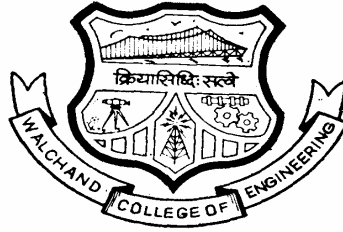


**M.T.E. Society's
WALCHAND COLLEGE OF ENGINEERING,
SANGLI**

TENDER DOCUMENT



**LAST DATE OF RECEIVING
15th September, 2008 upto 5:00 pm**

**DATE OF OPENING THE TENDER
16th September, 2008 at 2 pm
In Conference Hall, Main Building**

(1) CCF Department :

ITEM No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
1.	RAM for Desktop PC 1. For HCL 1GB DDR SDRAM @400 FSB compatible with Intel 915G chipset 2. For HCL 512MB DDR SDRAM @400 FSB compatible with Intel 915G chipset 3. For DELL 1GB DDR2 SDRAM @533 FSB compatible with Intel 945G chipset			35 each	
2	VMWare (Software) 1. Academic VMware Infrastructure 3 Enterprise for 2 processors; additive licenses, (includes ESX Server 3, Virtual Center Agent, Virtual SMP, VMFS, VMotion, HA, DRS, installation and on site training) 2. Academic VMware Virtual Center Management Server 2 for VMware Infrastructure, installation and on site training. 3. VMware Fusion for Mac.			2 lic. 1 lic. 4 Licenses	

(1) CCF Department :

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
3	<p>Apple Mac computers Qty</p> <p>1. Apple iMac MB324LL/A / 325LL/A 3 2. Apple MacBook MB 403LL/A and MB 404LL/A 1 3. Apple Final Cut Pro / Express 1 4. Apple Logic studio 1 5. Apple iWorks'08 4 6. ScreenFlow for Mac 4 7. Wacom Bamboo 4 8. MS Office for Mac OS 4</p> <p>(For iMac and MacBook quote Video adapter for LCD projector and other accessories separately) Mention Educational prices.</p>			3 1 1 1 4 4 4 4	
4	<p>Antivirus Client-server based with auto up gradation and deployment through server. [AVAST/ Kaspersky latest version with 3 years up gradation]</p>			150 users	
5	<p>Deep Freeze System Integration Management Software (Edition) 1) Standard 2) Server 3) Client</p>			1 4 100 users	
6	<p>Dot Matrix Printer Epson LQ-2090 with Data cable for connecting to PC</p>			2	
7	<p>Personal black & white HP LaserJet P1007 Printer with USB data cable</p>			1	
8	<p>Personal black & white HP LaserJet P1008 Printer with USB data cable</p>			1	

(1) CCF Department :

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
9	<p>Desktop Computers (IBM/DELL/HP/COMPAQ) with following specifications or equivalent:</p> <p>Intel Core 2 Duo Processor E6550 (2.33 GHz, 4MB cache, 1333 FSB, Vpro)</p> <ul style="list-style-type: none"> • 2GB (2x1GB) 667MHz Dual Channel DDR2 SDRAM • 160GB SATA Hard Drive (7200RPM with 8MB Cache) • Intel G31 Express Chipset Mother Board or Higher • Intel Integrated Graphics Accelerator X3100 • Integrated Brodcom 5722 Gigabit Ethernet • Raid 1 Support • USB Keyboard (English) • USB Optical Scroll Mouse, • BTX Chassis with SMPS • 17" LCD Monitor, • Internal Speaker • One Serial, One Parallel, One VGA, One RJ-45 Port, Eight USB Ports (min 2 USB ports on Front side) • On-site warranty: minimum 3 years. 			10	

(2) CSE Department:

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
1.	Computer Counter:- Providing and fixing counter approx. 85 rft with height of 750mm and width 600mm in exterior grade Eco-board/marine grade 18mm plywood, .back of table is covered with min.1 feet width 18mm plywood and top min. 30mm width covered with 1mm ISI laminate, fitting of foot-rest & arrangement of putting computer CPU at the base, and all work should be finished in standard ISI mark material, paint and polish as required . The counter having provision of keypad every approx. 2.5' length, all as per sight measurement, design & drawing as directed by engineer in-charge. [Quote separately for exterior grade Eco-board and marine grade 18mm plywood]			85 rft approx.	
2	Aluminum partition: - Providing and fixing Aluminum glass partition with medium weight aluminum sections 2.5" x 1.5" and glazing clips with attached aluminum door & ISI mark floor spring, the partition consists of 5 mm plain modiguard float glass and 12 mm ISI BSL pre-laminated particle board (eco board/vilson) and with black pure polyester powder coating etc. necessary hardware and fitting as per design & drawing and directed by engineer in-charge.			150 sqft Approx.	
3	Provision of raceway for network-cable:- Providing and fixing `C' type raceway on existing wall for computers in exterior grade particle board (eco-board/vilson)/marine grade 12mm ISI plywood covered with 1 mm ISI laminate, approx. 8 inch height and approx. 100 ft in length with provision of fixing I/O boxes and inside wiring-cable, complete as per specification and directed by engineer in-charge. [Quote separately for particle board and marine grade plywood]			300 rft approx.	
4	PVC carpet: - Providing and fixing 0.8 mm PVC carpet to existing flooring with/without POP filling as directed by engineer in-charge.			1500 sqft approx.	
5	Revolving chair for computer lab having facility of height adjustment and pushback			25	
6	Steel Cupboard 1280mm x 760mm x 430 mm in 20/22 full gauge			4	

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
7	HP LaserJet printer 1020+ or equivalent with USB data cable			1	
8	All-in-one (MFD) flatbed HP LaserJet 3055 PCL 6 with USB data cable or equivalent			1	
9	External USB Hard Disk 160GB			1	
10 a	17" LCD regular(not wide-screen) monitors			15	
10 b	17" LCD wide-screen monitors			15	
10 c	17" LCD regular (not wide-screen) monitors with buyback of existing old 15" CRT monitors			15	
10 d	17" LCD wide-screen monitors with buyback of existing old 15" CRT monitors			15	
11	Structured cabling (1) D-LINK I/O box (2) 1 mtr patch cord (3) 2 mtr patch cord (4) 24 port patch panel – 4 No. (5) CAT-6 305 mtr box – 5 No. (6) 6U Network Rack (7) 15U Network Rack (8) 24 port D-Link Switch – 1 No. (9) Cable laying and commissioning			90 50 40 4 5 1 1 1 1 90 ports	
12	Microprocessor Trainer Kits MF-DYNA-85 : Low cost 8085 Microprocessor Trainer or equivalent with switch mode power supply Cable & Connector set			8	
13	Online UPS 6 KVA/4.2KW Libert make or equivalent with sealed maintenance free batteries			1	

(3) Mechanical Department:

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
1	Grease Penetrometer: Direct-reading instrument for precision penetration measurements of bituminous materials, grease and waxes. Unit has 5" diameter indicator dial, graduated in 400 divisions of 0.1mm, corresponding to 40mm penetration. 47.5g plunger with 3.2mm hole, and two loading weights (50g and 100g). Overall Approximate dim 10-1/2" x 13" x 22" (266.7 x 330.2 x 558.8mm).			1	
2	Flash and Fire Point: Flash & Fire Point Apparatus having a flash point above 49°C. Consists of brass test cup with handle removable cup cover with the spring operated rotated shutter having oil test jet flame device, stirrer with flexible shaft. The assembly rests in Air Bath which is covered with dome shape metal top. The cup assembly is positioned in a cast iron air bath, fitted with a chrome plated brass top having electric heater with temperature controller			1	
3	Cloud and Pour Point: Temperature Range: upto 0°C, Four tanks(stainless steel), with 4 test positions per tank, with 4 preset temperatures. Floor Model. Individual Digital Temperature indicator cum controller with display resolution of 1°C. PT-100 Sensor. Provided drain			1	
4	Bomb Calorimeter: Equipment size: Table top model Range: Up to 8000 Cal/g for one gram of sample. Sample size: Up to 2g Precision: Repeatability ± 25cal Resolution of the temperature: Up to 0.01° Analysis time: <30 minutes Electrical requirements: 230V & 50Hz			1	
5	Dead weight Pressure gauge: Accuracy: 0.1% of produced pressure Operating Pressure: (100 kPa to 7000kPa) Body Material: Aluminum Alloy Piston and Cylinder Material: Stainless Steel Weights: Nonmagnetic die-cast zinc alloy, NBS traceable Operating Fluid: SAE 20 Automotive or Machine Oil O-Rings: Standard Buna-N Reservoir Volume: Approximately (1.5 liter)			1	

(3) Mechanical Department:

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
6	Hand Held Vibration Meter with pick up: Capable to measure overall vibration levels in terms of RMS, Peak Velocity (mm/s) ,acceleration g , displacement in microns with magnetic base. Displacement Range : 0-3000 microns Velocity Range : 0-300 mm/s Frequency Range : 0-20 kHz			1	
7	Microphone (Electric condenser Microphone): Sensitivity : -69db (Typ.), 0dB =1V/ μ bar at 1 khz Output impedance :600 Ω Frequency Range :50-18000Hz Maximum allowable input : 120dB SPL (min) Power Supply : 6V(AA-961) (equiv. to4LR44 or 4SR44) With 5 m mini plug terminated output cable along with sound calibrator			1	
8	Hand Held Sound level Meter: Integrating –averaging sound level meter range 30 to 137 db(A) Including microphone, cable, adaptor, sound calibrator.			1	
9	12”(300mm) Research (Transmission) Polariscope: Polarizer: one, Analyzer: one, Quarter wave plate : Two Field : 300 (plus minus 5 mm) diameter. Replacing Polariser analyzer and quarter wave plates filters along with acrylic covers from the both sides of each Filter by new ones. These filters are to be replaced in existing frame (main body) of 12” (300 mm) Research Polariscope in Post Graduate laboratory of Mechanical engineering Department. The quoted Price must be including servicing and setting of entire polariscope unit.			1	

(3) Mechanical Department:

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
10	Accelerometer(7gm) : Charge Sensitivity :5 pC/g ±10% Capacitance :300 pF (nominal) Transverse Sensitivity Less than 5% Frequency Range 1 Hz to 30 kHz (dependant on charge amplifier) Temperature Range -55 to +250 °C Mounted Base 45 kHz (nominal) Amplitude Linearity ±5% Acceleration Range ±2,000 g Case Material Stainless steel Connector Microdot Weight 7 gms (nominal) Mounting 10-32 UNF male Sealing IP65 Torque 3 Nm Charge Amplifier Required MTN/CA003			1	
11	Accelerometer (45gm): Standard Sensitivity 100 mV/g ±10% nominal at 80 Hz Frequency Response 2 Hz to 10 kHz ±5% (-3 dB at 0.8 Hz) Mounted Base Resonance 20 kHz (nominal) Isolation Base isolated Dynamic Range ±80g Transverse Sensitivity Less than 5% Electrical Noise 0.1 mg max Current Range 0.5 mA to 8 mA Temperature Range -50 to 140 °C Temperature Sensitivity 0.08 %/°C Bias Voltage 12 Volts (nominal) DC Supply +18 to 30 Volts Case Material Stainless steel Mounting Torque 8 Nm Weight 45 gms (nominal)			1	

(4) Electrical Department:

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
1.	Induction motor controller- TMS320LF2407, 30/40 MHz, 64-kB external RAM, RS-232 and JTAG interfaces, 3-phase GBT power module 750 w, 4 A, induction motor- 230 VAC, 370 W, with encoder,MCWIN2407 software, Real-time serial communication monitor PROCEV2407, Processor evaluation software , Motor Control Developer software TI software tools: C-Compiler, Assembler and Linker.			1	
2	DC motor control servo system -TMS320LF2407,30/40 MHz, 64-kB external RAM, RS-232 and JTAG interfaces, 3-phase inverter power module Brushless motor equipped with Hall sensors and encoder MCWIN2407 Pro software: Real-time serial communications monitor PROCEV2407, Processor evaluation software, Digital Motor Control Developer software, Brushless Motor Control software tools: C-Compiler, Assembler and Linker.			1	
3	Lab View Software- full basic development system software for windows, other modules for instrumentation and DAC, control system design and simulation, real time control, Embedded modules.			10 User Copy for Basic software and other module 01 copy each.	

(5) Physics Department:

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
1	Magnetic Stirrer (M 16.5 Hotplate stirrer with V2A hotplate, microprocessor controlled, LCD display 60-1600 rpm, 500 Watt, connection for external probe Pt-100, CTC*)			1	
2	Muffle Furnace Oven Size - 28" x 10" x 18" Maximum Temperature-1600 Degrees Fuel & Quantity Electric (18.4 KW at 45 Amps) Load Voltage..240 Volt, 3 Phase, 60 Cycle Control Circuit.120/1/60			1	
3 a	Color printer with Scanner HP DeskJet All-in-one or equivalent			1	
3 b	All-in-one(MFD) color printer HP LaserJet All-in-one or equivalent			1	
4	$\frac{e}{m}$ for electron experimental set up with all accessories			2	
5	Band gap of Semiconductor by Four Probe Resistivity Set up			2	
6 a	Pen drives (4 GB)			2	
6 b	Pen drives (8 GB)			2	
7	Hall Effect Expt. Set up Electromagnet: 6.5 Gauss with Power Supply, Gauss meter (Digital), Hall Probe – Spring type contact, Constant current Source.			1	
8	Wave length of He-Ne laser by plane diffraction grating method with optical bench 1 m long and 6 slides specification – Wavelength 632.8 nm, Minimum Power – 2 mwatt Maximum power - 3 mwatt, Beam divergence in mrad – 1.00 Beam Diameter 1/e2 (mm) - 0.81			1	

(6) IT Department:

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
1	MS Office 2007 Single OLP NL AE with Media			1	
2	Quick Heal Antivirus Admin Console for Desktop, Network User License with 3 year upgradeable copy, Academic Edition			20	
2	Microsoft Windows Live One Care Antivirus for desktop			20	
5	Computer Revolving Chairs (Sit back, Metal Stand, Hydraulic type			60	
6	Store Well Book Rack (5'x2'x1.5') Eco Board with door Edge Binding 1mm PVC with lock			5	
7	HP Color Laser Printer 1280x670 Min Resolution			1	
8	N Computing X 300 xtenda multi-user system			2	

(7) Civil Engg. Department: Transportation Engineering Laboratory

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
1	DUCTILITY TESTING M/C DESIGNED TO TEST 03 SPECIMENS SIMULTANEOUSLY,MOVING OVER A LEAD SCREW,AN ELECRC MOTOR DRIVEN REDUCTION GEAR UNIT,SMOOTH CONSTANT SPEED & CONTINUOUS OPRATION, ENTIRE ASSEMBLY MOUNTED WITH WATER BATH, METAL BOUND HARDWOOD, EQUIPPED WITH AN ELECTRIC PUMP CIRCULATOR & HEATER.OR EQUIVALENT SPECIFICATION.			1	
2	LOS ANGES ABBRASION M/C AS PER IS 2386 PART-IV			1	
3	DIGITAL ELECTRONICS BALANCE DIGITAL DISPLY, 15 Kg CAPACITY,ACCURACY 01gm			1	
4	FLASH POINT (CLOSED) PENSKEY-MARTEN APP. IS:1209,IS1448 i) WITH ENERGY REGULATOR ii) WITHOUT ENERGY REGULATOR			1	

(7) Civil Engg. Department: SOIL MECHANICS LABORATORY

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
5	Automatic Compactor As per IS 2720, for light and heavy compaction, 100 and 150 mm moulds, with digital display of number of blows			1	
6	Rock core cutting and grinding machine Up to 100 mm size cores, water cooled, single phase, with cutting blades			1	
7	Polishing and Lapping machine Polishing of rock core samples			1	
8	Sand replacement testing apparatus Sand pouring cylinder, calibrating container			2	
9	Electrical Resistivity Survey Set-up with Battery and set of cables.			1	

(7) Civil Engg. Department: Civil-Computer Facility

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
10	Server Branded, ML-350 G5 Server Intel Quad Core Xeon E-5410 @ 2.33 GHz – 1333 MHz,, 4 GB ECC DDR2 SDRAM etc or equivalent			1	
11	Laptop Branded Intel C2D T-7250 @ 2 GHz Processor , WiFi, Intel Wireless LAN, Bluetooth, 16.1 media card reader, 2 GB RAM, 160/250 GB HDD, DVD R/W, 15.4W-TFT, Windows Vista, 6 cell battery etc or equivalent			2	
12	Workstation PC – HP XW 4600 or equivalent Intel Core2Duo E 7200 @ 2.53 GHz, 3 MB cache 1066 MHz FSB CPU, 3 GB DDR 800 ECC RAM, 160/250 GB SATA NCQ HDD, 16 X DVD dual layer writer, NVIDIA Quadra FX 570 Graphics, Monitor 22W-TFT, Integrated High definition Audio with 5.1 C creative speakers, Integrated LAN Broadcam 5755, USB 2F-7R, USB KB, Optical UBS Mouse.			2	
13	LCD/DLP Projector : 2100 Lumen, 1024*768 XGA or equivalent Screen with tripod extra			2	
14	LCD Visualizer Sony DP 6850 or equivalent			1	
15	Printer-Laser-A4 COLOR HP make or equivalent All-in-One Print-Scan-Copy-Phone-Fax			1	
16	1) Printer-B/W Laser-A4 : A4-Nornal HP or equivalent 2) Printer Inkjet HP All-in-One with flat bed scanner			4 2	
17	1) 1 KVA UPS with 4 Hrs. backup, Libert make or equivalent 2) 3 KVA UPS with 4 Hrs. backup, Libert make or equivalent			1 1	
18	600VA UPS with 20 min. backup, Powersafe make or equivalent			15	
19	1) Scanner : Flatbed HP 4800 DPI or equivalent 2) Scanner : Flatbed HP ScanJet 8300 high resolution Scanner or equivalent			1 1	
20	Digital Camera : 8-10 MP Digital Zoom, 3-5 x O- Zoom Sony make or equivalent			1	
21	Video Camera : DVD-Writer 4-6 MP Sony make or equivalent			1	
22	Antivirus : Total Security – Quick Heal with 3 Years free update			25	
23	Operating System W-Xp or W-Vista Paper license – 10 users			10	

(7) Civil Engg. Department: Survey

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
24	Digital Theodolite Angle measuring equipment with 9" LC, with double axis compensator, fitted with 30X magnification telescope; having angle display up to 1" and alpha numeric key pad and internal memory of min. 10,000 points with PC interface and essential accessories like power pack, tripod etc. Leica Geosystems Builder- T-200 or Equivalent.			2	
25	Digital Level Electronic level with 2 – 80 m measuring range with built in memory and programs with essential accessories like batteries, charger, aluminum staff and tripod. Leica Geosystems Sprinter- 100 M or Equivalent.			2	
26	Outdoor GPS GPS handheld receiver Leica – Triton 400 or Equivalent.			1	
27	Outdoor GPS Handheld GPS with touch screen interface and camera Leica – Triton 2000 or Equivalent.			1	
28	Vernier Theodolite Angle measuring equipment with 20" LC, erect image as per IS 2988/1965 with standard accessories			5	
29	Aluminum Staves Telescopic 5.0 m height			20	

(7) Civil Engg. Department: Environmental Engineering

Item No.	Particulars	Basic Unit Price a	VAT + OCTORI b	Approx. Qty q	Total Price (a*q)+b
30	Weather Monitoring Station Micro-controller based Data Logger including:- Wind Speed Sensor, Wind Direction Sensor Temperature and RH Sensor, Windows XP compatible Software - MetLog Industry Standard RS232 Data Transfer Cable Tripod Stand, T-Bar and Tools to mount Sensors, Magnetic Compass to record North & South Poles, NiMH Battery for 20 hours power back-up with Charger USB Adapter for data transfer on Laptops			1	
31	Sound Level Meter Standards : Designed as per IS:9779- 1981, Type 1, Measuring Range 34- 134 Db Microphone : ¼” Electret Condenser Calibration : Factory calibrated, Field calibration by Acoustic calibrator 3022. Calibration traceable to NPL. Detector : True RMS Resolution : 0.1 dB, Display : LCD, 16x 2 alpha numeric, Error Indicators : Overload and under range indication, Frequency weighting : A,C, Linear as per IS:9779- 1981, Time Weighting : Slow, Fast & Impulse, as per IS: 9779- 1981. Parameters : SPL, Lmax, Lmin, Leq, Sel, Ln, Elapsed Duration Simultaneous Parameters: : SPL, Lmax, Lmin, Leq, SEL elapsed during 1sec or in continuous time mode, Battery Life : 24 hours per full charge, Battery Indicator : Battery life meter with auto shut-off on low battery Outputs : Analog output for filters AC output of selected signal, Construction : Rugged die cast, reflection free, aluminium enclosure Temperature : 0 to 50 degree Celsius Humidity : 0 to 90% none condensing Dimensions (mm) : L255 W 93 H 45mm Weight : 1000 gms Standard accessories : Battery charger, Microphone, Briefcase type carrying case, Windshield, Operation Manual.			2	
32	Demineralization plant Capacity 20 L/hr, Outlet water quality TDS < 8 mg/L, Conductivity < 10 µmhos/cm.			1	
33	Jar Test Apparatus.... 8 jars , 0 – 3000 RPM with marking as 50 RPM, Electrically Operated.			1	

(7) Civil Engg. Department: Fluid Mechanics

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
34	Reynolds Apparatus 1. Storage tank with flow steady arrangements. Tank Size 400 mm x 400 mm x 700 mm approximately. Storage tank is made up of 18 SWG M.S. sheet with 1.5 mm approx. of F.R.P. lining internally to resist corrosion and externally are powder coated. 2. Measuring Flask. 3. Dye bottle & capillary tube. 4. Bell mouth entry section. 5. Acrylic tube of 2.5 cm OD & 90 cm length. 6. Suitable stand to mount the acrylic tube. 7. Balancing tank to maintain constant head. 8. Stop clock. 9. Supply tank suitable capacity, 1phase, 230 v FHP motor 10. Support stand			1	
35	Verification of Bernoulli's Theorem Appa. 1. Storage tank: Made up of 18 SWG M.S. sheet with 1.5 mm approx. of F. R. P. lining internally to resist corrosion and externally are powder coated. Capacity: - 50 Lts. (Approx.) 2. Mono-block pump: 1-phase 1/2 HP .Sharp. Make / equivalent 3. Tanks: 2 numbers of suitable size mounted on stand. 4. Flow channel of 90 cm length made out of Perspex sheets. 5. Pizo-meter tubes equispaced at 5 cm. 6. Supporting stand structure for the equipment. 7. Rotameter 250 to 2500 LPH. 8. Differential Manometer			1	
36	Flow over Notches 1. Storage tank Capacity: -50 lts. (Approx) Storage tank is made up of 18 swg MS Sheet with 1.5 mm approx of FRP lining internally to resist corrosion and externally are powder coated. 2. Mono-block pump: 1-phase ½ HP .sharp. make/equivalent 3. Set of three brass notches a) .v. notch b) Rectangular notch c) Trapezoidal notch 4. Arrangement for fixing interchangeable notches. 5. Rotameter: - Having capacity 250 -2500lph			1	

(7) Civil Engg. Department: Fluid Mechanics

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
37	<p>Flow Measurement by Venturimeter & Orifice meter)</p> <p>01) STORAGE TANK Capacity: - 50 Lts. (Approx.) Storage tank is made up of 18 SWG M.S. sheet with 1.5mm approx. of F.R.P. lining internally to resist corrosion and externally are powder coated.</p> <p>02) MONOBLOCK PUMP: Single phase 1/2 H.P. Sharp. Make / equivalent</p> <p>03) VENTURI METER: Diameter: 12.5 mm ORIFICEMETER: Diameter: 12.5 mm</p> <p>04) ROTAMETER: Having capacity 250 -2500 LPH</p>			1	
38	<p>Tilting Flume 6 meters long Size (L x W x H): 6m x 0.15m x 0.3m Height. Material: M.S. Sheet 2mm Thick. Observation section: 1m x 0.3m ht on either side of the middle of flow channel. Acrylic Sheet of 5mm Thick Baffles: 3 Nos. made out of perforated sheet. Gates: 2 Nos. Material: MS Sheet, 3mm Thick, Chain & wheel with handle Slope Arrangement: Slope : 1:50 upstream and 1:20 downstream. : Jack: manually operated with handle Point Gauge: Size: 300mm. Height, 0.1mm Resolution. : Material: M.S. Bright bars with chrome plating Calibrated Orifice meter : Size: Suitable for 2. pipe. : Material: Brass. : Manometer: Differential type gauge. Sump Tank Size : 1,25m.(L) x 0.5m.(W) x 0.5m.(H) : Material: 2mm, thick MA Sheet, F.R.P. lining from inside 200mm Thick Pump : Monoblock pump / 2. delivery / 1 phase MODELS (Optional at Extra Cost) A) V Notch : Size : 45 x 80mm Deep. : Material : Brass, 3mm Thick B) Rectangular Notch : Size 30mm X 80mm : Material : Brass, 3mm Thick C) Sharp Crested Weir : Size : 3mm, thick : Material : Brass. D) Broad Crested : Size 250mm X 150mm : Weir : 100mm Height : Material : FRP, 1.5mm thick E) Venturi-flume : Size 800mm. Long x 2</p>			1	

(7) Civil Engg. Department: Civil-Computer Facility

Item No.	Particulars	Basic Unit Price a	VAT + OCTROI b	Approx. Qty q	Total Price (a*q)+b
39	<p>(1) Branded Desktop Computers (IBM/DELL/HP/COMPAQ/HCL) with following specifications or equivalent : Intel® Core™2 Quad Q6600 / Q6700 (2.40 / 2.66 GHz, 8 MB L2 cache, 1066 MHz FSB) or higher Intel® Q35 Express Chipset or equivalent Memory type : 2 GB DDR2@800MHz or equivalent Memory slots : 4 DIMM memory slots, Memory upgrade Expandable to 8 GB through four industry-standard DIMM slots, 250 GB SATA internal hard disk drive, DVD Writer Optical Drive, 1000 NIC (Ethernet), Intel® Graphics Media Accelerator 3100 or equivalent, internal pc speakers (internal audio), I/O port - Rear : 6 USB 2.0, 1 serial port, 1 optional serial port, 1 parallel port, 2 PS/2, 1 RJ-45, 1 VGA, audio in/out; Front : 2 USB 2.0, Front: audio ports, 17" LCD monitor, Standard Keyboard (PS/2 or USB), PS/2 2-Button Optical Scroll Mouse or USB 2-Button Optical Scroll Mouse, Warranty : minimum 3 years protected by company services</p> <p style="text-align: center;">OR</p> <p>(2) Branded Desktop Computer having configuration as above with 19" wide screen LCD monitor instead of 17" monitor</p> <p style="text-align: center;">OR</p> <p>(3) Branded Desktop Computer having configuration as above with 22" (wide/regular) LCD TFT monitor instead of 17" monitor.</p>			13	
40	<p>Creative 5.1 Audio(speaker) System or equivalent</p> <ol style="list-style-type: none"> 1. Creative 5.1 SBS-580 2. Creative Inspire 5200 5.1 3. Creative inspire M5300 5.1 			3	

(8) Electronics Engg. Department: Digital Communication Kits

Item No.	Particulars	Basic Unit Price a	VAT + 3% OCTORI b	Qty q	Total Price (a*q)+b
1	Delta and Adaptive Delta Modulation Independent Complete Kit. Built in Power Supply. Variable sampling frequency up to 250KHz, Built in clock generator, Variable low frequency modulating signal generator up to 5 KHz. LPF 2 nd and 4 th order. Test connecting sockets, manuals with circuit and block diagram, set of patches and supply cords. Assembled in sturdy PCB & box, should be able to perform the experiment with slop overload, sigma, delta, ADM/CVSD modulation and demodulation, compression expansion etc.			2	
2	QPSK: Modulation and Demodulation Independent Complete Kit. Built in Power Supply, Display ON board, Carrier to transmit the data at different frequency(0% to 9%). Test connecting sockets. Manuals with circuit and block diagram. Set of patches and supply cords. Assembled in sturdy PCB & box,			2	
3	DPCM Modulation and Demodulation Independent Complete Kit. Built in Power Supply. Built in clock generator upto 25KHz(Switch selectable), Built in low frequency modulating signal generator 100Hz-5KHz, Test frequency modulating sockets, manuals with circuit and block diagram. Set of patches and supply cord, Assembled in sturdy PCB & box,			2	
4	PCM: Modulation and demodulation Independent Complete Kit. Built in Power Supply. Built in clock generator upto 20KHz(Variable) A.C. Signal generator, 100Hz-5KHz. Built in BPF , LPF & Notch filter, for study of companding & SNR measurement in campaning (A law & u law) Test connecting sockets, manuals with circuits & block diagram. Set of patches and supply cords. Assembled in sturdy PCB & box,			2	

(8) Electronics Engg. Department: Embedded System Kits

Item No.	Particulars	Basic Unit Price a	VAT + 3% OCTORI b	Qty q	Total Price (a*q)+b
5	ARM9 ARM9 development board with Embedded Linux: <ul style="list-style-type: none"> • Atmel AT91SAM9260 ARM9 32-bit micro-controller • 64 MB Flash and up to 64 MB SDRAM • External memory bus interface on headers • On Board Ethernet Controller with RJ45Jack • USB Host and Device interface • Matrix keypad • SD/MMC card interface • On Board ADC pot for providing Analog signal • Expansion header for GPIO • Expansion header for I2C bus • Expansion header for External interrupts • Debugging header with JTAG interface • Min. 4 User programmable LED's • Push button switch, which can be used for simulating an external interrupt • RTC with Battery Backup and crystal 32.768 KHz • 512KB I²C EEPROM • 2 UARTs for programming and debugging • Board should support Ethernet Based JTAG Debugger. • The user should be able to download/debug linux OS + user application through Ethernet port • All required and related Software & Documentation CD on site training 			1	

(8) Electronics Engg. Department: Embedded System Kits

Item No.	Particulars	Basic Unit Price a	VAT + 3% OCTORI b	Qty q	Total Price (a*q)+b
6	ARM7 ARM 7 Development board with uCOS support: <ul style="list-style-type: none"> • NXP (Philips) LPC2148 ARM7 based 32 bit • GPIO Expansion header • Expansion header for SPI and I2C bus. • Expansion header for External interrupt • Expansion header for DAC • Expansion header to drive stepper motor • On board ADC pot • Debugging header with JTAG interface • Min. 6 User programmable LEDs. • Push button for simulating an external interrupt. • USB Device side • 1 X UART for programming and debugging • 4 X 4 matrix keypad • 16 X 2 LCD module • 7 Segment Display • The user should be able to download/debug uCOS + user application • All required and related Software & Documentation CD on site training 			1	

(8) Electronics Engg. Department: Embedded System Kits

Item No.	Particulars		Basic Unit Price a	VAT + 3% OCTORI b	Qty q	Total Price (a*q)+b
7	Interfacing Module for Item 5 & 6					
	Steeper Motor	+5 V ,Step Angle 7.5 Deg/1.5 Deg,Step Accuracy +/-0.5 % to +/- 1 %, Torque – NMn, 6.3, Temp. Res. /Winding – 100MOhm.			2	
	R.F.I.D. Interface Card	125khz PROXIMITY card reader, Serial Cable, Power Supply ,Sample code on CD ROM,TAGS (10 nos.)			2	
	GSM Interface Module	GSM Module with Antenna , Serial cable & Power supply, Sample code on CDROM			2	
	Graphics LCD Interface Module	240*128 Dots, Sample code on CD ROM (Graphics & Character made)			2	
	Biometric Interface Module	Biometric Finger Scanner, Interface card, Serial cable, USB power Cable, Sample code on CDROM			2	
	Thermal Printer Interface module	Thermal Printer 2”mechnisum with interface card , Serial cable & Power supply, Sample code on CDROM			2	
	GPS Interface	Serial cable & Power supply, Sample code on CDROM			2	
	Bar Code Scanner	Serial cable & Power supply, Sample code on CDROM			1	

(8) Electronics Engg. Department: Other

Item No.	Particulars	Basic Unit Price a	VAT + 3% OCTORI b	Qty q	Total Price (a*q)+b
8	Anti-virus : Admin consol Antivirus Suitable for WINXP and its other versions, Win2k3 Server family. Suitable for Client-server technology, with active agent on all the clients in the network enables the user to remotely install, monitor, configure, update, & uninstall protection across the network.			1	
9	On line UPS : 6 KVA on line UPS , 3 to 6 Hrs Backup 6 KVA/4.2 KW, 230V Single Phase, 12V/100AH battery.			1	

Terms & Conditions

Please note following terms and conditions before filling the tender form and return this **sheet duly signed along with company's seal.**

1. Essential additional Services to be included Installation and training on college site. Supplying documentation, Software Media /Software with media. (Licensed Version), Warranty for **three** years. Equipment for its malfunctioning, if any, must be replaced / repaired within 15 days during warranty period.
2. For any proprietary items, attach certificate from the manufacturer that the product is proprietary and also attach the valid certificate of authorized dealer/distributor/channel partner.
3. Local support for three years must be provided by the party/manufacturer.
4. The name of your principal party (if any) is to be indicated for the items, so as to enable to place the order with the principal.
5. **Usual payment terms** : 80% against successful installation, testing, training and 20% after submission of Bank guarantee for three years of 10% of the total purchase order.
6. **The tender form is not transferable.**
7. The offer value is to be calculated on the basis of Rate x Quantity
8. Tender documents should be sealed in an envelope along with duly signed terms & condition sheet in the college office on or before 15/9/2008 (5:00 pm). Late documents will not be accepted. -
9. The cost of the TENDER document is in the form of DD of Rs.600/-- in favour of Director, Walchand College of Engineering, Sangli. This amount is non refundable. The tender document after having downloaded from the college website, www.walchandsangli.ac.in; is to be filled up by the bidder and the filled tender document is to be submitted alongwith the D.D. Document without D.D. will not be considered.
10. If the space provided in any one of the columns of the tender form is not enough, additional pages may be attached.
11. Earnest Money Deposit (EMD) is to be calculated as 3% of the offered total price of the items for a department. Separate Demand Drafts for each of the departments must be submitted alongwith the tender documents. Tender submissions, without Demand Drafts will not be considered. Demand Drafts must be drawn on any Nationalized Bank in favour of `The Director, Walchand College of Engineering, Sangli' payable at Sangli. If the tender offer is not acceptable, the EMD will be refundable.
12. **The right to reject or accept any or all offers with or without modifications from any or all parties without assigning any reason is reserved with the Director, Walchand College of Engineering, Sangli.**
13. The bidder has to submit an undertaking for terms and conditions, if selected for placing the order.
14. Rates quoted should be valid at least for **One Month.**
15. The supply of materials should be done within two weeks after date of purchase order.
16. Legal matter will be restricted to Sangli jurisdiction.
17. Quantity mentioned in tender for item may vary depending on availability of fund.
18. Enough supporting documents, for example, specifications of the items, customer list, Authorization letter, Sales tax number letter, etc. must be submitted alongwith the tender documents.

I / We have read the above instructions carefully, and I /we abide by the instructions.

Seal of Company

**Authorized Signature
Name:**

Date:

Details of EMD

Sr. No.	Department	Total Amount		EMD		D.D. Details		
		Rs.	Ps.	Rs.	Ps	D.D. No.	D.D. Date DD/MM/YYYY	Nationalized Bank's Name
1	CCF							
2	CSE							
3	Mechanical							
4	Electrical							
5	Physics							
6	IT							
7	Civil							
8	Electronics							

Seal of Company

Authorized Signature
Name:

Date: