance from road block ; * Raising and Lowering time of the blocking element : 3sec to 6sec * The blocking element with the integrated anti deflection device must be electro hydraulic and operated with an electrical motor of adequate size 3 phase. * Working temperature -20℃~ +60℃	4	Each		

		* Oil tank capacity(L) 60, Oil rate of flow (L/min) 24, Oil Viscosity 32cst(40 ℃) * Controlling Signal Relay signal, dry contact signal, RFID * 1 no. push-button set „Up-Stop-Down" (box-type pendent control) To be located in the guard house or similar Room.				
7	**Biometric Time Attendance Machines** SUPREMA BIOLITE NET or Equivalent	Supply and Installation of Time and Attendance Biometric Machines. IP based Outdoor Fingerprint Terminal with given Specifications. • CPU 400MHz DSP • Memory 8MB flash + 16MB RAM • Fingerprint Sensor 500 dpi optical sensor • Identification Speed 2,000 matches in 1 second • Fingerprint Capacity 5,000 fingerprints (10,000 templates) • Log Capacity 50,000 events • RF Card Mifare (13.56 MHz) • Authentication Finger / PIN / Card • Network Interface TCP/IP, RS485 • Wiegand 1 channel (input/output switchable) • TTL I/O 2 inputs for exit switch and door sensor • Internal Relay Deadbolt, EM lock, door strike, automatic door • Ingress Protection Rate IP65 class • LCD 128 x 64 pixel, black & white • Keypad 3 x 4 keypad, 3 navigation keys • Sound and Interface Multi-color LED and multi-tone buzzer • Operating Voltage 12VDC • Size 60 x 185 x 40 mm (W x H x D)	5	Nos.		
8	**Under Vehicle Scanning System**	Supply and installation of Under Vehicle Scanning System with following features and Specifications: Auto digital line scan, high-resolution undercarriage imaging.● Decision Response Time: 2-3 seconds (the length of time from when the vehicle clears the scanning platform until the system automatically identifies the vehicle, automatically searches the under carriage and displays the decision results on the operator terminal) ● Applicable to variety of vehicles, wide vision : Max Vehicle Length: 25 meters standard – longer vehicles can be scanned requires setup. Vehicle Width: 2.75 meters standard – wider vehicles w/optional settings.● Test will be completed during the vehicle maneuvers without stopping, adapted to different speed.● Undercarriage image can be stored, retrieved, searched or compared with other images.● Whole image display ion monitor, can zoom, playback, sign in the images, stretching and cutting, etc ● Multi entrance management model, and statistics of entering and exiting vehicles.● Flexible detection process can be made on site to satisfy the needs of various work conditions.● Image monitoring, video recording for different scenario Technical Specification	2	Jobs		

		:Scanning unit : 1) Material : stainless steel2) Dimension: 1100(L)*280(W)*205(H)mm 3) Weight : 105kg4) Water-proof grade: IP685) Load bearing Weight: 50T Color CCD Line Scan camera :1) Resolution: 5000* 2048 pixels, 2) Camera view: > 170° & Pixels size: 14μm*14μm3) Line rate(max)19kHz 4) ADC Resolution: 12 bit & Responsivity : 41V/uJ/cm25) Image format The solution may be complete in all aspects including data and electrical work.				
9	**Centralized IP P.A System**	Supply ,Installation of Centralized Management Software to remotely manage all the terminals be installed at Main Control Room server machine NAS-8500.The Software must have comply to following features . * Capability of unified managements and settings over all intercom terminals . * Capability to Display various type of terminal status in real time such as IP Address , volume , Task, Status etc. * Capability to configure kinds of terminal	1	Nos.		
10		Supply , installllation of MAIN IP Video Intercom Paging Console NAS -8530V with following features *Compatiable with standard SIP Protocal * Support partition broadcasting * interagted 4.3" LCD screen with 33 output buttoms ; Integrated 3W Speaker with full duplex intercom and monitoring function * Support H.264 ,D1 and CIF formats * Netwrok Protocol TCP/IP ,UDP,ARP ICMP, IGMP ,SIP 2G ,HTP and FTP * Audio Coding MP2 ,MP3 . PCM, ADPCM	4	Nos		
11		Supply , Installation and connecting up ot Main Guard Room IP PA video Intercom NAD-8531V with following features * Professional console design must have the capability to be Wall mounted /Flush Mounted and Desktop setting * With 10" Digital TFT display resolution of 1280 x 800 * integrated Digital Camera * Support Privicay protection , Two way audio with H.264 coding * Built in 3W speaker to make handfree calls , broadcasting etc * Network Protocol TCP, UDP, ARP, ICMP ,IGMP	7	Nos.		
12		Supply , Installation and Connecting up ot IP PA Terminal for each Building for further connections to the speakers with following fearures NAS-8505B * Integrated Constant Voltage Amplifer * Equipped with Dual core (ARM+DSP) chipe of industrial grade * Built in digital amplfier of D-Class with power of 60W or 120W * heat desipation and high efficient capability * Network protocol TCP/UDP/ARP/ICMP/IGMP * Network Chip 10/100Mbps * Audio Sampling 8kHz -44kHz ;Power output 60W * Interface 1x RJ45 port , line in , 1 line out ,power out, 1 Alarm in and 1 Alarm out	14	Nos.		

13		Supply & Installation of IP PA Speaker indoor NAS-8507A	18	Nos.		
14		Supply & Installation of IP Paging MIC NAS-8502IP	4	Nos.		
15		Supply & Installation of IP PA outdoor Speaker NAS-8507B	20	Nos.		
16		Supply & Installation of IP PA Amplifier for CTRL and ATDR NAS8510 Power Output 480Watts (min) RMS , Frequency response 50Hz to 20 Khz	1	Nos.		
17		Supply & Installation of IP PA Amplifier BAS 8508	1	Nos.		
18		Supply & Installation of Data Cabling	75	Nos.		
19		Supply & Installation of PVC Pipe 1/2 inch	500	Nos.		
20		Supply & Installation of Channel Patti 25x25	500	Nos.		
21		Supply & Installation of Cisco Juniper 24 port 10/100 / 1000 base network switch	3	Nos.		
22		Supply & Installation of 8 Way PDU	7	Nos.		
23		Supply & Installation of Network Cabinet 9U	7	Nos.		
24		Supply & Installation of Electrical Point at Each location	75	Nos.		
25	**Warranty**	The contractor shall be responsible for one year warranty of all the installed equipment including replacement of any damaged item/equipment. The warranty period shall start after the handing over of the project.	**At the Contractor's End**			
26	**Maintenance**	The Contractor shall provide 01 year SLA (repair and Maintenance services) for all the equipment. The SLA agreement time will start after the ending of warranty time.	01	Job		
				Grand Total		

Member
Procurement/Project Committee
Cadet College Larkana

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Chairman
Procurement/Project Committee
Cadet College Larkana