



**JNTUH INNOVATION FOUNDATION**  
**JNTUH, Kukatpally, Hyderabad – 500 085**

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**Tender Notice No. JNTUHIF/TN-002/2022-23, Dated 06-09-2022**

NAME OF WORK

: **Supply, Installation and Training of Consumable IoT Lab Equipment at JNTUH Innovation Foundation, JNTU, Hyderabad.**

NAME AND ADDRESS OF THE CONTRACTOR  
WHO DOWNLOADED THE BID DOCUMENTS.

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**JNTUH INNOVATION FOUNDATION**  
**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
Kukatpally, Hyderabad – 500 085

**NOTICE INVITING TENDERS (NIT)**

**Tender Notice No. JNTUHIF/TN-002/2022-23, Dated 06-09-2022**

- 1) Name of the work : **Supply, Installation and Training of Consumable IoT Lab Equipment at JNTUH Innovation Foundation, JNTU, Hyderabad.**
  - 2)A Estimate Contract Value (E.C.V) of work put to tender (Excluding GST) : **4,19,648/-**
  - 2)B Period of completion of work : **45 Days**
  - 3) Form of contract : **LUMPSUM**
  - 4) **E.M.D (2.5% of E.C.V). to be paid online in favor of The Director, JNTUH Innovation Foundation, HYDERABAD** : **Rs. 10,490**
  - 5) Bid Submission Start Date & Time : **From 06/09/2022 (5.00 PM)**
  - 6) Bid Submission Closing End Date & Time : **20/09/2022 (5.00 PM)**
  - 7) Pre-Qualification/ Bid Opening Date (Qualification and Eligibility Stage) : **20/09/2022 (5.01 PM)**
  - 8) Commercial Stage (Financial Bid Stage) : **20/09/2022 (5.02 PM)**
  - 9) **Processing Fee (non-refundable)** to be paid :  
in the shape of Demand Draft in favour of **Registrar, JNTUH Kukatpally, HYDERABAD** : **Rs. 590/-**  
obtained from Nationalized Bank/Scheduled Bank
- 2 a) The bidders need to contact the **Chief Engineer, JNTUH KUKATPALLY, HYDERABAD** for information on 'e'procurement.

b) The intending bidders need to register on the electronic procurement market place of Government of T.S., that is, <https://tender.telangana.gov.in>. On registration on the eprocurement market place they will be provided with a user ID and password by the system using which they can submit their bids on line.

c) While registering on the eprocurement market place, bidders need to scan and upload the required documents as per the tender requirements on to their profile.

d) Such uploaded documents need to be attached to the tender while submitting the bids.

The e-procurement market place provides an online self-service registration facility to such of the contractors who are already registered with respective participating departments for supply of specified goods and services.

3. As per G.O.Ms.No.174 I & CAD Dept., dt.1.9.2008:

i) Submission of original Hard Copies of the uploaded scan copies of DD towards EMD by participating bidders to the tender inviting authority before opening of the price bid is dispensed forthwith.

ii) All the bidders shall invariably upload the scanned copies of DD in e-procurement system and this will be the primary requirement to consider the bid as responsive.

iii) The Department shall carry out the technical bid evaluation solely based on the Uploaded certificates/documents, DD towards EMD in the e- procurement System and open the price bids of the responsive bidders.

iv) The Department will notify the successful bidder for submission of original hard copies of all uploaded documents, DD towards EMD prior to entering into agreement.

v) The successful bidder shall invariably furnish the original DD towards EMD, certificates/documents of the uploaded scanned copies to the Tender inviting Authority before entering into agreement either personally or through courier or post and the receipt of the same within the stipulated date shall be the responsibility of the successful bidder. The Department will not take any responsibility for any delay in receipt/non-receipt of original DD towards EMD, certificates/documents from the successful bidder before the stipulated time. On receipt of documents, the Department shall ensure the genuinely of the DD towards EMD and all other certificates/ documents uploaded by the bidder in e-procurement system in support of the qualification criteria before concluding the agreement.

vi) if any successful bidder fails to submit the original hard copies of uploaded certificates/documents, DD towards EMD within the stipulated time or if any variation is noticed between the uploaded documents and the hard copies submitted by the bidder, the successful bidder will be suspended from participating in the tenders on e-Procurement platform for a period of 3 years. The e-Procurement system would deactivate the user ID of such defaulting successful bidder based on the trigger/recommendation by the tender Inviting Authority in the system. Besides this, the Department shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the tender process for execution of the development schemes taken up by the Government. The information to this extent may be displayed in the e-procurement platform website.

4. a) A minimum of 3 days' note time gap shall be maintained between opening of technical bids and opening of price bids.

b) The successful (L1) tenderer shall furnish the original hard copies of all the documents/ Certificates / statements uploaded by him before concluding agreement.

c) The tenderer shall be required to furnish a declaration online stating that the soft copies uploaded by them are genuine. Any incorrectness / deviation noticed will be viewed seriously and apart from canceling the work duly forfeiting the EMD, criminal action will be initiated including suspension of business.

d) Before concluding the agreement with the L1 tenderer, the tender inviting authority shall ensure the genuinely of DD furnished by bidder towards EMD and all the certificates uploaded by the bidder online by deputing responsible departmental officials.

e) The Government has further decided that notwithstanding any existing provisions of the A.P. Public works Department Code as well as other orders and executive instructions in force if any tenderer fails to submit the hard copies of DD for EMD. DD for transaction fee, hard copies of uploaded documents within the stipulated time the tenderer will be suspended and disqualified from

participating in the tenders on 'e procurement platform' for a period of 2 Months from the date of bid submission. The suspension of tenderer shall be automatically enforced by the eprocurement system (As per G.O.Ms. No.6 I&CAD (PW-Reforms) Dept., dt.11.1.2005 and G.O.Ms.No.245 I&CAD (PW-Reforms) dept., dt. 30.12.2005)

**5. Action to be taken against the lowest bidder, who back out at the time of Agreement, the contract Registration will be suspended for a period of One year duly forfeiting the E.M.D. as per G.O.Ms.No.259, T.R&B (Roads-V) Dept., dt.6.9.2008**

**6. Eligibility criteria for opening the Price Bid:**

- i) The Bidder submitting the Bid should be **Consumable IoT Lab Equipment Supplier / Company / Firm registration**
  - ii) The Bidder / Supplier should furnish copy of Permanent Account Number (PAN), GST, and proof of submission of the latest income tax returns i.e. for the assessment year 2022-23.(FY 2021-22)
  - iii) The Bidder should submit the processing fee of original demand draft to the **Chief Engineer, JNTUH, Kukatpally, Hyderabad** on or before opening the Price Bid. Failing which the tender will not be considered.
  - iv) The Bidder should submit the MSME/NSIC certificate (Applicable for E.M.D exemption availing bidders.)
7. The price bids of such bidders, who are determined to have complied with the eligibility criteria, and approved by the Tender Committee of **JNTUH, KUKATPALLY, HYDERABAD** will only be opened.
  8. If the office happens to be closed on the dates specified above, the respective activity will be performed at the designated time on the next working day without any notification.
  9. Any other details can be had from the Office of the Chief Engineer, **JNTUH, KUKATPALLY, HYDERABAD**
  10. The Director, JNTUH Innovation Foundation, **JNTUH, KUKATPALLY, HYDERABAD** reserves the right to reject the tenders without assigning any reasons.
  11. All the bidders are requested to follow up the e-procurement website for additional information, like addendums, and corrigendum's on <https://tender.telangana.gov.in> and no paper publication will be issued.

## INSTRUCTIONS TO TENDERERS

### A – GENERAL

The Engineering Department, JNTUH Kukatpally, Hyderabad, invites tenders from reputed goods distributor/ Dealers for **Consumable IoT** Lab equipment's/Companies / shops and establishment registration and installation.

**Item wise specifications indicated below:**

SI no	Equipment/software name	Specification	Qty
1	Arduino UNO	ATmega328P - 8bit AVR family microcontroller, equivalent or better. Operating Voltage:5V, Digital I/O Pins: 14 (of which 6 provide PWM output), PWM Digital I/O Pins: 6, Accessories: Case shell enclosure, compatible USB cable (length - 6 inch or more)	15
2	Arduino Nano	ATmega328P - 8bit AVR family microcontroller, equivalent or better. Operating Voltage:5V, Digital I/O Pins: 14 (of which 6 provide PWM output), Analog I/O Pins: 8, Accessories: Compatible USB cable (length - 6 inch or more)	10
3	Arduino Mega	ATmega2560P - 8bit AVR family microcontroller, equivalent or better. Operating Voltage:5V, Digital I/O Pins: 54 (of which 6 provide PWM output), Analog I/O Pins: 16, Accessories: Case shell enclosure, compatible USB cable (length - 6 inch or more)	5
4	Raspberry Pi 4	RASPBERRY PI 3 MODEL B+, equivalent or better Accessories: MicroSD card - 32GB, USB 3.0 cable (1m, HDMI to VGA - 1m, HDMI to VGA adapter, Case shell enclosure	5
5	Breadboards & Mini Breadboard	Solderless 400 pin breadboard	20
		Solderless 800 pin breadboard	20
		Self Adhesive Proto Shield	20
6	General Purpose solderable Board	FR2 A Grade material (140 x 90 mm)	30
		FR2 A Grade material (80 x 55 mm)	30
7	Berg Strips	Female Berg Strip, 2.54mm pitch, 40 pin single row, brealable pin	30
		Male Berg Strip, 2.54mm pitch, 40 pin single row, brealable pin	30

8	16x2 LCD display	Dot matrix LDC display with 16 char x 2 lines I2C	20
9	USB Cables	USB Cable Set (A to B, 12 inch or more)	10
10	USB Cables	USB Cable Set (Mini, 12 inch or more)	10
11	Battery	9-12v 2000 to 2500 mAh rechargeable battery with 2 chargers. Equivalent or better	10
12	Resistor Kit	One kit contains 30 carbon film resistors of 20 different resistance values each assorted, packaged together and labelled. Wattage:0.125W to 1W. Values: 0Ω, 1.5Ω, 4.7Ω, 10Ω, 47Ω, 100Ω, 220Ω, 330Ω, 470Ω, 680Ω, 1kΩ, 2.2kΩ, 3.3kΩ, 4.7kΩ, 10kΩ, 22kΩ, 47kΩ, 100kΩ, 330kΩ, 1mΩ (600nos/pack)	20
13	Capacitor Kit	One kit contains 20 electrolytic capacitors of 10 different capacitance value each. Assorted kit packaged together and labelled. Values: 10pF, 22pF, 100pF, 1nF, 10nF, 100nF, 1μF, 10μF, 100μF, 1000μF (200nos Per pack )	20
14	Linear Voltage Regulator	7805, 7812, 7809 ( each 10)	30
15	Water Pump module	DC12V 3W Submersible water pump	4
16	Piezoelectric Plate	Normal Cu based 4cm Diameter approx	30
17	8*8 LED Matrix Module	Max7219 Dot LED Matrix Module Mcu Control LED Display Module	10
18	Bluetooth Module	HC 05, Bluetooth Module, Voltage Rating: 5V	15
19	7 Segment Display	Led LED 4-Digit Display Module/ Voltage Rating: 2.4v to 5.5v, 4-pin interface/ Vcc, GND, Data, Clock	20
20	GSM	Sim900 GPRS Transfer Board Micro Sim GSM Core TTL Port Module for Arduino	4
21	GPS	GY-NEO6MV2 new GPS module	4
22	Laser Diode	650nm 5mW Mini Laser Dot Diode Module	10
23	LDR Module	5mm/ 12mm, Photosensitive LDR Light Sensor Module	30
24	Keypad	Universal 16 Key Switch Keypad	10
25	Joy Stick	2-axis Joystick with push button function	10
26	Active Buzzer	small 5 volt	40
		big 5 volt	40
27	Motor driver module	L293d	10

28	Sound Playback Module	ISD1820 voice recording module or equivalent	10
29	DC Plastic Gear motor with wheel	12v, 150RPM, Side Shaft BO (Battery operation) motor	40
30	Node MCU	ESP 8266, 12C, 1 Wire, plug and play	15
31	WeMos D1 R2	WeMos D1R2 with WiFi ESP 8266, operating volt 5V	6
32	Vibrating Motor	Weight: 10g, operating Voltage: 1.5 to 3v	20
33	Alligator Connectors	Multi Colour Alligator Connectors - 12 inch	200
34	Battery clips with DC Jack	9 volt battery clips with DC Jack	40
35	Hookup Wires	Red & Black set 100m each	4
36	Jumper Cable	Male-Male	1000
		Male-Female	600
		Female-Female	400
37	RGB LEDs	Regular 5mm 3-5 volt Range	400
38	LEDs (Red)	Regular 5mm 3-5 volt Range	1000
39	LEDs (Green)	Regular 5mm 3-5 volt Range	1000
40	LEDs (Blue)	Regular 5mm 3-5 volt Range	1000
41	LEDs (Yellow)	Regular 5mm 3-5 volt Range	1000
42	LEDs (White)	Regular 5mm 3-5 volt Range	1000
43	Timer IC- LM 555	LM 555 Timer IC, Voltage range - 4.5v to 16v	30
44	Atmega16u2	8 bit microcontroller individual IC (DIP), Voltage range: 2.7v to 5.5v, Operational range: -40° C to +80°C	10
45	Diodes and Transistors Kit	One kit contains 25 assorted basic diodes of 4 different types each, Types: NPN Transistor - 2N3904, BC547, PNP Transistor - 2N3904, BC 547 Silicon Diode - 1N4148, Power Diode - 1N4004/4001, Equivalent or better, Wattage: 1W, Current rating 1A, Assorted kit packaged together and labelled	3
46	Button Switch Set	One kit contains - 100 buttons of different types Types: Push, toggle, rotary, selector and slide switch. Assorted kit packaged together and labelled	3

47	Capacitive touch module	MPR 121 with I2C, Voltage Range: 2.5v to 5v DC	20
48	Capacitive Touch Switch Module	Digital capacitive touch switch module - TTP223B, Voltage Range: 2v to 5v	10
49	IR Sensors, Obstacle avoider sensor Module	LM393, Detection Diste: 2-30cm, Detection angle: 30-40°	20
50	Triple Axis Magnetometer	3 Axis Magneto resistive sensors, I2C Digital Interface, Integrated 12 bit ADC, range -8 to +8 Gauss, 160Hz Max o/p rate	10
51	Humidity Sensor	Operating range: 20-95% RH, Temp: 0-60°C. Power Supply: 1.5v AC (Max Sine), Op Freq 500Hz - 2kHz	10
52	MQ Series	MQ-2 Smoke Detection	3
		MQ-3 Alcohol - Ethanol Sensor	3
		MQ-4 Methane Natural Gas Sensor	3
		MQ-5 Methane Liquefied Gas Sensor	3
		MQ-6 Liquefied Petroleum Gas Sensor	3
		MQ-7 High Sensitivity Carbon Monoxide Sensor	3
		MQ-8 Hydrogen Gas Sensor	3
		MQ-135 Air Quality Sensor	3
58	IR transmitter/receiver	TSOP 1738, Switching rate: 38kHz, Voltage rating: 5v	10
59	Ultrasonic Sensor Module HC-SR-04 or compatible	Working Voltage: DC 5v, Working Current: 15mA, working Frequency: 40Hz, Range: 1cm to 4m, Effectual Angle: <15°	20
60	Triple Axis accelerometer	3 axis sensing, Small, low profile package, 4mm x 4mm x 1.45mm, LFCSP, Low Power: 350µA (typical), Single supply operation: 1.8V to 3.6V,	15
61	PIR Motion Detector Module	High digital pulse when motion detected, Low digital pulse when idle/ no motion detected, sensitivity range upto 6m, power supply: 5V - 12V	20
62	Pulse Rate Heart Sensor	Pulse Rate Sensor Finger Based, (finger or earlobe), Working voltage 3 - 5V	10
63	Relay Module	5V, 10A-2 channel relay module. Compatible with Arduino	20



64	Relay Module	5V 10A - 1 Channel Relay Module. Compatible with Arduino	20
65	Big Sound microphone module	Large Electret capsule sound module	10
66	Soil Moisture Sensor	FC-28 with LM293 comparator, operating voltage:3.3V to 5V	15
67	Touch Sensor	Capacitive Touch Sensor Module. TTP22X series. Voltage Range: 2.4V to 5.5V	15
68	Metal touch sensor module	KY-036 or equivalent metal touch sensor module	15
69	Rain Drop Sensor	Rain Sensitive , Rain Drop Detection Sensor Module. Voltage Range: 3.3V to 5.5V, Size: 5mm x 40mm or equivalent	15
70	Flex Sensor	Flex Sensor, Size 2.2 Inches	15
71	Temperature Sensor	LM35 Full range Temperature Sensor, Voltage Range: 4V to 30V, Error: $\pm 0.5^{\circ}\text{C}$	15
72	Temperature and Humidity Sensor Module	DHT11, Voltage Range: 3V to 5V	15
73	Force Pressure Sensor	force sensitive resistor with a square, 1.75x1.5" sensing area	15
74	Color Recognition Sensor	TCS3200 Color Recognition Sensor	15
75	Water Flow Sensor	Arduino Compatible Water Flow Sensor. 5V DC input	15
76	Sound Sensor	Sound Sensor Module, Microphones module	15
77	IR Sensors Array module for Line Following	8 IR Sensors Array module for Line Following, Operating Voltage: 5V	15
78	Power Bank	10000 Mh 5 volt Power Bank	5
79	RFID Reader – Tags	Current: 13-26mA/ DC 3.3V, Idle Current: 10-13mA, Sleep Current: 10-13mA, Sleep Current < 80 $\mu$ A, Peak Current < 30mA, Operating Frequency: 13.56MHz<30mA	10
80	RF Modules Tx & Rx 315 MHz ASK	Frequency Range: 433.92/ 315MHz, Supply Voltage: 3-6V, Output: 4-16Dbm, Low power consumption, easy application	10
81	Stepper motor with Driver board	28BYJ-48 ULN2003 5V Stepper Motor + ULN2003 Driver Board	10
82	DC motor	12V DC Gear 150 RPM	20
83	Servo motors	Position Servo Angle Based Metal Gear	10
		Small Servo Metal Gear	10

		Continuous Metal Gear Servo 360	10
		Small Servo Plastic Gear	40
84	150 RPM BO Motor	150 RPM BO Motor	10
85	L298 Motor Driver	L298 Motor Driver Shield or relative Driver Shield	10
86	Servo Motor Testor	CCPM 3 channel Servo Tester	4
87	Robotics DIY Kit	Robotics kit with programmable intelligent brain/brick. Open Source, Wirelessly Programmable 32bit Microcontroller, Kid/Students Friendly Programmable Interface , Apps on PC & Android OS , Scalable and Multiprogram Interfaces, Programmable by USB and Bluetooth 4.0, Full Colour Display, IoT & Mesh, Supports Direct Dual Motor Outputs , Safety Features and Auto Shutdown, Optional built - in battery support, Direct accessory plug and play support ,Other Open Source accesory support , Transparent modular enclosures, App is freeand supports remote , speech recognition , modular hexagonal programming and, Power failure protection many morefeatures.	2
88	Mechanical (Modular) Construction kit	Metal/ plastic mechanical construction kit compatiabile with electronic equipment	1
89	Drone Kit	WiFi Capability & Camera included	1
90	Aerospace Kit	Aerospace space station model blocks - More than 560 pieces	1
91	Automobile Kit	IC engine model / Remote controlled car bloacks - More than 453 pieces	1
92	Bio-medical Kit	Patient Monitoring system	1
93	Agritech Kit	Soleniod valvue, Moisture sensor, Ph meter, water level sensor	1
94	Bio-tech Kit	Magnettic Strirrer/ Centrifuge / Electrophoresis kit	1
95	Water/ Sanitation Kit	Mesh, Charcoal, PH paper and TDS	1
96	Set of Arts & Crafts Accessories – eg- stationary items and basic prototyping material	Cardboard	5
		Foam Core Boards	5
		20m spool of thick strings various colours	5
97	Set of Arts & Crafts Accessories – eg- stationary items and	Rubber Band	100
		Popsicle Sticks	100

	basic material	prototyping	Wood Glue - 500ml	2
98	Soldering Kit		Soldron 878D Hot Air Soldering Rework Station, Soldering Flux (Paste) 100g, De-soldering Copper Braid, Solder Wick: 1.5mx2mm Compatible soldering tip: Bevel, Chisel, Conical - 5 each per kit, Soldering Wire: 20/22 AWG soldering wire with rosin core flux (100g)	5
99	Adapters		DC power Adapter 5V , 2A	10
100	Adapters		DC power Adapter 12V , 2A	10
101	Dual Temperature Heat Gun		1800W Dual Temperature Heat Gun	1
102	Soldering hand	Helping	Adjustable Crocodile holding clamps/ clip, Soldering iron holder, LED light, Magnifying Lens	4
103	Return tape	measuring	Return measuring tape 5mx19mm	2
104	Stainless Steel Rule		Stainless Steel 12" / 150 mm Rule	5
105	Digital Vernier Caliper		150 mm / 6" Digital Vernier Caliper	2
106	Spirit Level		12" Spirit Level	1
107	Digital Pen Tester	electric	Voltage tester	1
108	Digital Multi Meter		Fluke 101 Digital multimeter	2
109	Sewing Kit with consumables		Semi Automatic Sewing Machine, straight stitch, consumables: 2 set of assorted needles and 10 colour spool set	1
110	Glue Sticks		11 mm x 200mm Hot Melt Glue Stick	100
111	Nuts and Bolts and screw		Specs: M4x12mm, M4x20mm, M5x16mm, M5x25mm, M6x20mm	40
112	Cable Tie		Small cable Tie Pack - Pack of 100	10
			Medium cable Tie Pack - Pack of 100	10
			Big cable Tie Pack - Pack of 100	10
113	Sand Paper		Various Grit: 80, 100, 120, 200, 300. 5 nos of each	10
114	Power Strip for Power Adapters		Std quality extension with 5A safety fuse, 5 or more sockets in each extn, 5m length of each extn	5
115	Bulb Holders		Regular Hanging Bulb holder	10
			Twisted Red black pair - 20m	1

116	USB to DC jack cable	USB to DC jack cable For Battery bank	10
117	Standard First Aid Kit	Standard Medical First Aid Kit in portable container	2
118	Fire Extinguisher (Handy Units)	Powder type fire extinguisher 2KG	5
119	Protective Eyewear	Polycarbonate Safety Goggles, clear lens with no tint	30
120	Safety Gloves Pairs	Latex Coating Gloves (Medium Size)	10
121	Safety Mask	Filtering efficiency ranging 80 percent when tested against 0.3-micron sodium chloride particle	20
141	Smd components	Capacitor ( electrolite & ceramic) , resisters, voltage regulators, indicators, transistors , bridge rectifier, led etc...	1

- 1.1 The Successful bidder shall invariably furnish the original DD towards EMD, Certificates/documents of the uploaded scanned copies of the tender inviting authority before entering into the agreement either personally or through courier or post and the receipt of the same within the stipulated date shall be the responsibility of the successful bidder. The Department will not take any responsibility for any delay in receipt/non-receipt of original DD towards EMD, certificates/documents from the successful bidder before the stipulated time. On receipt of documents, the department shall ensure the genuinely of the DD towards EMD and all other certificates/documents uploaded by the bidder in support of qualification criteria before concluding agreement.
- 1.2 If the successful bidder fails to submit the original hard copies towards EMD and other documents with in the stipulated time, the successful bidder will be suspended from participating in the tenders on e-procurement for a period of three years. The e-procurement system will deactivate the user ID of such defaulting successful bidder based on the trigger/recommendation by the tender inviting authority and also criminal prosecution shall be invoked.
- 1.3 The successful tenderer is expected to complete the work within the time period specified in the NIT.

**SPECIAL CONDITIONS:**

1. Bidders are required to make a written acknowledgement that their quoted technical Specifications match with the prescribed specifications.
2. **Two bid system: Part I** – Technical bid – consisting of all technical details wherever applicable. **Part-II** – Financial bid – indicating price for the item mentioned in the technical bid along with commercial terms and conditions.
3. The bids are evaluated strictly in terms of the technical specifications desired here in this document, and no improvisation of technical advantages, which might be attributed to any equipment, is not taken into consideration. Only those technical bids which are perfectly matching to the specification issued here are considered for the opening of the financial bid and the lowest of the bids are considered for the award of the purchase order in case if the University desires to procure. Date and Time of opening of the technical bids will be intimated to those firms whose technical bids were found successful.
4. **List of current users:** List of current users of the quoted or an equivalent model in India should be provided. Vendor should be having **at least two or three similar installations**. That have

- been installed and are working satisfactorily for at least 2 years (please provide customer reference with contact details).
5. If you are an authorized distributor/agent, please enclose the distributor /agencies certificate given by your principals.
  6. In case of proprietary item, enclose the relevant certificate issued by the manufacturer concerned.
  7. Enclose/upload all the literatures *in original (not Xerox)* pertaining to all aspects of the instrument.
  8. **Registration Nos.:** Firms should mention their GST, PAN registration numbers etc., on the quotations wherever applicable.
  9. **Warranty/Guarantee:** One year warranty for all manufacturing defects and installation defects with free replacement of spare parts including service charges. Any additional details and terms & conditions of warranty must be given. Details of the on-site after sales and service shall be specified. The Supplier should have an exclusive affiliated service center in Hyderabad for repairs of equipment and a certificate to that extent may be attached.
  10. **Delivery:** To be delivered at **O/o Dr.M. Asha Rani, Director, JNTUHIF, Jawaharlal Nehru Technological University, Kukatpally, Hyderabad – 500085, Telangana State, India.**
  11. **Risk purchase clause:** If the supplier fails to deliver the ordered material(s) within the stipulated delivery period specific in the purchase order, we may produce such item(s) and in such a manner as deemed appropriate, goods or services similar to those undelivered, and the supplier will be liable to the University for any excess costs for such similar goods or service.
  12. **Agreement:** The supplier has to enter into a purchase agreement with **The Director, JNTUH Innovation Foundation, Jawaharlal Nehru Technological University Hyderabad.** The order will be executed only upon fulfilling the agreement. Copy of the agreement form will be sent along with the Purchase Order.
  13. The quotation should be addressed to **Dr. M. Asha Rani, Director, JNTUH Innovation Foundation, JNTUH, Kukatpally, Hyderabad – 500085, Telangana State, India.**
  14. The JNTUH Kukatpally, Hyderabad, reserves the right to reject any/ all quotations or accept any offer part thereof without giving any reasons. The decisions of the JNTUH Kukatpally, Hyderabad in this matter will be final.
  15. **Validity of the rates:** The rates quoted must be valid for at least **three months** from the date of the due date of the quotations.
  16. JNTUH Kukatpally, Hyderabad will not be held responsible for postal/courier delay.
  17. **Acceptance quotations:** The Department reserves the right to reject or partially accept any or all the quotations received without assigning any reason.
  18. **Arbitration:** Any dispute arising out of this contract shall be referred to the JNTUH Kukatpally, Hyderabad, and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of the Arbitrator, who should be acceptable to both the parties, to be appointed by the Vice-Chancellor of the University. The decision of such Arbitrator shall be final and binding on both the parties. All disputes are to be settled within the jurisdiction of Hyderabad courts.
  19. Bidders are requested to carefully go through the specifications given in the tender and quote only when they are sure they have the product specified to offer.
  20. **EMD of Rs10,490/- (RupeesTen Thousand Four Hundred Ninety only) in favour of Director, JNTUH Innovation Foundation Kukatpally** need to be submitted along with the Bid documents in the form of Demand Draft.
  21. **Payment will be done only after satisfactory supply, installation & training on the equipment and upon the satisfactory functioning of the equipment's.**
  22. **No advance payment will be made.**
  23. **The other terms & conditions:** Will be as per JNTUH Kukatpally, Hyderabad purchase procedure.

24. The quantity of the item indicated may increase or decrease while giving purchase order.

Clarifications if any may be sought from the undersigned **only** through our email **ceo@jntuhtbi.in** before submission of the bids. No telephonic queries/personal visits will be entertained.

**Mr. T. Kartheek**  
**CEO,**  
**JNTUH INNOVATION FOUNDATION,**  
**JNTU, Hyderabad – 500085**  
**Telangana State,**

**2. Validity of Tenders:**

- 2.1 Tenders shall remain valid for a period of not less than **45 days** from the last date for receipt of Tender.
- 2.2 During the above mentioned period no plea by the tenderer for any sort of modification of the tender based upon or arising out of any alleged misunderstanding of misconceptions or mistake or for any reason will be entertained.
- 2.3 In exceptional circumstances, prior to expiry of the original time limit, the Tender Inviting Officer may request the bidders to extend the period of validity for a specified additional period. Such request to the Tenderers shall be made in writing. A Tenderer may refuse the request without forfeiting his E.M.D. A Tenderer agreeing to the request will not be permitted to modify his Tender, but will be required to extend the validity of his E.M.D. for a period of the extension.

**TENDER OPENING AND EVALUATION**

**3. Tender opening**

- 3.1 The Technical bids will be opened online by the Chief Engineer, JNTUH KUKATPALLY, HYDERABAD at the time and date as specified in the tender documents. All the Statements, documents, certificates, Demand Draft etc., uploaded by the Tenderers will be verified and downloaded, for technical evaluation. The clarifications, particulars, if any, required from the bidders, will be obtained either online or in the conventional method by addressing the bidders. The technical bids will be evaluated against the specified parameters / criteria same as in the case of conventional tenders and the technically qualified bidders will be identified. The result of Technical bids evaluation will be displayed on the 'e' market place, which can be seen by all the Tenderers who participated in the Tenders.

The department shall carry out the technical bid evaluation solely based on the uploaded certificates/documents, DD towards EMD in the e-procurement system and open the price bids of the responsive bidders.

**4. Clarification on the Technical Bid.**

- 4.1 The tender opening authority may call upon any tenderer for clarification on the statements, documentary proof relating to the technical bid. The request for clarification and response thereto shall be in writing and it shall be only on the qualification information furnished by the tenderer. The clarification called for from the tenderers shall be furnished within the stipulated time, which shall not be more than a week.
- 4.2 The tenderer if so desirous, shall agree in writing to furnish the clarification called for within the stipulated time and, for disqualification and rejection of his tender in the event of failure to do so.

**5. Examination of technical Bids and Determination of Responsiveness**

- 5.1 The Director will evaluate whether each Tenderer is satisfying the eligibility criteria prescribed in the tender document and declares them as a qualified Tenderer.
- 5.2 If the technical bid of a Tenderer is not satisfying any of the eligibility criteria it will be rejected by the director. However, the tender accepting authority detects any error in the evaluation of Tenders by Director, the tender accepting authority while returning the tenders may direct the Director or Director as the case may be, to re-evaluate the tenders.
- 5.3 If any alteration is made by the tenderer in the tender documents, the conditions of the contract, the drawings, specifications or statements / formats or quantities the tender will be rejected.

**6. Price Bid Opening:**

- 6.1 At the specified date and time, the price bids of all the technically qualified bidders will be opened online by the Director and the result will be displayed on the 'e'market place which can be seen by all the bidders who participated in the Tenders.
- 6.2 Only the price bids of qualified Tenderers whose technical bids are found satisfying the eligibility criteria shall be opened on the date and time fixed.
- 6.3 Only the Price Bids of qualified Tenderers who's technical Bids are found satisfying the eligibility criteria shall be opened.
- 6.4 The Price Bid of the Unqualified Tenderers will not be opened and kept in safe custody till the tenders are finalized and thereafter E.M.D. will be returned to the Tenderers.
- 6.5 Tenders shall be scrutinized in accordance with the conditions stipulated in the Tender document. In case of any discrepancy of non-adherence conditions the Tender accepting authority shall communicate the same which will be binding both on the tender opening authority and the Tenderer. In case of any ambiguity, the decision taken by the Tender Accepting Authority on tenders shall be final.

**7. Evaluation and Comparison of Price Bids**

- 7.1 The Chief Engineer will evaluate and compare the price bids of all the qualified Tenderers.
- 7.2 Negotiations at any level are strictly prohibited. However, good gesture rebate, if offered by the lowest tenderer prior to finalization of tenders may be accepted by the tender accepting authority.
- 7.3 Selection of Tenderer among the lowest & equally quoted tenderers will be in the following orders:
  - a) The tenderer whose bid capacity is higher will be selected.
  - b) In case the bid capacity is also same the tenderer whose annual turnover is more will be preferred.
  - c) Even if the criteria incidentally become the same, the turnover on similar works and thereafter machinery available for the work and then the clean track record will be considered for selection.

**8. Discrepancy in Tender percentage quoted.**

- 8.1 In case of any discrepancy between the overall tender percentage quoted in words and figures, the percentage quoted in words shall prevail. In case the tenderer has quoted overall tender percentage only in words and not in figures or vice versa, such tender shall be treated as incomplete and rejected.

**9. Process to be Confidential.**

- 9.1 Information relating to the examination, clarification, evaluation and comparison of Tenders and recommendations for the award of a contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced by the tender accepting authority. Any effort by a Tenderer to influence the processing of Tenders or award decisions may result in the rejection of his Tender.
- 9.2 No Tenderer shall contact the Chief Engineer any authority concerned with finalisation of tenders on any matter relating to its Tender from the time of the Tender opening to the time the Contract is awarded. If the Tenderer wishes to bring additional information to the notice of the Chief Engineer, it should do so in writing.
- 9.3 Before recommending / accepting the tender, the tender recommending / accepting authority shall verify the correctness of certificates submitted to meet the eligibility criteria and specifically experience. The authenticated agreements of previous works executed by the lowest tenderer shall be called for.
- 9.4 Tenders will be finalized by the Executive Engineers / Chief Engineers / Chief Engineers for the works costing up to Rs.2 Crores. The tenders for the works costing more than Rs.2 Crores will be referred to JNTUH KUKATPALLY, HYDERABAD tender committee along with technical bid evaluation for consideration. The Committee of tenders shall scrutinize the tenders submitted by Engineer-in-Chief / Chief Engineer / Project administrators in accordance with the conditions stipulated in the tender document and in case any discrepancy of non-adherence to the conditions, the same shall be communicated which will be binding both on the tender concluding authority and contractor. In case of any ambiguity the decision taken by the JNTUH KUKATPALLY, HYDERABAD tender committee on tenders shall be final.

## **AWARD OF CONTRACT**

### **10. Award Criteria**

- 10.1 The Chief Engineer will award or recommend to the competent tender accepting authority for award of the contract to the Tenderer who is found technically qualified as per the Tender conditions and whose price bid is lowest.
- 10.2 The tender accepting authority reserves the right to accept or reject any Tender or all tenders and to cancel the Tendering process, at any time prior to the award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the reasons for such action.

### **11. Notification of Award and Signing of Agreement.**

- 11.1 The Tenderer whose Tender has been accepted will be notified of the award of the work by the Chief Engineer, prior to expiration of the Tender validity period by registered letter. This letter (hereinafter and in the Conditions of Contract called "Letter of Acceptance") will indicate the sum that the Government will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Amount").
- 11.2 When a tender is to be accepted the concerned tenderer shall attend the office of the Chief Engineer concerned on the date fixed in the Letter of acceptance. Upon intimation being given by the Chief Engineer, of acceptance of his tender, the tenderers shall make payment of the balance E.M.D., and additional security deposit wherever needed by way of Demand Draft or unconditional and irrevocable Demand Draft obtained from a Nationalized with a validity period of three months, and sign an agreement in the form prescribed by the department for the due fulfillment of the contract. Failure to attend the Chief Engineer's office on the date fixed, in the written intimation, to enter into the required agreement shall entail forfeiture of the Earnest Money deposited.



- 11.3 The written agreement to be entered into between the contractor and the Government shall be the foundation of the rights and obligations of both the parties and the contract shall not be deemed to be complete until the agreement has first been signed by the contractor and then by the proper officer authorized to enter into contract on behalf of the Government.
- 11.4 The successful tenderer has to sign an agreement within a period of 15 days from the date of receipt of communication of acceptance of his tender. On failure to do so his tender will be cancelled duly forfeiting the E.M.D., paid by him without issuing any further notice and action will be initiated for black listing the tenderer.

## **12. Corrupt or Fraudulent Practices**

- 12.1 The Government requires that the bidders / suppliers / contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Government

- (a) define for the purposes of the provision, the terms set forth below as follows:
  - (i) “corrupt practices” means the offering, giving, receiving or soliciting of anything of value to influence the action of a Government official in procurement process or in contract execution: and
  - (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Government and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish in Tender prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition.
- (b) Will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- (c) Will blacklist / or debar a firm, either indefinitely or for a stated period of time, if at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing a Government Contract.
- (d) Furthermore, Tenderers shall be aware of the provisions stated in the General Conditions of Contract.

## **13 . Bid Security / E.M.D :**

As per GFR - 2017 - Rule 170 Bid Security: To safeguard against a bidder's withdrawing or altering its bid during the bid validity period in the case of advertised or limited tender enquiry, Bid Security (also known as Earnest Money) is to be obtained from the bidders **except Micro and Small Enterprises (MSEs)** as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the **Central Purchase Organisation** or Startups as recognized by Department for Promotion of Industry and Internal Trade DPIIT.

**FORMS OF TENDER**  
**QUALIFICATION INFORMATION**  
Annexure –I  
**CHECKLIST TO ACCOMPANY THE TENDER**

S. No	Description	Submitted in Cover 'A'	Page No. (see Note below)
1	2	3	4
1	Consumable IoT Lab Equipment Supplier/Company / Firm registration	Yes / No	
2	E.M.D. to be paid online in favour of <b>The Director , JNTUH INNOVATION FOUNDATION, HYDERABAD</b>	Yes / No	
3	Processing fee in shape of Demand Draft drawn in favour of <b>Registrar, JNTUH Kukatpally, HYDERABAD</b> any Nationalized bank/Scheduled Banks only	Yes / No	
4	GST Document. (Registration copy) and Latest return copy	Yes / No	
5	Copy of PAN Card and Copy of Latest Income Tax returns for the assessment year 2022-23 (Financial Year 2021-22) submitted along with proof of receipt.	Yes / No	
6	If you are an authorized distributor/agent, please enclose the distributor /agencies certificate given by your principals.	Optional	
7	Enclose/upload all the literatures in original (not Xerox) pertaining to all aspects of the instrument	Yes / No	
8	Item wise price breakup for L1 bidder to submit at time of agreement	Optional	
9	Any other documents	Optional	

**Notes:-**

- All the statements copies of the certificates, documents etc., enclosed to the Technical bid shall be given page numbers on the right corner of each certificate, which will be indicated in column (4) against each item. The statements furnished shall be in the formats appended to the tender document.
- The information shall be filled-in by the Tenderer in the checklist and statements I to IX, and shall be enclosed to the Technical bid for the purposes of verification as well as evaluation of the tenderer's Compliance to the qualification criteria as provided in the Tender document. All the Certificates, documents, statements as per check-list shall be submitted by the tenderer in sealed Cover "A".
- As per the directions issued by the Government in GO MS No.174 I&CAD (PW-REFORMS) dated 1.9.2008, submission of original hard copies of the uploaded scan copies of DD towards EMD by participating bidders to the tender opening authority before opening of the price bid is dispensed with. All the bidders shall invariably upload the scanned copies of DD in e-procurement system will be the primary requirement to consider the bid as responsive. The Department shall carry out the technical bid evaluation solely based on the uploaded certificates/documents, DD towards EMD and open the price bids of the responsive bidders. The Department will notify the Successful bidder for submission of original hard copies of all uploaded documents, DD towards EMD prior to entering into agreement. If any successful bidder fails to submit the original hard copies towards EMD and other documents with in the stipulated time, the successful bidder will be suspended from participating in the tenders on e-procurement for a period of three years. The e-procurement system will deactivate the user ID of such defaulting successful bidder based on the trigger/recommendation by the tender inviting authority and also criminal prosecution shall be invoked

## **DECLARATION**

I / WE ..... have gone through carefully all the Tender conditions and solemnly declare that I / we will abide by any penal action such as disqualification or black listing or determination of contract or any other action deemed fit, taken by, the Department against us, if it is found that the statements, documents, certificates produced by us are false / fabricated.

I / WE hereby declare that, I / WE have not been blacklisted / debarred / Suspended / demoted in any department in Telangana/Andhra Pradesh or in any State due to any reasons.

**Signature of the Tenderer**

## **CONDITIONS OF CONTRACT**

### **A. GENERAL**

#### **1. Interpretation:**

1.1 In interpreting these Conditions of Contract, singular also means plural, male also means female, and vice-versa. Headings have no significance. Works have their normal meaning under the language of the contract unless specifically defined. The Engineers-in-charge will provide instructions clarifying queries about the conditions of Contract.

1.2 The documents forming the Contract shall be interpreted in the following order of priority:

- 1) Agreement
- 2) Letter of Acceptance, notice to proceed with the works
- 3) Contractor's Tender (Technical bid)
- 4) Conditions of contract
- 5) Specifications
- 6) Drawings
- 7) Bill of quantities (Price-bid)
- 8) Any other document listed as forming part of the Contract.

#### **2. Engineer-in-Charge's Decisions:**

2.1 Except where otherwise specifically stated, the Engineer-in-charge will decide the contractual matters between the Department and the Contractor in the role representing the Department.

#### **3. Delegation:**

3.1 The Engineer-in-charge may delegate any of his duties and responsibilities to other officers and may cancel any delegation by an official order issued.

#### **4. Communications:**

4.1 Communications between parties, which are referred to in the conditions, are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act)

#### **5. Sub-contracting:**

5.1 If the prime contractor desires to sub-let a part of the work, he should submit the same at the time of filing tenders itself or during execution, giving the name of the proposed Sub-contractor, along with details of his qualification and experience. The Tender Accepting Authority should verify the experience of the Sub-contractor and if the Sub-contractor satisfies the qualification criteria in proportion to the value of work proposed to be sub-let, he may permit the same. The total value of works to be awarded on sub-letting shall not exceed 50% of contract value. The extent of subletting shall be added to the experience of the sub-contractor and to that extent deducted from that of the main contractor.

**6. Other Contractors:**

6.1 The Contractor shall cooperate and share the Site with other contractors, Public authorities, utilities, and the Department. The Contractor shall also provide facilities and services for them as directed by the Engineer-in-charge.

6.1 Failure to employ the required technical personnel as per agreement by the contractor, amount will be recovered from the contractors bills towards technical personnel as per SSR 2017-18.

6.2 The technical personnel should be on full time and available at site whenever required by Engineer in Charge to take instructions.

6.3 The names of the technical personnel to be employed by the contractor should be furnished in the statement enclosed separately.

6.4 In case the contractor is already having more than one work on hand and has undertaken more than one work at the same time, he should employ separate technical personnel on each work.

6.5 If the contractor fails to employ technical personnel the work will be suspended or department will engage a technical personnel and recover the cost thereof from the contractor.

6.6 If the Engineer-in-charge asks the Contractor to remove a person who is a member of Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the site forthwith and has no further connection with the work in the contract.

**7. Contractor's Risks:**

7.1 All risks of loss of or damage to physical property and of personnel injury and death, which arise during and in consequence of the performance of the Contract, are the responsibility of the Contractor.

**8. Power Supply.**

8.1 The contractor shall make his own arrangements for obtaining power from the Electricity dept., at his own cost. The contractor will pay the bills of Electricity Department for the cost of power consumed by him.

**9. Settlement of disputes:**

9.1 If any dispute of difference of any kind whatsoever arises between the department and the Contractor in connection with, or arising out of the Contract, whether during the progress of the works or after their completion and whether before or after the termination, abandonment or breach of the Contract, it shall in the first place, be referred to and settled by the Engineer-in-charge who shall, within a period of thirty days after being requested by the Contractor to do so, give written notice of his decision to the Contractor. Upon receipt of the written notice of the decision of the Engineer-in-Charge the Contractor shall promptly proceed without delay to comply with such notice of decision.

9.2 If the Engineer-in-Charge fails to give notice of his decision in writing within a period of thirty days after being requested or if the Contractor is dissatisfied with the notice of the decision of the Engineer-in-Charge, the Contractor may within thirty days after receiving the notice of decision appeal to the Department who shall offer an opportunity to the contractor to be heard and to offer evidence in support of his appeal, the Department shall give notice of his decision within a period of thirty days after the Contractor has given the said evidence in support of his appeal, subject to arbitration, as hereinafter provided. Such decision of the Department in respect of every matter so referred shall be final and binding upon the Contractor and shall forthwith be given effect to by the Contractor, who shall proceed with the execution of the works with all due diligence whether he requires arbitration as

hereinafter provided, or not. If the Department has given written notice of his decision to the Contractor and no claim to arbitration, has been communicated to him by the Contractor within a period of thirty days from receipt of such notice the said decision shall remain final and binding upon the Contractor. If the Department fail to give notice of his decision, as aforesaid within a period of thirty days after being requested as aforesaid, or if the Contractor be dissatisfied with any such decision, then and in any such case the contractor within thirty days after the expiration of the first named period of thirty days as the case may be, require that the matter or matters in dispute be referred to arbitration as detailed below:-

**SETTLEMENT OF CLAIMS:**

**Settlement of claims for Rs.50,000/- and below by Arbitration.**

All disputes or difference arising of or relating to the Contract shall be referred to the adjudication as follows:

- a) Claims up to a value of Rupees 10,000/- - Competent authority appointed by the Director
- b) Claims above Rs.10,000/- and up to Rupees 50,000/- - Competent authority appointed by the Director

The arbitration shall be conducted in accordance with the provisions of Indian Arbitration and Conciliation Act 1996 or any statutory modification thereof.

The arbitrator shall state his reasons in passing the award.

**Claims above Rs.50,000/-.**

All claims of above Rs.50,000/- are to be settled by a Civil Court of competent jurisdiction by way of Civil suit and not by arbitration.

The contractor shall make a reference for adjudication under these clauses within six months from the date of intimating the contractor of the preparation of final bill or his having accepted payment whichever is earlier.