



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

No. Mech-500282-2017-18

Date: 18.10.2017

NOTICE INVITING TENDER

Subject: NIT No. Mech-500282-2017-18 for Supply and Installation of equipment for robotics lab

Indian Institute of Technology (Indian School of Mines), Dhanbad invites tenders/ quotations for Supply & Installation of following item

S No	Full Description of items/ store	Qty
1	Supply & Installation of equipment for robotics lab (Specification as per Annexure –II)	As per Annexure - II

Particulars of tender cost, earnest money deposit and date and time of submission and opening of tenders are as under:

S No	Items	Particulars
1.	Tender cost	Rs. 1,000.00 (Rupees One Thousand Only)
2.	Earnest money deposit	Rs.19,000.00 (Rupees Nineteen Thousand Only)
4.	Date and time for submission of tenders	08.11.2017 at 1:00 P.M.
5.	Date and time of opening of tenders	08.11.2017 at 4:00 P.M.

Tender document containing following document is available on the websites of <https://eprocure.gov.in/cppp> & www.iitism.ac.in/tender_page, which may kindly be referred.

1. General terms & condition as per Annexure-I
2. Technical specifications as per Annexure-II
3. Financial Bid as per Annexure - III

Those firms who do not want to quote may please intimate us along with reasons for same as it will help us to update our suppliers list.

Encl: As above



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

Annexure - I

Terms & Conditions

- 1) The rates should be quoted for each item separately.
- 2) Conditional offer will not be accepted.
- 3) IIT (ISM) does not issue any Form 'C' or 'D' towards sales tax concessional rate. Hence, full rate of GST applicable should be quoted.
- 4) **Bid Security or Earnest money deposit (EMD)**: should be submitted in form of A/c payee demand draft drawn in favor of Registrar, IIT (ISM) Dhanbad and payable at Dhanbad, Jharkhand.
- 5) Successful bidders will have to submit Performance Security (PBG) in the form of Bank Guarantee only as per the Purchase Order before releasing payment.
- 6) **Educational discount**, if any, should be clearly mentioned.
- 7) You are requested to submit your quotation strictly as per the specifications mentioned in the NIT.
- 8) Your tender must be valid for **minimum 90 days** from the date of opening of tender.
- 9) Please mention warranty/ guarantee in your offer clearly. Material/ equipment to be supplied must have minimum warranty/guarantee of **36 months**.
- 10) *Each page in the bid document must be numbered properly* and duly signed & sealed by the bidder on every page of the bid.
- 11) **The items/ materials shall be required to be delivered at Mech Department/ Section through Purchase & Store Section, IIT (ISM) Dhanbad** at the risk and cost of the tenderer.
- 12) Unloading and installation shall be the complete responsibility of the supplier.
- 13) The stores are required to be delivered within 30 days. Late delivery may not be accepted.
- 14) The items offered should be of good quality confirming to BIS standards, wherever applicable.
- 15) **Advance payment is not admissible**. Payment shall normally be made within 3-4 weeks subject to receipt and acceptance & installation (as per Purchase Order Terms) of the ordered materials/items.
- 16) In the event date on which the tender is opened for acceptance is declared to be a holiday, the tenders shall be deemed to remain open for acceptance till the next working day.
- 17) Please send your offer by Regd.Post/ Speed Post/ Courier along with Courier receipt. Tender/ quotation will be received during IIT (ISM) working hours only (i.e. Monday to Friday). *Late or delayed tenders shall be summarily rejected*.
- 18) Any other information that you may like to obtain, you are free to contact IIT (ISM) before submission of tender.
- 19) IIT (ISM) reserves the right to accept and/or to reject any/ all tenders without assigning any reason.

Deputy Registrar

Annexure - II

Specifications of the equipment for the Robotics Lab:



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

Sl. No	Features	Qualifying Minimum Requirements
1	Robotic ARM with 3 15 Degree of Freedom	Load capacity:- 2 KG Application:- Loading and Unloading Material Ambient Temperature:- 0-55 deg C Repositioning Precision:- +1-1mm Max Programming Platform: LabVIEW Software Movement, Rotation, Choice of Different Loading Material, Control Logic can be programmed as per requirement.
2	Saw Blade Robot with Automated Safety Controller	Machine will automatically detect if any human contact happen with the High Speed Blade and control it accordingly. Programming Platform: LabVIEW Software
3	ROBOTIC ARM 6 DOF DIY KIT WITH USB SERVO CONTROLLER AND SOFTWARE	Controllable through Rhino Robot Control Board, Arduino or any other microcontroller capable of driving 6 RC Servos to control the robotic arm directly
4	ROBOBOX : PRE-PROGRAMMED, PICK & PLACE RCIAUTO ROBOT - DIY KIT	The robot should work as Line follower, Obstacle avoider, Wall hugger, Remote Controlled racing car, Remote Controlled Pick & Place robot etc.
5	6 LEGGED INTELLIGENT HEXAPOD DIY W/IT 18 SERVO CONTROLLER	The robot should complete forward, backward, turn, dancing, and climbing motion.
6	AUTONOMOUS OUTDOOR ROBOT - 7 KG PAYLOAD DIY KIT	The robot with 4 High Torque DC Geared motors and High quality 10 CM wheels. The robot has a payload capacity of 7 KG weight on flat surfaces and up to 3 KG on rough terrain. The robot should be controlled through Rhino Robot controller board which is powered by AVR Atmega16A microcontroller
7	Micro-controller Small Line Tracking Smart Car Line Following Robot LFR DIY Kit	ATmega8 Microcontroller Board with Atmega8, L293D & HT92B70 IC
8	ARDUINO WITH SENSORS AND COMPONENTS KIT	1 Arduino, 1 breadboard, ultrasonic sensor, accelerometer module 3 axis, Temperature and humidity sensor, gas sensor, hall effect sensor, potentiometer
9	ARDUINO STARTER KIT COMPLETE	1x Arduino uno(made in India), 1xBreadboard, 2x IR Sensor(High Sensitive) 1x Object Counter Project, 1x SMPS Adaptor 12 volts 1AMP 30xM/M-10xM/F Cables, Motor +Fan, 1x LCD 1602, 2x Burg Strip 16 pin M/F, 10x Transistors S-NPN and S-PNP, 2x MOSFET 1x N-Channel, 1x P-Channel, 70x Resistors (Useful Values)
10	Arduino Uno R3 ATmega328P Compatible with USB Cable	14 digital input/output pins (of which 6 can be used as PWM outputs), 6 analog inputs
11	Beaglebone Black	512MB DDR3 RAM, 4GB 8-bit eMMC on-board flash storage, NEON floating-point accelerator
12	Raspberry Pi Camera	Smp camera module, capable of 1 080p video and still images and connects directly to Raspberry Pi
13	Raspberry Pi 3 Model B	1.2GHz, 64-bit quad-core ARM Cortex-A53
14	Intel Gallileo	intel® Quark SoC X1000 Application Processor, a 32-bit Intel Pentium-class system on a chip, Digital pins 0 to 13 (and the adjacent AREF and GND pins), Analog inputs 0 to S, the power header, ICSP header
15	Arduino Lilypad	Based on ATmega328V



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

16	Vision Based Robots	Set-up Consist of (a) Colour based Recognition, (b) Pattern Based
		Segmentation , configurable smart cameras with the included Vision Builder
		for Automated Inspection (AI) software and program the camera with the
		LabVIEW Real-Time Module and the Vision Development Module.
17/	STANDARD SERVICE	System Configuration, Assembly, and Test
	PROGRAM FOR	
	SYSTEMS	
18	Delivery, Installation	Delivery:- Delivery and assembly and installation at our laboratory at
	and Training	IIT(ISM) Dhanbad.
		Training:- Onsite Training for Two days covering basics and core Training
		with study Material
19	Warranty	1 year



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

Annexure - III

Format for Financial Bid

NIT No.: Mech-500282-2017-18

Date:

Bidders Ref: No.

Date:

GSTIN No.:

Subject: Supply & Installation of Desktop Computer

Sl. No.	Full Description of Items with (HSN Code/SAC Code)	Qty.	Rate	Amount
			Packing & Forwarding (if any)	
			Total	
			GST	
			Freight (if any)	
			Installation (if any)	
	Amount should be in figure as well as word		Grand Total	

Note:

- 1) All the details must be provided as per prescribed format only
- 2) Prices quoted by the bidders should include GST, HSN Code, SAC Code, duties, livies, transportation cost and insurance costs etc. if any
- 3) All the rates must be quoted in Indian Rupees.