

JNTUA COLLEGE OF ENGINEERING, PULIVENDULA

SCHEDULE FOR THE TENDER

NAME OF THE WORK

: PURCHASE OF LAB EQUIPMENT FOR EEE DEPARTMENT IN JNTUA COLLEGE OF ENGINEERING, PULIVENDULA.

NAME AND ADDRESS OF THE: M/s. CONTRACTOR/AGENCY :



JNTUA COLLEGE OF ENGINEERING, PULIVENDULA

NIT No.12/Prl./JNTUA CEP/ Lab Equipment (EEE)/2019-20, Dt: 20-12-2019

Tenders for the work mentioned below are invited from the Authorized Agencies for the specified item of LAB EQUIPMENT

1.	NAME OF WORK	PURCHASE OF LAB EQUIPMENT FOR EEE DEPARTMENT IN JNTUA COLLEGE OF ENGINEERING, PULIVENDULA.			
2.	Estimate Contract Value	Rs.9,80,000/-			
3.	Period of completion	One Month			
4.	Form of Contract/Class of Contractor eligible	Firm Registration			
5.	E.M.D. to be paid in the shape of Electronic transfer in E procurement Platform in favour of the Principal, JNTUA College of Engineering, Pulivendula from any Nationalized/Scheduled commercial bank at 2% of ECV	Rs.19,600/-			
6.	Bid Processing Fee to be paid in the shape of Demand Draft In favour of " The Principal , JNTUA College of Engineering, Pulivendula "	Rs.2,950/- (Rs.2,500/- +(18% GST) Rs.450/-)			
7.	Date and time for Tender Schedules	21 /12/2019 @ 11.30 AM to 06/01/2020 upto 03.30 PM			
8.	Last date and time for submission of Tender	06/01/2020 upto 04.00 PM			
9.	Date & Time for opening of Tenders	06/01/2020 @ 04.01 PM			

SPECIAL CONDITIONS

- 1. The Bidder should submit their tenders on or before 06/01/2020@ 04.00 p.m.
- 2. The bidder must submit their firm Registration. Certificate shall be enclosed.
- 3. The bidder must submit the Xerox copies of PAN Card, GST registration, latest IT Returns for past 2 years and GST Clearance.
- 4. The Bidder must submit make, model and technical specifications for each item to be supplied along with registration and GST Forms.
- 5. A copy of the Tender Document with each page duly signed by the authorized signatory (who has signed the Bid), should also be uploaded in e-procurement portal with the Technical Bid in token of bidders confirmation to accept the terms and conditions and other provisions contained in it.
- 6. Financial bid will be opened only for the successful technical specifications of the bidders.
- 7. If in the first invitation/call, single bid is received, the authority inviting the tenders/bids shall not open the price bid. In such cases the tenders shall be re-invited.
- 8. Tender Inviting authority reserves the right to cancel the tender at any time without assigning any reason before issue of the purchase order. BIDDERS are not entitled to claim any damage or compensation in case of such cancellation.
- 9. The bid processing fee of Rs.2,950/- (Rs.2,500/- + (18% GST) Rs.450/-) should be drawn a Demand Draft in favor of, "The Principal, JNTUA College of Engineering, Pulivendula" and send the hard copy immediately to "The Principal, JNTUA College of Engineering, Pulivendula -516390, YSR Kadapa Dist, Andhra Pradesh".

- 10. The EMD of 2% of Estimation Cost Value (ECV), should be paid in the shape of Electronics Transfer in E-Procurement portal through online to the account of "Principal, JNTA College of Engineering, Pulivendula".
- 11. The EMD of the **unsuccessful bidders** will be **returned** after the **successful bidder is awarded the work.** The EMD of the successful bidder will be refunded after warranty period from the date of successful completion of installation of the equipment.
- 12. All the bidders desirous of participating in the tender shall visit the site of installation and quote their rates suitably.
- **13.** The tenders will be opened on the specified date at specified time by the **"Principal, JNTA College of Engineering, Pulivendula".**
- 14. The successful bidder who is awarded the work shall arrange for himself all tools and machinery necessary for installation. The College will not take any responsibility to provide any tools & machinery necessary for installation of Equipment.
- 15. The final acceptance of the material will be made only after delivering at our end in good condition and subject to satisfying all the specifications given by the College.
 - 16. The work shall be completed within one month time period.
 - 17. The payments shall be released after complete satisfaction, testing and installation of the equipment.
 - 18. The successful bidder will have to deposit a Performance Security (Security Deposit) of 3% of the total contract value within 15 days from the date of issue of LOA (Letter of Acceptance), in the form of Demand Draft drawn in favor of "Principal, JNTA College of Engineering, Pulivendula". After receiving

the Permanence Security the purchase order will be issued. The security deposit will be released after warranty period.

- 19. Staff working in JNTUA University and its constituent Colleges and their immediate relatives (husband/wife/brother/sister/son/daughter/son-in-law/daughter-in-law) shall not participate in the tender.
- 20. Bidders shall submit their bids online at e-procurement plat form <u>www.tender.apeprocurement.gov.in</u>.
- 21. The rate for the items shall be inclusive of GST.
- 22. The University has issued Procs. No. JNTUA/DAPO/D3/Exemption for EMD/MSME and NSIC/ 2019 date: 31-10-2019. The firms as registered under Single Point Registration Scheme of NSIC are eligible to get the benefits as listed below under Public Procurement Policy for Micro & Small Enterprises (MSEs) Order 2012 as notified by the Government of India, Ministry of Micro Small & Medium Enterprises, New Delhi.
 - Issue of the Tender Sets free of cost
 - Exemption from payment of Earnest Money Deposit (EMD)

The firms registered with **MSME** and **NSIC** have to submit a copy of registered certificate and make request for **Tender Processing Fee** and **Earnest Money Deposit** (EMD) **Exemption**.

For any further enquiries/clarifications, contact: +91-76 70 902 300, +91-9000 551 427

PRICE BID

NAME OF WORK: PURCHASE OF LAB EQUIPPMENT FOR EEE DEPARTMENT IN JNTUA COLLEGE OF ENGINEERING, PULIVENDULA.

NAME & ADDRESS OF THE BIDDER:

I/We have gone through all the terms & conditions of the tender and specifications of the Lab Equipment for CIVIL Department. We offer our Price for the Lab Equipment for EEE Department as given below:

S.No	Description of the item	Qty	Rate	Amount
1.	Speed Measurement and closed loop control using PMDC motor. IGBT based PWM chopper drive for PMDC motor-24V/50 W / 1500rpm with control circuit, IGBT based power circuit, DC power supply unit, PMDC motor with mechanical loading arrangement and Tacho coupling for closed loop DC motor control.	01 No		
2.	Thyristorised drive for PMDC Motor with speed measurement and closed Loop control. Thyristorised drive – 50W / 24V / 1500 rpm PMDC motor with firing circuit, power circuit, PMDC motor with loading arrangement, isolation transformer, tacho generator coupling for closed loop control and speed indicator.	01 No		
3.	IGBT used single 4 quadrant chopper drive for PMDC motor with speed measurement and closed loop control. IGBT based Four quadrant PWM chopper drive for PMDC motor-24V/50 W / 1500rpm with control circuit, IGBT based power circuit, DC power supply, PMDC motor with mechanical loading arrangement and Tacho coupling for closed loop DC motor control.	01 No		
4.	 Cyclo-converter based AC Induction motor control a. Single Phase cycloconverter power circuit - (230V / 5A) This unit consists of 4- SCR's to be interconnected in center-tapped transformer type cycloconverter power circuit. Each device mounted on suitable heat sink and protected by snubber circuit, fuse and circuit breaker. Voltmeter and Ammeter for measurement of output Voltage and current are provided. All the connections are to be brought to the front panel. b. Single Phase cycloconverter Firing Unit: This Unit should generate 4 Synchronized firing pulses based on Micro controller to trigger SCR's connected in center-tapped transformer type cycloconverter. Features Work on 230V AC mains, 200 mA gate drive current to trigger wide range of devices. 	01 No		

Power Converters and Drives Lab

	 Frequency division -1,2,3,4,5,6,7,8,9,10. Firing angle variation should be from 180 degree to 0 degree, on a graduated scale. Test Points should be provided in the logic circuit. c. Single phase capacitor run induction motor - 0.5 hp/230V /1440 rpm d. Single phase center tap transformer - 230V - 0 - 230V @ 350VA Digital Hand held Tachometer. 		
5.	Speed control of 3 phase wound rotor Induction motor. Speed controller for 3 phase wound rotor motor using PWM chopper for rotor resistance control with 1 hp / 415 v slip ring inductions motor.	01 No	
6.	Cyclo Converter Fed Synchronous Motor 3 phase cyclo converter fed synchronous motor drive with 0.5 HP/ 3 phase auto synchronous motor.	01 No	
7.	 Isolated Gate Drive circuits for MOSFET / IGBT based circuits. a) Using opto coupler driver ICs – 6 channels b) Using Skyper 32 driver circuit – 1 leg 	01 No	
8.	CRO Make : Specified by the vendor 30MHz Dual Trace	03 No	

Power Converters and Energy Lab

S.No	Description of the item	Qty	Rate	Amount
1.	Study of thyristors controlled DC Drive	01 No		
	This experimental setup consists of:			
	a) Three phase bridge converter firing circuit.			
	b) Three phase fully controlled Full Bridge converter Power circuit.			
	c) DC shunt motor -0.5 hp / 220V / 1500 rpm with			
	mechanical loading arrangement.			
	d) Three phase step down transformer.			
	e) Digital Hand held Tachometer.			
2.	Experimental study for Chopper fed DC motor Drive	01 No		
	IGBT based PWM chopper drive for PMDC motor-24V/50 W /			
	1500rpm with control circuit, IGBT based power circuit, DC			
	power supply unit, PMDC motor with mechanical loading			
	arrangement and Tacho coupling for closed loop DC motor			
	control.			
3.	Experimental study for characteristics of single phase semi	01 No		
	controlled Full-Bridge Converter for DC motor drive			
	This experimental setup consists of:			
	a) Single phase bridge converter firing circuit.			
	b) Single phase Semi controlled and Full Bridge converter			

	Power circuit.		
	c) DC shunt motor – 0.5 hp / 180V / 1500 rpm		
	d) Digital Tachometer		
4.	Experimental study for speed Control of separately excited DC	01 No	
	motor. This experimental setup consists of:		
	a) Single phase bridge converter firing circuit.		
	b) PID controller unit for closed loop speed control.		
	c) Single phase Fully controlled and Full Bridge converter		
	Power circuit.		
	d) DC shunt motor -0.5 hp / $180V$ / 1500 rpm with		
	mechanical loading arrangement and DC tacho generator		
	coupling for closed loop control.		
5.	CRO with Data Storage	01 No	
	Make : Specified by the vendor		
	50MHz Dual Trace		

Digital Signal Processors Lab

S.No	Description of the item	Qty	Rate	Amount	
1	TMS320LF2407A DSP Processor based Development Kit	01 No			
2	TMS320F2812 DSP Processor based Development Kit	01 No			
3	Computers	02 No			
	Total :				
Note: The total amount should not exceed Rs.9,80,000/- with all taxes, Transportation, etc. and enter the					
total bid amount in default price bid given in e-procurement platform.					