



शासकीय अभियांत्रिकी महाविद्यालय यवतमाळ

(GOVERNMENT COLLEGE OF ENGINEERING YAVATMAL)

धामणगाव रोड यवतमाळ - ४४५००१

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Quotation Enquiry

No. GCOEY/EED/ 2023-24/ 1447

Date: 19/06/2023

To,
Programmer

(For Web Portal & Main Notice Board).

Subject: Invitation of quotation for the supply of Machineries / Equipments For Electrical Engg. Deptt.

Sir/ Madam,

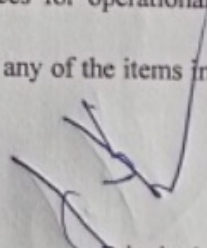
The sealed quotations are invited for the supply of following items (Given in Table-1 below) subject to the conditions mentioned below.

Sr. No.	Name of equipment/ item	Detailed Specifications	Quantity
1	Single Phase Loading Rheostat	230 V, 20 A, Voltage : 240V AC+ 10%, 50 Hz, Current : 15A, Power : 3.5 kW, Loading Steps : 15, Features : Suitable for static & rotating machines, Heavy duty castor wheel for easy movement.	1
2	Single Phase Inductive Load	230 V, 20 A, Voltage : 230V AC+ 10%, 50 Hz, Current : 15A, Power : 3.5 kVAR, Features : Suitable for static & rotating machines, Load variation can be obtained by movable handle, Heavy duty castor wheel for easy movement.	1
3	Three Phase Loading Rheostat	400 Volt, 20 A, Voltage : 415V AC+ 10%, 50 Hz, Current : 5A(per Phase), Power : 10.5 kW, Loading Steps : 5, Features : Suitable for static & rotating machines, Suitable for balanced and unbalanced load Conditions, Heavy duty castor wheel for easy movement, Exclusive and rugged designed panel.	1
4	Three Phase Inductive Load	400 Volt, 20 A Voltage : 415V AC + 10%, 50Hz, Current : 5A (Per Phase), Power : 3.5 kVAR, Features : Suitable for static & rotating machines, Load variation can be obtained by movable handle, Heavy duty cast or wheel for easy movement.	1
5	Linear System Simulator (Advanced Version)	type0 And Type1 system. It consists of : 1)Gain Controllable Amplifier 2)One No. Of Integrator 3) Inductance Bank4) Variable Resistance 5) Capacitor Bank 6) Square wave generator with amplitude and frequency control. 7)impulse generator, sawtooth generator, and controllable DC output. Amount of feedback can be controlled by a ten turn Helical Potentiometer. Students can study of the effect of square and impulse Input on First and second order system.	1
6	Servo Speed Torque Characteristics Measurement Unit	Two-phase servomotor. · The speed measuring device which will not load the motor · Proximity sensor is used for speed sensing. · Loading arrangement for servomotor. · Torque measuring device. · RPM indicator and ammeter measuring load current. Unit will be covered by an acrylic window to facilitate clear view of the entire system. Dimension: 50*38*22 cms. The a.c. servomotor is having its reference winding at 110 volts with the control winding operating at 60 volts maximum. The maximum torque is typically 70 gm-cms. PC interface through modbus for speed and current measurement and estimation of torque. Step down and isolating transformer. Microcontroller 328P or equivalent with USB for PC communication.10 ohm/10 w resistance,100ohm /25W resistance for speed control, 1k pot ,2N5294 based variable power supply.MS powder coated box and polycarbonate printed front panel.	1
7	P. I. D. Simulator	System comes with variable DC power supply -200mv ,+12V,-12 power supply, +5v power supply for 3 and ½ digit DPM , 1no of analog meter , potentiometers with value of 1k,100K,1M,500 ohm/2W, 47K ,Condensers 220mfd/63V 2 no, Push button 1no,toggle switches 1no, Separate KP,Ki,KD sections with summing amplifiers 2no, 6 Opamp based card with adjustable gains, 330Ohm, 460 ohm, 1k resistances as load , option to open	1

		connect or disconnect feedback path to study closed loop and open loop.DPM is floating to check input and output.System comes with neatly printed polycarbonate panel with working circuit diagram , link to select Kp,KI,KD modes	
8	Stepper Motor Controller	12V, 2kg.cm,200 steps, stepper motor with advanced micro stepping drive, 2V, 2A SMPS, LCD 16*2 display, PIC 16F870 microcontroller based control circuit, push buttons for Mode selections, RUN, ENTER (total 4 no), System is provided with separate Motor module with neatly printed scale on it with pointer for step measurement. System is provided to study the control for, Steps A. Speed B. Sequence C. Direction Also separate ATMEGA microcontroller is provided to control the drive through MODBUS USB interface from PC Dedicated switch is provided for selection of control mode from pc or on board control. 4 no of Sequence programs with selectable from push buttons	1
9	Dc Motor Speed Controller Using PID	advanced microcontroller based PID controller with 24V,2A PMDC motor with proximity switch based speed measurement card System has inbuilt Chopper based drive using PWM technique .System has , 1) 16F870 microcontroller based main control circuit. 2) 16*2 character LCD display with actual speed, set speed ,KP,KI,KD constant display. 3) Separate card for speed measurement. 4) 24V,3A SMPS based main power supply, 5) 47nC063 or equivalent power device with 4N35 optoisolator 6) Step down chopper configuration with 1KHZ frequency. 7) 1k pot 4no for Speed, KP,KI,KD adjustment. 8) 12 pin Johnson socket for motor connection. 9) 1 no ammeter for DC current measurement. 10) LCD also shows selected mode. 11) Study of OPEN /CLOSED LOOP study. 12) study of proportional proportional + integral proportional + integral + derivative mode study. 13) Over current protection. 14) Motor is provided with loading arrangement (brake ,drum type) 15) Firm MS powder coated panel and motor frame. 16) 16) 230V,50Hz operated system	1

Terms and conditions

11. Quotations should be submitted in sealed envelope superscribed as "Quotations for "Electrical Engg. Deptt." so as to reach this office on or before Dt.29/06/2023 by 5 pm. The supplier should enclose PAN Card Xerox, GST registration certificate / Number, GST Clearance Certificate/ GST Challan for last quarter of the financial year.
12. Quotations will be opened at 15.00 p.m. on Dt.30/06/2023 If you desire, the supplier may remain present at his/ her own cost.
13. The instruments /equipment's /goods / materials, quoted for, should be of the best quality and should be in conformity with specifications mentioned against the item/equipment. Clearly indicate the Make / Manufacturer / Country and other specifications in details. **The quotation must accompany with the complete technical description (leaflet) / literature of the goods quoted without which the quotation may not be considered.**
14. The rates should be **F.O.R. Institute and inclusive of all the taxes (GST), packing, forwarding, freight, insurance, transportation etc.**
15. Supply will have to be completed within **15 days** from the date of issue of the supply order. The penalty for **late delivery** shall be @ 0.5% (max.10%) of the value of undelivered stores per week.
16. The payment will be subject to delivery of items in good condition and will be made only after installation, commissioning and satisfactory test / trial of the same by the technical committee. Two copies of the bill should be supplied along with goods.
17. If the supplied item is rejected in full or part, the supplier will have to bear the expenses incurred for return and replacement of the items if any.
18. The supplied items should be highest quality as per specifications and should confirm to the specifications for the period of 3 months from the date of delivery failing which the supplied item will be rejected.
19. The supplier has to give warranty for satisfactory working of supplied equipment at least for a period of 2 years from the date of delivery. The supplier is also entitled for providing its services for operational purposes of supplied item on the chargeable basis for 2 years beyond the warranty.
20. This office reserves the right to accept or reject any or all quotations and to order any of the items in any quantity without assigning any reason thereof.


 Principal
 Government College of Engineering
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