COST OF TENDER FORM: Rs.1000/-

WALCHAND COLLEGE OF ENGINEERING, SANGLI An Autonomous Institute

TENDER DOCUMENT



LAST DATE OF RECEIVING TENDER 25th June, 2015 up to 12:00 noon

DATE OF OPENING THE TENDER

25th June, 2015 at 3.30 pm

In Conference Hall, Main Building

INVITATION FOR TENDERS

Ref No; - WCE/CS/	Date: - 11/6/2015
То	

Dear Sir,

Sub: Invitation of Tender for supply of Equipments for Instruments, Computers, Furniture, Stationary etc.

You are invited to submit your most competitive tender for supply of Equipments for various departments under the terms and conditions as enclosed herewith.

This tender form is also available on college website www.walchandsangli.ac.in

While submitting the Tender, the offer must be submitted in following fashion.

- 1. Two separate envelopes are to be used.
- 2. First envelope should be titled as "**Specifications Envelope**" and it should contain documents such as:
- i) Shop Act license ii) I-Tax Return iii) Experience certificate iv) Sales Tax Registration v) Authorized dealer / distributor certificate vi)Proprietary item certificate, if applicable, viii) Copy of the receipt for Rs 1000/- for purchase of the tender form from the college office OR D.D. for Rs 1000/- if the tender form is down loaded from the college web site (for cost of tender form which is non refundable & without which tender will not be considered), viii) Separate (not a single) E.M.D. D.D.s for each of the department as per page number 34. All of the above D.D.s must be drawn from nationalized bank, favoring "The Director, Walchand College of Engineering, Sangli" payable at Sangli, ix) Detailed Specification of the offered item (if it differs from what is indicated in the tender) as per the tender form, but with no indication of offered cost of the respective item. Each Page must be signed and rubber stamped. This envelope must be sealed. At the time of tender opening, if the specifications and the other documents in this envelope are found correct, second envelope will be opened, otherwise the tender submission is likely to be rejected. The tender form is not transferable. Each bidder shall submit only one tender for one particulary department or section.
- 3. Second envelope should be titled as "Commercial Offer Envelope" and it must be sealed. Your "Commercial Offer" sealed envelope should contain competitive offered prices for the items. Taxes for VAT and other if any (except LBT) should be clearly indicated in the column "Total Amount". LBT is to be paid at actual by the tenderer, while supplying items. The LBT receipt must be in the name of the Director, Walchand College of Engineering Sangli. Separate envelopes (and not a single envelope) are to be used for each of the departments. All the department specific pages of the tender form should be filled with the competitive prices offered, signed and rubber stamped on each page. The other specifications of the item, its make and model number, its detailed other features, leaflet of the items, customer list along with their contact details (where the tenderer has earlier supplied the item) etc., must be supplied in the department specific envelopes. If the space provided in the tender form is insufficient, additional pages may be attached appropriately.
- 4. Two of the separate sealed envelopes, namely, "Specification Envelope" and "Commercial Offer Envelope" must be sealed together in a "common" single envelope.
- 5. Each of these envelopes should be also titled, as per the case for either "Supply of Equipments for (Name of the resp. department)". Tenderer must also mention their Company name, Address, email, contact person, cell no. etc. on envelopes.
- 6. If tenderer has SSI registration, the tenderer will be exempted from paying E.M.D. The valid SSI registration documents, for this purpose, must be enclosed in "Specifications Envelope".

7. If the tenderer is selected for supply of items, the selected tenderer will give an undertaking for supply of items as per the college's terms and conditions, and the tenderer will supply the items accordingly. If the tenderer fails to supply the items as per college's terms and conditions, the EMD amount of the tenderer will not be returned. EMD will be returned to all other "not selected" tenderers only when the selected tenderer supplies all the items as per college's terms and conditions. The selected tenderer has to submit Bank guarantee for 10 % of total purchase value. The Bank Guarantee will be returned, if no violation of terms and conditions are found, only at the end of the warranty period or at the end of contract to the tenderer.

The supply place is normally respective departments of college and supply period is usually 15 days from the date of placing order.

We look forward to receive your tender and thank you for your interest in this system.

Yours faithfully,

Director

Walchand College of engineering, Vishrambag, Sangli

1. Mechanical Engineering Department:

Item No.	Particulars	Approx. Qty	Basic Unit Price	VAT + Other +LBT	Total Amount Rs.	EMD amount (3 % of the total amount)
		q	а	b	(a+b)*q	
01	Desktop PC's of make DELL/HP or equivalent with following specifications: Intel® 4th generation Core TM i5-4570 Processor (Quad Core, 6MB Cache, 3.2GHz, w/HD Graphics 4600), 8GB DIMM (4GB x2) DDR3 @ 1600MHz, 500GB @7200 RPM 3.5" SATA Hard Drive, 16X Half Height DVD+/-RW Drive, Intel® H 81 Chipset Mother Board, Integrated Intel® HD Graphics 4600 (with select CPUs), Integrated Realtek® RTL8151GD Ethernet LAN 10/100/1000, USB Entry Keyboard, Optical Mouse, 18.5" Widescreen Monitor with TFT, Internal Business Audio Speaker. Microsoft® Windows®8 Professional 64 bit (English). Mini Tower Chassis + Standard SMPS Warranty: 3Year Next Business Day On-site Service.	25				
02	Computer Lab Chairs: Providing and supplying chairs in medium back of make RCF 32 or equivalent, wooden for seat and back chrome plated structure etc.	20				

	RCF-32			
03	PCM Coater Cum Photo Resist Dryer Specifications: The Machine is Tabletop and Compact. A Rectangular tank is provided for PCM coating (Photo Resist) which is attached to the main machine. Tank Capacity – 2 Liters. Approximately. The combined unit is for curing of liquid photo resist. Electronic Timer (4 minutes), controlled Heating system allows fast and efficient PCM curing. The unit is manufactured by steel material .Heating Finned Heaters with thermostat controls & air circulation. Max. PCM size: 300x250mm (12" x 10").	01		
04	UV Exposure Unit Specifications: A Table top unit specifically designed for Double side simultaneous exposure. Actinic U. V. tubes and controlled by an Electronic Timer (2 minutes) and used sandwich glass assembly to provide excellent pressure between the negative and P.C.M. Exposure is made of M.S. sheet with powder coated surface. Min. PCM size: 250X300mm. (10"x12"). Choke: Electronic type. 230VAC.	01		
05	Easy Etcher Specifications: Etcher is constructed of P.P. or PVC with welded joint. Used for fast single and double sided PCM etching. Includes a heater and air flow compressor. Corrosion free construction materials. Electronic Timer - 4 minutes.	01		

Digital Microscope/ Inspection Camera with RCA/USB Port Specifications: Plug directly into computer, Up to 200X Magnification Up to 1.3M pixel resolution, High Quality Image Snap Capture and video Record, Unique Micro-Measurement Tool Software.	01		
Laser alignment instrumentation Single beam laser alignment instrumentation which is capable of- 1. Recording of alignment reading which will be independent of direction of rotation 2. Wireless communication 3. Automatic evaluation of alignment condition 4. Aligning horizontal and vertical machines 5. Doing active clock measurement mode 6. Aligning the shafts without the effect of backlash ,coupling and bearing float 7. Auto save of the data and resume facility 8. Taking readings at more than five different locations in one revolution specially required for sleeve bearings 9. Calculating thermal growth and shim requirements 10. USB interface, color display with 320 x 240 pixel Other specifications • Compatible to CPU –Intel X scale PXA 270 running at 312 MHz, memory 64 MB,32 MB flash • Multicolor LED for laser status and battery status • Integrated rechargeable batteries • Operating temperature range -10 to 50 °C • External interface-USB host, USB slave, RS232 serial for transducer • Laser: Type –Semiconductor laser diode, Wave length-670nm(red, visible) Safety class-2, Beam power- <imw accuracy="" area-unlimited,="" detector:="" dynamically="" extendible,="" measurement="" resolution-imicron,="" •="">98% • Inclinometer –Measurement range 0° to 360°; Resolution <1°</imw>	01		

	MODSONIC make Ultrasonic flaw detector			
	Specifications:			
	"da Vinci" delta model			
	• Test range-2.5 mm to 10 meter			
	Velocity-1000met/sec to 15000 met/sec Fine mode adjustment in step 1			
	met/sec			
	Delay- Variable from 10 to 2000mm			
	Gain 100dB, Calibrated gain adjusted in 0.1,0.5,1,2,6,or 12 dB steps			
	Rejection-0 to 100% FSH with LED indicator			
	• Rectification- Full wave rectified, Half ,wave -ve, Half wave +ve and RF			
08	mode			
	• Frequency- In four bands;0.2 to 1 MHz,0.5 to 4 MHz, 0.8 to 8 MHz, 2 to 20			
	MHz			
	Test mode-Pulse echo and Transmit/ Receive	01		
	Transmitter-Transmission pulse negative spike			
	Damping selectable Damping selectable			
	Connectors BNC or LEMO			
	Monitor-Dual gate with threshold adjustable in 1% screen height With TLOG DAG TOG AWG DGG facilities.			
	 With T-LOG, DAC, TCG, AWS, DGS facilities Digital Readout- Thickness/ Depth can be displayed in digital readout 			
	when using normal probe and sound path			
	B-Scan memory- 50 B scan patterns to be stored which can be recalled or			
	transferred to PC via USB with auto file name			
	Colour code B-scan: should have facility to display ,in real time, colour			
	coded B-scan as well as live A-scan display			
	Should have Real time RF A-scan and TOFD D-scan. It should give A-scan			
	pattern after collecting thr data			
	• Record length –1000mm test length with collection step of 1 mm . Each A-			
	scan with 500 mm point depth			
	Data storage Each scan file must be stored in external USB storage device			
	with auto file naming			
	Sensors for Ultrasonic flaw detector and thickness measurement			
	Single crystal probe (Regular) M_SN series 24mm dia. 2 MHz			
	Single Crystal probe (miniature size) 10 mm dia. 2MHz and 4MHz			
	Angular probes regular size 2MHZ and 4 MHZ			

Item No.	Particulars	Approx. Qty	Basic Unit Price	VAT + Other +LBT	Total Amount Rs.	EMD amount (3 % of the total amount)
		q	а	b	(a+b)*q	
09	Six Component Wind Tunnel Balance with amplifier to measure Lift,Drag, Pitching moment, Yawing moment, side force. With standard models like Aerofoil (Symmetric, Cambered, and cylinder airfoil), sphere, cylinder, Airplane etc. Suitable for Wind Tunnel Having Test Section 2' x 2' x 3'feet (WxHxL) Contraction Ration: 9 Max. Velocity: 12m/s. Ele. Motor: Slip ring induction motor, Power: 15hp (400V, 3phase, 50cycles) Speed: 1440rpm.	01				
10	Smoke wire flow visualization (used in wind tunnel)	01				

2. CIVIL ENGINEERING DEPARTMENT

Item No	Particulars (Specifications)	Approx.Qty	Basic Unit Price	VAT + Other +LBT	Total Amount Rs.	EMD amount (3 % of the total amount)
		q	a	b	(a+B)*q	
1	Slump test apparatus with Tamping rod steel, 10 mm dia x 600 mm length with ISI certification mark IS: 10086 and base plate, Confirming to Standards IS:7320, BS:1881, ASTM C 143, AASHTO T119	1				
2	Flow table for self compacting concrete, Flow Table top with 76.2 cm dia, finely machined from a solid brass casting. Height of drop 12.5 mm, Suitable for operation with 220 volts, 50 Hz, single phase, AC Supply. confirming to Standard- IS:1199, AASHTO T126					
3	Concrete Penetrometer, Spring Type, The plunger graduated in 1 kg divisions, to a maximum Capacity of 60 kg with set of six needle points with areas of 645, 323, 161, 65, 32 and 16 mm are provided. Carrying case conforming to Standard IS:8142, ASTM C 403	1				
4	Concrete Mixer, Pan type with Adjustable Blades. Mixing Capacity:40ltrs. Overall Dimension: 910mm X 875mm X 1250mm Motor:2HP,960RPMSuitable for operation on 440V, 50Hz,ThreePhase,AC supply.	1				
5	Mould, Cast Iron, Spilt length wise 150mm x 300mm high with ISI certification mark IS:10086	6				
6	Capping Set, Vertical for capping 150mm dia. Cylinders and cores	1				

7	Vibrating Table, Table Top 75cm x 75cm for 6 moulds of 150mm cube, Suitable for operation on 220 V, 50 Hz, Single Phase, AC supply. Conforming to Standard EN 12350-6, 7, 12390-2, 13286-50	1		
8	Longitudinal Compressometer, Analogue suitable for cement concrete cylindrical specimens of 150 mm dia x 300 mm length. with dial gauge 0.002×5mm	1		
9	Concrete Permeability Apparatus, 3 Cell model for 150mm cube, Each unit with chamber pressure gauges of 2 0-21 kg/cm and test pressure gauge of 0-17.5kg/cm	1		
10	Motorised Sieve Shaker,8 sieves of 20cm dia., ¼ HP geared motor, inclined from the vertical axis and change in the direction of inclination progressively in the clockwise direction. gyratory motion of the table, tapping motion. Suitable for operation on 220 V, 50 Hz, Single Phase, AC supply.	1		
11	Laboratory Electric Oven, Thermostatically controlled range 50deg C to 300deg. C +/- 3 deg C with air circulating fan S. S. inside, size 600 x 900 x 600mm	1		
12	pH Meter, Portable Resolution 0.01pH Temp range 0 to 1000C LED Display power 230 V AC	1		
13	Air Permeability Apparatus (Blaine Type) with ISI Certification Mark, IS5516	1		
14	Fineness Testing Apparatus (Wet Sieving Type) for fly ash	1		

15	Cement Autoclave with analog pressure gauge and digital temperature controller, Working Pressure : $21 \pm 1 \text{kg} / \text{cm}^2$ at 215° C Pressure Vessel : ID 150mm X Depth 500 mm Weight : 70 Kg Heater : 2000 Watts Supply : $220V$, 50Hz , 1 phase Panel mounted PID controller with international safety certifications.	1		
16	ALPHIE – 3 Dimensional Mixer	1		
17	Mini Slump Apparatus	1		
18	Marsh Cone Apparatus	1		
19	Stop Watch, Digital 1/10Sec.	1		
20	Flow Table for Mortar manual operated, a brass table top 250 ± 2.5 mm dia, mounted on a rigid stand, drop through 12mm by a ground and hardened cam, with Flow mould 100mm base dia, 70mm top dia and 50mm high. conforming to Standard IS 5512	1		
21	Magnetic stirrer with hot plate 300oc, Max. RPM 1500, With safety lid cover and LED display, temperature and RPM controller	4		
22	Brass Sieves 45 microns, 90 microns 20 cm dia.	2 each		
23	Conductivity meter	1		
24	Le-Chatelier Apparatus conforming to IS:5514, The mould complete with two glass plates and lead weight.	1		

25	Digi Mortar Mixer, For High Viscious Material Including Admixtures, • Microprocessor control • Choice of automatic mixing cycles • Sand Dispenser • Water burette Suitable for operation on 220V, 50Hz, single phase, AC supply. Rotational Speed, (rpm) Planetary Speed (rpm) Low Speed 140+/-5, 62+/-5 High Speed 285+/-10, 125+/-10	1		
26	Sample Tray (Enamel Tray), Size 600x450x50mm,Size 450x300x40mm,Size 300x250x40mm,Size 200x150x30mm	2 each		
27	Digital Conductivity meter 20000 micromhos/cm	1		
28	pH meter Range 0 to 14 Resolution 0.01pH Temp range 0 to 100 ⁰ C LED Display power 230 V AC	1		
29	Digital Analytical balance Accuracy 0.1 mg	1		
30	Peristatic pump 0.25 hp with silicon wire	1		
31	Water bath 50 L capacity with 12 jars	1		
32	Depth Sampler Depth up to 2 m with accessories	1		

33	Centrifuge Capacity -16x15mL Display-Digital ,Control-Microprocessor, Control Speed Set/Step/Display-300 to 6500rpm, ±10rpm , Max. Speed-6500 rpm, Feature(s)-High/Low acceleration and braking Timer -1 to 99 min. plus HOLD, Motor-Direct-drive brushless induction Noise-<57dBA	1		
34	Vacuum pump- 0.25 hp with accessories for filtration	1		
35	5 KVA,1 ph Servo stabilizer (3 No.) Type Indoor, Input A.C., 170 V to 270 Volts Output 230 V.A.C. ± 0.5% Adj. Frequency 47 – 51 Hz. Phase Single Line Regulation ± 1% Over Load Capacity 120% for 1 minute. Cooling Air/Oil Capacity2 KVA to 20 KVA	3		

3. INFORMATION TECHNOLOGY DEPARTMENT

Item No.	Particulars	Approx. Qty	Basic Unit Price	VAT + Other +LBT	Total Amount Rs.	EMD amount (3 % of the total amount)
		q	a	b	(a+b)*q	
1	HP or equivalent ENVY 700xt Desktop	20				
	Processor: 4th Generation Intel(R) Core(TM) i7-4790 processor quad-core [3.6GHz, 8MB Shared Cache] Hard drive: 1TB 7200 RPM SATA Hard Drive Memory: 12GB DDR3-1600MHz [2 DIMMs] Graphics: 2GB Nvidia GeForce GT720 [DVI, HDMI, DVI to VGA Dongle] Networking: HP WLAN 802.11 b/g/n 1x1 MCard BT Premium Wireless-N LAN card and Bluetooth(R)(2x2) Ports: 15-in-1 Multi-slot Media Card Reader, 4 USB Ports (Front/Top), Audio [Front 2USB2.0, Top 2USB3.0] Optical drive: Super Multi DVD Burner Blu-ray player and Super Multi DVD burner Keyboard & mouse: HP USB keyboard & optical mouse Memory slots: 4 DIMM Operating system: DOS					
2	UPS Emerson /APC/ or Equivalent Make online UPS Capacity – 6 KVA 192v 1 Phase Input/ 1 Phase Output With 1 hour backup Battery should SMF 12v Including Batteries M.S. Rack, Installation. UPS Warranty 3 Years. Batteries guaranty 3 Years	02				
3	Printer HP all in one: HP Laserjet M1005 MFP Prints letter-size pages at speed up to 15 pages per minute (pm) and A4- size pages at speeds up to 14 ppm .or equivalent.	04				
4	Epson/Hitachi LCD Display Type: LCD, Light Output: 3000 Lumes, Warranty: 2 Years.	02				

5	Features: Remote Control, Life of Lamp – Standard Uses: 4000 Hours, Life of Lamp Eco Usage: 5000hours, Contrast Ratio: 000:1 Aspect Ratio: 4:3 Resolution: 1024x768, Audio output: 1 watts, Color White and Black. HP /Dell Laptop Intel core i5-4210 with Intel HD Graphics 4400(1.7GHz,up to 2.7 GHz with Intel Turbo Boost Technology, 3MB cache, 2 cores), Intel SoC (Chipset is integrated with processor), 4 GB 1600 MHz DDR3, 500GB SATA, DVD +/- RW, 14" LED (1366x768), RealtekEthernet(10/100), 802.11/g/n and Bluetooth 4.0 combo, card reader, 1 year warranty on primary battery.	01		
6	48" inch Internet LED backlight Screen Sony/Samsung or Equivalent Display resolution full HD, Bass reflex speaker, HDMI connection 4, USB 2, Ethernet Connection, USB play support all format, WiFi Connectivity Wireless LAN Built in, Wifi Direct.	01		
7	Xeon Processor Workstation Intel Xeon Processor E5-2695 v2 2.4 30 MB 1866 MT/s 12 Core, Processor socket: Dual LGA2011, CPU bus speed: QPI: Up to 8.0 GT/s, Memory expansion slots: 16 slots (8 slots per CPU), Memory type: DDR3, RDIMM (Registered) or UDIMM (Un buffered), ECC, LR (Load Reduction) DIMMs, Memory speed: 1066-MHz, 1333-MHz, & 1600-MHz, Interfaces supported: 2-channel SATA 6.0 Gb/s Interface (2 channels e-SATA configurable), 4-channel SATA 3.0 Gb/s Interface/ 8-channel 6Gb SAS interface (8 SAS connectors on the motherboard), SAS ports can be ported externally by using the SAS Bulkhead and/or Back Panel connector Kits / USB 3.0, USB 2.0, IEEE 1394a, Maximum memory: Supports up to 64GB using UDIMMs / Supports up to 256GB using RDIMMs / Supports up to 512GB using LRDIMMs	01		
8	16 Port 1U Rackmount USB KVM Switch Kit with Cables. USB Keyboard and Mouse combo support	02		

		0.1		
		01		
9	1.5 ton, 3 star Split Air Conditioner			
	Nominal Capacity: 1.5 ton. Cooling capacity: 5.25 kW ± 2%			
	Function modes: Auto/Cool /Fan/Dry-shall have sleep and			
	power saving modes			
	Remote handset: LCD display with night glow			

4. ELECTRICAL ENGINEERING DEPARTMENT

Item No.	Particulars	Approx. Qty	Basic Unit Price	VAT + Other +LBT	Total Amount Rs.	EMD amount (3 % of the total amount)
		q	а	b	(a+b)*q	
1	Supplying, installation & Commissioning on old foundation with C channel. The machines specification are as follows (Induction Motor # D.C. Compound Machine);- 3-Ph Induction Motor: 415V, 50Hz, 1440 RPM, 3 HP, 5.2A class of insulation, A, type of duty – continuous duty: S ₁ , air cooled(6 terminals, V/Ph= 230 V) DC Compound Machine: 230V, 1500 RPM, 3HP The above machines should be coupled together on common C -channel.	1 Nos				
2	Supplying, installation & Commissioning on old foundation with C channel. The machines specification are as follows(Induction Motor # D.C. Machine # Syn. Machine) 3-Ph Induction Motor: 415V, 50Hz, 1440 RPM, 3 HP, 5.2A class of insulation, A, type of duty — continuous duty: S ₁ , air cooled DC Compound Machines: 230V, 1500 RPM, 3 HP, 10A, 3-Ph Synchronous Machine: 400V, 1500 RPM, 3HP, 5.4 A the above machines should be coupled together on common C - channel.	1 Nos				
3	Supplying, installation & Commissioning on old foundation with C channel. The machines specification are as follows: Induction Motor (squirrel cage) # Induction Motor (Slip Ring)- # D.C. Machine 3-Ph Six terminal Squirrel cage Motor Induction Motor: 230V for delta connection, and 415V for Star connection, 50Hz, 1440 RPM, 3 HP, 5.2 A class of insulation -A, type of duty – continuous duty: S ₁ , air cooled 3-Ph Slip-ring Induction Motor: 415V, 50Hz, 1440 RPM, 3 HP, 5.4 A, class of insulation, A, type of duty – continuous duty: S ₁ , air cooled DC Machine: 230V, 1500 RPM, 10 A,3HP. The above machines should be coupled together on common C -channel.	1 Set				

	Supplying, installation & Commissioning on old foundation			
	with C channel. The machines specification are as follows (D.			
	C Compound # D. C Compound):			
4	DC Compound Machines: 230V, 1500 RPM, 2.21 KW,	1 Set		
•	10A,	1 001		
	DC Compound Machines: 230V, 1500 RPM, 2.21 KW,			
	10A, the above machines should be coupled together on common C -channel.			
	Supplying, installation & Commissioning on old foundation			
5	with C channel. The machines specification are as follows (D.			
	C Shunt # D.C. Series::	1 Set		
	D.C Shunt Motor: 230V, 10 A, 2.21 KW, 1500/1800			
	RPM			
	D.C. Series Motor: 230V, 10 A, 2.21 KW & continuous duty, 2350 RPM the above machines should be			
	coupled together on common C -channel.			
	coupled together on common e channel.			
	Supplying, installation & Commissioning on old foundation			
	with C channel. The machines specification are as follows			
	(D.C. Series Motor # D.C. Series Generator):	1 Set		
6	D.C. Series Motor: 230V, 10 A & continuous duty,			
	2350 RPM, 2.21KW, D.C. Series Generator: 230V, 10 A, 2.21KW, 1500 RPM			
	The above machines should be coupled together on			
	common C -channel.			
	Supplying, installation & Commissioning on old foundation			
	with C channel. The machine specification are as follows			
	Single Phase Induction Motor:	4.0.4		
	Capacitor Start, Capacitor Run # Brake Drum: 230V,	1 Set		
7	1420 RPM, 50 Hz, 2 HP, 6A			
	Capacitor Start # Brake Drum: 230V, 1420 RPM, 50 Hz,			
	2 HP, 6 A			
	Split Phase with break drum Induction Motor: 230V,			
	1420 RPM, 50 Hz, 2 HP,6 A			

	Universal Motor # Brake Drum: 230V, 1420 RPM, 50 Hz, 2 HP, 6A. The above machines are individually coupled to brake drum equipped with spring balances.			
8	Supplying, installation & Commissioning on old foundation with C channel. The machine specification are as follows D. C. shunt motor # Brake drum: DC Shunt Motor: 230V, 1500/1750 RPM, continuous rating 3 HP, 10 A. the above brake drum equipped with spring balances and loading arrangement.	1 Set		
9	Supplying, installation & Commissioning on old foundation with C channel. The machine specification are as follows 3-Ph synchronous Motor # Exciter # DC Compound Generator: 3-Ph synchronous Motor: 3 HP, 400V, 1500 RPM, 5.4 A, 50 Hz, Type of duty: S ₁ Exciter: shunt field, 1500 RPM, 12/24V, 2 A DC Compound Generator: 1500 RPM, 2.21 KW, 230V, 10 A The above machines should coupled together on common C -channel.	1 Set		
10	Desktop Computer: 1) Intel® 4th generation Core™ i5-4570 Processor (Quad Core, 6MB Cache, 3.2GHz, w/HD Graphics 4600), 8GB DIMM (4GB x2) DDR3 @ 1600MHz, 500GB @7200 RPM 3.5" SATA Hard Drive, 16X Half Height DVD+/-RW Drive, Intel® H 81 Chipset Mother Board, Integrated Intel® HD Graphics 4600 (with select CPUs), Integrated Realtek® RTL8151GD Ethernet LAN 10/100/1000, USB Entry Keyboard, Optical Mouse, 18.5" Widescreen Monitor with TFT, Internal Business Audio Speaker. Microsoft® Windows®8 Professional 64 bit (English) with media CD Tower Chassis + Standard SMPS Warranty: 3Year Next Business Day On-site Service. (Note: Make DELL or HP Only)	50 No		

	OR 2) Intel® 4th generation Core™ i7-4770 Processor (Quad Core, 6MB Cache, 3.2GHz, w/HD Graphics 4600), 8GB DIMM (4GB x2) DDR3 @ 1600MHz, 500GB @7200 RPM 3.5" SATA Hard Drive, 16X Half Height DVD+/-RW			
	Drive, Intel® H 81 Chipset Mother Board, Integrated Intel® HD Graphics 4600 (with select CPUs), Integrated Realtek® RTL8151GD Ethernet LAN 10/100/1000, USB Entry Keyboard, Optical Mouse, 18.5" Widescreen Monitor with TFT, Internal Business Audio Speaker. Microsoft® Windows®8 Professional 64 bit (English) with media CD Tower Chassis + Standard SMPS Warranty: 3Year Next Business Day On-site			
	Service. (Note: Make DELL or HP Only			
11	 Magnetic Levitation Apparatus: Specifications High Flux Drive Coils at Top & bottom Laser Feedback Sensors Top & bottom Low Friction Guide Precision ground & polished glass Rare Earth Magnets NbFeB, one or two at a time for SISO or MIMO Laser Conditioning Electronics to provide high resolution position measurement Magnet Storage Safely stows high strength magnets Attachment For Turntable Optional, demonstrates induced field levitation Range of Motion- 15 cm total. 6 cm indefinitely 10 cm momentarily. Actuator Magnets- Very high flux, rare earth NdFeB, with laser reflective coating. Sensors- Laser light amplitude with low noise, stray light rejection circuitry. Drive Coils- Low inductance, high field constant, and air core. 	01 Set		

12	Drive Amplifiers - Linear range ± 40V out, 500 Hz current loop bandwidth, Size & Weight- 36x36x30 cm. (14x14x12 in.), 5.1 kg. (11 lb.), Turntable Accessory- Dynamically balanced spin platter, 0- 500 RPM, Accessory Sensor & Actuator- Optical encoder, 12,000 counts/rev. Rare earth, servo motor, Accessory Size & Weight- 38x38x15 cm. (15x15x6in.), 4.3 kg. (9.5 lb.) Beagle Board x M ⇒ ARM37 x 1 GHz ARM processor 512 MB	04		
12	LPDDR RAM Tektronix make 70 MHz, 2 Ch, 1GS/s, TFT Digital Storage			
13	Oscilloscope: TBS1000B Series Features: Key Performance Specification: 70 MHz Bandwidth models, 2-Channel Models, 1GS/s sample rate on all channels, 2.5k point record length on all channels, Advanced triggers including pulse and line selectable video triggers, Key Features: 7 inch WVGA (800X480) Active TFT color Display, 34 automated measurements, Dual window FFT, simultaneously monitors both the time and frequency domains, Built-in waveform limit and Dual channel frequency counter, Zoom Function, Automated, extended data logging feature, Auto set and auto ranging functions, USB 2.0 host port on the front panel for quick and easy data storage, USB 2.0 device port on rear panel for easy connection to a PC, Standard Accessories: Passive probes, one per channel: TPP0051: 50MHz passive probe for TBS1052B, TPP0101: 100 MHz passive probe for: TBS1072B, TB1102B, TPP0201: 200 MHz passive probe for: TBS1152B, TBS1202B, Power cord (Please specify plug option), NIM/NIST Traceable certificate of calibration, printed documentation Installation and safety manual, CD with customer documentation-customer documentation including detailed user manuals	06		
14	Visual presenter- Model CP155 3.2 Megapixels, 16 x 200 m Auto focus & Manual Focus .	03 Nos		

15	 Function Generators Frequency and amplitude display simultaneously Output waveforms: sine wave, square wave and triangle wave Frequency of output signal: 0.2Hz ~ 2MHz , Duty cycle adjustable: 20% ~ 80% Power: AC 110/220V 	02 Nos		
16	Dual Power supply: Two nos. of 0-30 V, 3A power supply with isolated ground in one unit, with Short circuit and current limiting protection	05 Nos		
17	Single Power Supply: 0-30 V, 5A, Variable with Short circuit and current limiting protection	04 Nos		
18	Rheostats: (1) 19/20 ohm,8.5 Amp range Rheostat for practical use only, Make: Toshniwal (2) 300/350 ohm,1.2 Amp range Rheostat practical use only, Make: Toshniwal (3) 700/750 ohm,1.2 Amp range Rheostat practical use only, Make: Toshniwal (4) 170 ohm, 2.8 Amp range Rheostat practical use only, Make: Toshniwal	05 No each		
19	HP3030 Multi function Printer	5 No		
20	HP1008 Printer	5 No		
23	D.C. Power Supply 0-300 volts/50A: DC Power Supply consists of 3-Ph, Transformer, 3-Ph Dimmer stat, 3-Ph Diode bridge, AC and DC voltage & current meters, MCCB on input supply side and DC output side	01		
24	Slip Power recovery scheme for 3-Ph, 440 volt, 3 H P, 50 Hz Induction Motor with suitable eddy current loading arrangement. The setup consists of 3-Ph diode bridge and line commutated Inverter, Associated firing angle control circuits AC, DC voltmeter and ammeter & wattmeter	01		

25	240/400 volts: Can be Used as single or three values on each bank 3-in-build balanced or unbalanced load independent banks to all allow	phase load. Ten selectable load star / Delta switch 4-Works as a in three phase circuits. Totally w connection as a star or delta t: 4.6 A each phase (in star n Delta Connection)	01			
26	Single Phase cum Three Phase Single Phase Operation: Vol Current: 15A, Power: 3.5KV Phase Star Operation, Vol Current: 5A (per Phase) Power (per Phase), Three Phase Delta	bltage: 240V AC ±10%, 50Hz, VAR Loading steps: 30, Three ltage: 415V AC ±10%, 50Hz er: 3.5KVAR Loading steps: 5 ta Operation 0Hz Current: 15A (per Phase)	01			
27	Specifications of DAQ : National Instruments USB-600 I/O and NI-DAQmx software (I		04			
	CPU	8085 Operating @ 3.072 MHz				
	MEMORY	64KB MAX (32KB EPROM and 32K	B RAM) Batter	y Backup option for RAM		
	NOTE	The system is supplied with 16KB EF	ROM and 8KB	RAM		
	I/O PARALLEL	48 I/O lines using two 8255				
	I/O SERIAL	One RS232 compatible interface				
20	TIMER	Three 16 bit counter / timer using 825				
28	KEYBOARD	External PC-AT compatible keyboard	10			
	DISPLAY	16 characters and 2 line LCD display				
	BUS SIGNALS	All Address, Data and Control signals	are terminated	n 50 pin berg stick for user ex	pansion	
	PIC	Optional facility for 8259. All the 8 in	terrupts are tern	ninated in berg stick		
	MONITOR SOFTWARE	16KB of system monitor, which allow on-board PC keyboard and display or display				

29	8255 Study Card , 8253 Study Card, 8279 Study Card (All study card must be compatible to above (28th) microprocessor kit.	05 each set		
30	* Based on 8085 CPU operating at 6.144 MHz crystal. * 16K bytes of EPROM with powerful monitor program. * 8K byte of RAM available to the user. * Battery backup for user's RAM with 3.6V rechargeable cell * Total on board memory expansion up to 64K bytes using 2732/2764/27128/6264. * Memory mapping definable by the user. * 20x2 Liquid Crystal Display (LCD). * 104/105KeysIBM PC Compatible ASCII Keyboard * 48 programmable I/O lines provided through 2 nos. of 8255. * 16 bit programmable timer/counter using 8253. * Additional serial port using 8251. * EPROM Programmer for 27 series with 28 pin ZIF. * Printer Interface. * RS-232C interface for CRT using SID / SOD lines. * Interrupt Controller using 8259. * 8 Channel 8 bit ADC using 0809. * 1 Channel 8 bit D/A using DAC 0800. * 1 Relay output. * 1 Opto isolated input. * Two modes of Commands: Key board Mode & Serial Mode * All address, data and control lines are buffered and made available at the edge connector as per STD Bus configuration. * Powerful Software Commands like relocate, string, fill, insert, delete, block move, memory compare etc. * Onboard Single Line Assembler/Disassemble. * Facility for Downloading/Uploading files from/to PC. * In-built Power Supply. * User's Manual.	4		
31	Digital AC Voltmeters – 0-1000V AC	10		
32	Digital DC Voltmeters – 0-1000V DC	10		
33	Digital AC Ammeters – 0-50A AC	10		
34	Digital DC Ammeters – 0-10A DC	10		
35	Digital Wattmeter: 100V/1000V, 5A to 15A	10		

	MODROB			
	FLUKE-434-II,PQ AND ENERGY ANALYZER			
	Make:-Fluke Included Accessories:-			
	a) BC430 Power Adapter			
	b) International plug adapter set			
	c) BP290 (Single capacity Li-ion battery) 28 Wh (8 hours or			
	more)	01		
1	d) TL430 Test lead and Alligator clip set			
	e) WC100 color coding clips and regional decals			
	f) i430flex-TF, 24 inch (61 cm) length,4 flexible(0.5A to			
	6000A)current probes			
	g) 8 GB SD card h) PowerLog on CD (includes operator			
	manuals in PDF format)			
	i) USB cable A - Mini B			

5. ELECTRONICS ENGINEERING DEPARTMENT

Item No.	Particulars	Approx. Qty	Basic Unit Price	VAT + Other +LBT	Total Amount Rs.	EMD amount (3 % of the total amount)
		q	а	b	(a+b)*q	
1	 Digital storage oscilloscope 70 MHz bandwidth models 2-channel models, Time base range 2.5ns to 50 Sec/Div 					
	 Up to 1 GS/s sample rate on all channels 2.5k point record length on all channels Advanced triggers including pulse and line-selectable video triggers 7 inch WVGA (800X480) Active TFT Color Display Automated measurements Dual window FFT, simultaneously monitors both the time and frequency domains Integrated Courseware feature Dual channel frequency counter Zoom Function USB host port supporting flash drives, USB device port for PC connectivity. 	20				
2	 Waveforms: Sine, Square, Triangle, Ramp, Pulse, DC, DC-Offset Adjustment Frequency Range 0.3Hz to 3MHz Internal Sweep & External AM FM-Modulation Square Wave Rise time max 70ns Distortion Factor max 0.5% (up to 100kHz) Internal AM Generator (20Hz to 20kHz) 40 MHz Frequency Counter 	15				

	 LCD Display for displaying functions, mode, frequency, amplitude etc. TTL Trigger Output 			
3	Video processing set up (from Wavelet	1		
	Group)			
	 Wavelet Technologies make DIPLAB-1.0 DIGITAL IMAGE PROCESSING A Set containing of Hardware: DSPPORT-V.1 units, RS232 cables, USB-RS232 Converter, BNC to BNC cables - 2 Nos of Each PAL camera with Tripod, JTAG USB Emulator, 17" LCD monitor, BNC to RCA cable, VGA converter, USB cable - 1 No of Each Software: Video processing library with example images, Pattern generation library, Example programs, Déjà vu application software, and Hyper Terminal files (Applicable OS: MS-Windows XP, 7 and 8) With DSPPORT-V.1 user manual, Déjà vu software user manual, Labexperiments manual, Library manual. Training for faculty in our institute. 			

6. TRAINING & PLACEMENT DEPARTMENT

Item No.	Particulars	Approx. Qty	Basic Unit Price	VAT + Other +LBT	Total Amount Rs.	EMD amount (3 % of the total amount)
		q	а	b	(a+b)*q	
1	1.Audio Mixer Z10 Phonics /Allen & Heath/Studiomaster professional AiR series or equivalent Operate with 220-240V 50Hz AC supply, USB interface (USB1.1 or higher), 4 channel (2 Mic/line + 2 Stereo input) 8 segment left right LED meter, Headphone output Technical Specifications: Frequency response 10Hz to 20kHz, Noise 22Hz to 22kHz - 90dBu, THD 0.01%, Mono channel (XLR) Input, Mono channel Line Input (Jack socket), Stereo Input (Jack or phono sockets) L/R Outputs (XLR) Normal/DI out, Aux & FX Outputs (Jack sockets) Record & Monitor Outputs (phono sockets) 2. Amplifier 900W Quest /Studiomaster/DJ or equivalent with accessories General Specifications Operate with 220-240V 50Hz AC supply, Temperature and short circuit protection, USB interface (USB1.1 or higher) Technical Specifications 8 or 4 ohm speaker output, Frequency response 20Hz to 20kHz THD <1% 3. Wireless Microphone System Mipro / Sure make or equivalent with accessories General Specifications Operate with 9V to 12V DC supply, Handheld and collar	01			(a b) q	
	microphone set, Range 100 m Technical Specifications VHF band 160-245MHz, Transmitter RF output 30Mw S/N ratio > 90Db, Frequency response 5Hz to 15KHz, THD <1%					

2	LCD Projector	01		
	Business Projector			
	Resolution: XGA (1024X768),			
	Brightness: 2700 lumens, USB, HDMI, Optional Wi-Fi,			
	Contrast Ratio: 10000:1,			
	Lamp Life: 5000Hr, Wireless Connection (Optional),			
	RGB Liquid Crystal Shutter Projection system Driving, Method Poly-			
	silicon TFT Active matrix,			
	Pixel Number : 786,432 dots (1024 x 768) x 3,			

7. AICTE-RPS (ELN-DEPT)

Item No.	Particulars	Approx. Qty q	Basic Unit Price a	VAT + Octroi b	Total Amount (a*q)+b
1	Quanser or equivalent Rotary Inverted Pendulum module with following specifications Rotary arm length 21.6 cm Rotary arm mass 0.257 kg Pendulum length 33.7 cm Pendulum mass 0.127 kg Encoder resolution 4096 count/rev Supported system in LabVIEW environment 1 x SRV02 Rotary Servo Base Unit 1 x Quanser Q1-CRIO module 1 x VoltPAQ-X1 linear voltage amplifier	1			
2	Xilinx ZC702 evaluation board featuring the XC7Z020 CLG484 -1 AP SoC (Part No.EK-Z7-ZC702-G) Full seat Vivado® Design Suite: Design Edition Node locked & Device-locked to the Zynq-7000 XC7Z020 SoC, with 1 year of updates and support AMS 101 evaluation board Printed Quick Start Guide Targeted Reference Design showcases various embedded domain features and capabilities with a Linux-based video pipeline design Board Design Files (DxDesigner 2005, Allegro 16.3 – 16.5) Cables & Power Supply Spartan®-6 FPGA SP605 Evaluation Board	2			

8. ELECTRICAL ENGINEERING DEPARTMENT-2

Item No.	Particulars	Approx. Qty q	Basic Unit Price a	VAT + Octroi b	Total Amount (a*q)+b
1	20KWp Grid Connect Rooftop Solar PV Plant: Total plant consists of PV modules, three phase string Inverter, Module mounting structure&Grid Connection. Details specifications of each item is as below A. PV Module: Product: Poly/Mono-crystalline solar Photovoltaic module. Maximum Power Pmax (W) : 250-280 Wp Maximum Power Voltage Vmax (V): 30.40V Maximum Power Current Impp: 8.10 A Open Circuit voltage (V): 37.60 V Short Circuit current (A) : 8.7 A ModuleDimensions (L*W*H) (+-1.5mm): 1639 X 982 X 36 mm Weight (kgs) : 17.25 Kgs No. of Bypass Diodes : 3 Junction Box Protection: IP65 Module Efficiency (%) : 15.53% Cell Efficiency (%) : 17.80% Total number of Modules should be suitable for rated output power. B. Three phase Inverter with MPPT Tracker: Input Data: Maximum Input Current: 33A Maximum Input Current: 33A Maximum Input voltage (Udc max): 1000V MMP Voltage range (Umpp min- Umpp max: 150-800 V Output Data: Rated Power : 20 KVA Max Output current : 28.86 A AC nominal Voltage: three phase four wire system V(line) = 400 V	1			
	Frequency (fr) : 50 Hz Maximum efficiency: 98% European efficiency (EU) : 97.5% Total No. of Invention 20 KVA : 1Nos				

Inverter will be provided with i) thermal overload and overvoltage protection, ii) Various control		
functions iii) communication port.		
C. Module Mounting structure:		
i. Prefabricated GI/MS and/or Aluminum sections.		
ii. Proper spacing between modules to reduce the wind load.		
iii. Minimum ground clearance on South Side is not less than 0.5 mts		
D. Grid Connection:		
Inverter should be connected to the grid with 50sq. mm four core cable with double MCCB and 10	00 A	
busbar system.		
E. Earthing and Lighting protection System:		
Earthing and Lighting protection System should be provided		

Terms & Conditions

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

- Essential additional Services to be included Installation and training on college site.
 Supplying documentation, Software Media /Software with media. (Licensed Version), <u>Exclusive</u> 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, tagging, satisfactory certification from concerned HOD 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 25th June, 2015 (12:00 noon).* Late documents will not be accepted.
- 9. The cost of the TENDER document is in the form of DD of Rs.1000/-- 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 along with 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 along with 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 **Two Months.**
- 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 along with 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:

Sr.	Department	Total EMD			D.D. Detail	s				
No.		Amount		Amount				D.D. No.	D.D. Date	Nationalized
								Bank's Name		
		Rs.	Ps.	Rs.	Ps		DD/MM/YYYY			
1	MECHANICAL									
2	CIVIL									
3	INFORMATION TECHNOLOGY									
4	ELECTRICAL									
5	ELECTRONICS									
6	TPO									
7	ELECTRONICS-AICTE RPS									
8	ELECTRICAL -2									

Seal of Company	Authorized Signature Name:
Date:	

For more details for filling up of the tender form, following respective head of the department may be contacted.

Sr.	Name of Department	Contact No.	Email Address
No.			
1	MECHANICAL	(0233)-2300716	hod.mechanical@walchandsangli.ac.in
2	CSE	(0233)-2301327	hod.cse@walchandsangli.ac.in
3	ELECTRICAL	(0233)-2300933	hod.electrical@walchandsangli.ac.in
4	ELECTRONICS	(O233)-2304470	hod.electronics@walchandsangli.ac.in
5	INFORMATION TECHNOLOGY	(0233)-2301910	hod.IT@walchandsangli.ac.in
6	CENTRAL COMPUTING FACULTY	(0233)-2300410	dinesh.kulkarni@walchandsangli.ac.in
7	TPO	(0233)-2300015	sanjay.dhaigude@walchandsangli.ac.in