

TENDER DOCUMENT
(Advt. No.: 09 /2022-23)

Equipment, Consumables and Accessories



Environmental Pollution Monitoring Laboratory
DEPARTMENT OF CIVIL ENGINEERING
NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH, KOLKATA
Block-FC, Sector-III, Salt Lake City
Kolkata- 7000 106



**NATIONAL INSTITUTE OF TECHNICAL TEACHERS'
TRAINING AND RESEARCH, KOLKATA**

(An Autonomous Institution under the Ministry of Education, Govt. of India)

Block – FC, Sector – III, Salt Lake City, Kolkata – 700 106

Website: <http://www.nittrkol.ac.in>

TENDER NOTICE

Sealed tenders are invited from manufacturers / bonafide suppliers / authorized dealers of Equipment, Consumables and Accessories for Environmental Pollution Monitoring Laboratory (Department of Civil Engineering). Tender Document (TD) is obtainable from the Institute website and CPP Portal from 27/09/2022 to 17/10/2022 The cost of downloaded TD, Rs. 500.00 and EMD are payable through separate DD i/f/o **Director, NITTTR, Kolkata**. The last date of submitting **TD** is 19/10/2022 up to **3 pm**. Tender will be opened at **4 pm** on 19/10/2022. For detailed advertisement visit institute website <<http://www.nittrkol.ac.in>>.

Advt. No. 09/2022-23

DIRECTOR

To,

M/s. _____

Subject: Invitation of quotations for supply of various equipment, Consumables and Accessories for Environmental Pollution Monitoring Laboratory in Department of Civil Engineering

Dear Sir,

Sealed tenders are invited from the bonafide suppliers / manufacturers / authorized dealers for supply of various equipment whose specifications are stated below: -

TECHNICAL SPECIFICATIONS

EQUIPMENT / CONSUMABLE / ACCESSORIES FOR ENVIRONMENTAL POLLUTION MONITORING LABORATORY, DEPARTMENT OF CIVIL ENGINEERING

List of Non-Consumables

S. No.	Item / Equipment
1.	<p>Water Quality multi-parameter Analyser pH, TDS, COND, ORP, ISE, Salinity, DO Meter, Sodium ISE Quantity: One No. Estimated Price: Rs. 5.0 lacs</p> <p>Water Quality Multi-parameter Analyser</p> <p>WATER QUALITY MULTIPARAMETER (FOR pH, COND, TDS, SALINITY, TEMP, DO, SODIUM ISE) MULTIPARAMETER WATER QYALITY ANLAYZER WITH METER, SENSORS, CALIBRATION STANDARDS, CONMSUMABLES & amp; ACCESSORIES FOR MEASUREMENT OF PH, COND, TDS, SALINITY, RESISTIVITY, DISSOLVED OXYGEN (OPTICAL SESNOR), ORP, SODIUM ETC HAVING FOLIWNG SPECIFICATION:</p> <p>NUMBER OF CHANNEL: 3 NUMBER OF CHANNEL FOR SIMULTANEOUS MEASUREMENT UPTO 3 PARAMETRS AT A TIME. DATA STORAGE: 100000 POINTS DISPLAY: 640X480 COLOR TFT ENCLOSURE RATING: IP67 INPUT: 3 POINTS</p> <p>PH RANGE: 0 – 14 PH UNIT RESOLUTION: 0.001/0.01/0.1 SELECTABLE ACCURACY: pH CALIBRATION: UPTO 3 POINTS AUTOMATIC BUFFER RECOGINITION</p> <p>CONDUCTIVITY RANGE: 0.01µS/cm – 200ms/cm RESOLUTION: 0.01 ACCURACY: TDS MEASUREMENT RANGE: 0.00 MG/L – 500G/L NACL RESOLUTION: 0.01 MG/L -0.1G/L CALIBRATION: SINGLE POINT CALIBRATION</p> <p>DO RANGE: 0.05 – 20.0MG/L RESOLUTION: 0.01 ACCURACY: 0.05MG/L</p> <p>ORP RANGE: ±1200MV RESOLUTION: 0.1MV ACCURACY: ±0.02MV</p> <p>TEMP RANGE: 0- 80 °C OPERATING TEMP: 0 - 60°C</p> <p>SODIUM MEASUREMENT RANGE: 10 – 1000MG/L ACCURACY: ±0.02 mv or 0.05% RESOLUTION: SELECTABLE, UPTO 4 SIGNIFICANT DIGITS</p> <p>SCOPE OF SUPPLY: METER WITH BATTERY, POWER ADAPTOR, CALIBRATION STANDARD, SAMPLE, CELL, SILICONE OIL, OILING CLOTH, CARYING CASE ETC</p> <p>SCOPE OF SUPPLY: 3 CHANNEL MULTIPARAMETER WITH PROBES FOR PH, ORP, CONDUCTIVITY, DO, TEMP, CALIBRATION STANDARD, CONSUMABLES ETC & amp; TURBIDITY METER WITH POWER ADAPTOR, BATTERY, CALIBRATION STNADARD, SAMPLE CELL, SILICONE OIL. OILING CLOTH, CARRYING CASE ETC. Make: Hach or Equivalent</p>

2.	<p>Electro-coagulator followed by filtration, Advanced oxidation Quantity: One No.</p> <p style="text-align: right;">Estimated price: Rs. 2.0 lacs</p> <p>25 LPH Capacity Electrocoagulation (EC) System</p> <p>Coagulation by applying DC voltage at various amps through mild steel / Aluminium/Tungsten plates. There will be corrosion at the anode and liberation of H₂ gas at the cathode. The voltage and amps will be controlled from the control panel according to the condition of the effluent for proper coagulation. The maximum inlet TDS range will be 2500 - 3000 mg/l.</p> <table border="1" data-bbox="183 504 1434 772"> <thead> <tr> <th data-bbox="183 504 263 571">Sl. No.</th> <th data-bbox="263 504 1141 571">Description</th> <th data-bbox="1141 504 1268 571">MOC</th> <th data-bbox="1268 504 1434 571">Qty</th> </tr> </thead> <tbody> <tr> <td data-bbox="183 571 263 638">1.</td> <td data-bbox="263 571 1141 638">EC Tank of dimension 500 mm x 350 mm x 500 mm ht Thickness of skid-6mm with inlet baffle and overflow launder.</td> <td data-bbox="1141 571 1268 638">PPH</td> <td data-bbox="1268 571 1434 638">1 No.</td> </tr> <tr> <td data-bbox="183 638 263 672">2.</td> <td data-bbox="263 638 1141 672">Electrode of Dimension 125mm x 200 mm ht x 3 mm thick</td> <td data-bbox="1141 638 1268 672">MS</td> <td data-bbox="1268 638 1434 672">40 Nos.</td> </tr> <tr> <td data-bbox="183 672 263 772">3.</td> <td data-bbox="263 672 1141 772">Manually operated control panel suitable for 20 Amps , 200V DC power supply without auto polarity reversal Input Power supply 220V AC</td> <td data-bbox="1141 672 1268 772"></td> <td data-bbox="1268 672 1434 772">1 Set</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li data-bbox="231 840 718 873">• <u>Exclusion from the scope of work</u> <p data-bbox="279 896 574 929">Power supply to panel</p> <p data-bbox="279 952 598 985">Effluent Feed container.</p> <p data-bbox="279 1008 686 1041">Make: Aquatreat or Equivalent</p>	Sl. No.	Description	MOC	Qty	1.	EC Tank of dimension 500 mm x 350 mm x 500 mm ht Thickness of skid-6mm with inlet baffle and overflow launder.	PPH	1 No.	2.	Electrode of Dimension 125mm x 200 mm ht x 3 mm thick	MS	40 Nos.	3.	Manually operated control panel suitable for 20 Amps , 200V DC power supply without auto polarity reversal Input Power supply 220V AC		1 Set
Sl. No.	Description	MOC	Qty														
1.	EC Tank of dimension 500 mm x 350 mm x 500 mm ht Thickness of skid-6mm with inlet baffle and overflow launder.	PPH	1 No.														
2.	Electrode of Dimension 125mm x 200 mm ht x 3 mm thick	MS	40 Nos.														
3.	Manually operated control panel suitable for 20 Amps , 200V DC power supply without auto polarity reversal Input Power supply 220V AC		1 Set														
3	<p>BOD Measurement System Quantity: One No.</p> <p style="text-align: right;">Estimated Price: Rs. 3.5 lacs</p> <p>BOD Apparatus</p> <p>THE BOD APPARATUS SHALL BE A BENCHTOP INSTRUMENT BASED ON MANOMETRIC PRINCIPLE THAT CAN GIVE DIRECT BOD READING. IT SHOULD BE FREE OF DO PROBE & MEMBRANE. IT SHOULD ACCOMMODATE 6 BOTTLS AT A TIME. DIRECT DIGITAL DISPLAY</p> <p>SHOULD POSSES FOLLOWING SPECIFICATION: RANGE: 0 – 35, 0 – 70, 0 – 350 & 0 – 700 MG/L BOD CAPACITY: SIX 492ML BOTTLE PRECISION: For a standard containing 150 mg/L each of glucose and glutamic acid, testing 44 samples obtained a mean of 235 mg/L BOD with a 95% confidence limit of distribution of 11 mg/L (or a range of 224 to 246 mg/L BOD) DRIFT: <3 MG/L FOR BOD IN 5 DAYS RESOLUTION: 1MG/L POWER SUPPLY: INPUT: 110 – 240V AC, 50/60HZ, OUTPUT: 24V OPERATING TEMP: 20°C STORAGE TEMP: 0 - 40°C DIMESNIONS: 28.9 x 26 x 9.8 cm (11.4 x 10.3 x 3.9 in.) WEIGHT: 4 KG</p> <p>Make: HACH or Equivalent</p>																

4	<p>COD reactor Quantity: One No.</p> <p style="text-align: right;">Estimated Price: Rs. 2.5 lacs</p> <p>COD APPARATUS The digestion reactor shall be a bench top instrument for heating prepared samples to temperature for the designated time for the COD test. Reactor shall capable of digesting samples for metal analysis, nutrient analysis or culture biological samples. The instrument shall have a Liquid Crystal display and shall have facility for programmable temperature range of 37 to 165°C in 1°C increment and shall have a programmable timer range of 0 to 480 minutes. Reactor shall emit an audible signal automatically shut down at the end of the digestion time.</p> <p>The instrument shall have a heating rate of 20 to 150°C in 10 minutes. The instrument shall be equipped with stored digestion programs for COD and TOC. The reactor shall also be capable of storing 3 user defined methods for digestion.</p> <p>The instrument shall have dual heating blocks to accommodate 21 nos. of 16-mm vials & 4 Nos. of 20-mm vials. Dual heating block shall be able to set temperature and timers independently allowing to use the reactor for testing method. Heating blocks shall be covered with transparent lids for operator safety. The power requirements of the instrument shall be 100-240 Vac, 50/60 Hz. Make: HACH DRB200 or Equivalent</p>
5	<p>Arsenic Test Kit Quantity: Two Nos.</p> <p style="text-align: right;">Estimated price: Rs. 0.40 lacs</p> <p>Colorimetric with test strips and reagent 0.005-0.1-0.025-0.05-0.10-0.25-0.50 mg/L As</p> <p>Make: Merck or Equivalent</p>

6 Sound Level Meter
Quantity: Two Nos.

Estimated price:Rs.1.3 lacs

- Reliable measurements, guaranteed! Pre calibrated to NIST-traceable standards, an ISO17025 accredited laboratory (A2LA certificate 1746.01) offering a broad range of NIST-traceable calibration services.
- Meets ANSI and IEC61672-1 Class 2 standards, making it ideal for OSHA and IEC surveys,
- Four user-selectable ranges from 30 to 130 dB provide additional flexibility
- Expanded memory of up to 32,700 readings
- Included data logging software with graphical display for quick and easy analysis
- Programmable sample rates for a wide range of applications

Specification

- Decibel (Db): Low Range (dB)30
- Decibel (Db) High Range (dB)130
- Resolution (dB)0.1
- Accuracy \pm 1.4 dB
- Response: Fast (125 millisecond), Slow (1 second)
- Weighting A, C
- Humidity Range: 10 to 90% RH
- Meter Class: Type 2
- Function: Fast/Slow, Min/Max Hold, Low/Med/Hi/auto-range, Under/Over range, A/C weighting; auto-off feature
- Output: USB
- Data Logging: Yes
- Memory32,700 readings
- Display4-digit LCD (backlit)
- Battery Type: AAA Battery (3)
- Length (in)9 1/4
- Height (in)1
- Width (in)2 1/2
- Length (cm)23.5
- Height (cm)2.7
- Width (cm)6.1
- Description: Data Logging Sound Meter with NIST-Traceable Calibration

Make: Antylia Scientific or Equivalent

7.	<p>Laboratory Turbidity Meter Quantity: One No.</p> <p style="text-align: right;">Estimated Price: Rs.4.0 lacs</p> <p>Benchtop Turbidity Meter for measurement of turbidity meter complying with regulatory EPA method 180.1 in the range of 0 – 4000NTU shall work on 230V AC Power comes with everything you need to start.</p> <p>Specification: Measurement Range: 0 – 4000NTU [Range: 0 – 40 (Ratio off) & 0 – 4000 NTU (Ratio on)] Accuracy: 2% of reading form 0 – 1000NTU, 5% for 1000 – 4000NTU Certification: CE, KC, RCM Communication: USB Data Logging: 2000 data points Display: 17.8mm color touch screen Interface: USB-A ports for USB flash drive Light Source: Tungsten filament lamp Measurement Principle: Nephelometric Operating Temp: 0 - 40°C Power Requirement: 3.4A/50-60Hz, 100 – 240V AC Reading Modes: Single, continuous, Rapidly Settling Turbidity™, signal averaging on or off, ratio on or off Repeatability: ±1% Response Time: 6.8 Seconds in ratio off mode/14 seconds in ratio on mode taking 10 measurements at a time Sample Cell Compatibility: Round cells 95 x 25 mm (3.74 x 1 in.) borosilicate glass with rubber-lined screw caps Sample Requirement: 25 mm sample cell: 20 mL minimum Stabilization Time: Ratio on: 30 minutes after start-up/ Storage Conditions: -20 to 60 °C Make: HACH or Equivalent</p>
8.	<p>Refrigerator, Cap 668 lit Quantity: One No.</p> <p style="text-align: right;">Estimated Price: Rs 1.10 lacs</p> <p>Make: LG or Equivalent</p>

9. PM1.0 and PM2.5 Analyzer

Quantity: One

Estimated Price: 2.0 lacs

Completely portable, full-featured, battery operated, handheld mass monitor. The device should simultaneously provides five critical mass ranges (PM1, PM2.5, PM4, PM10 & TSP) in one minute from start up.

Can be used for survey of the environment easily should be extremely portable.

Features:

Five Mass Ranges (PM1, PM2.5, PM4, PM10 & TSP)

Handheld Operation

Provision for Sample History

Data Logging facility

Technical specs:

Sample Duration: 1 minute

Sample Modes: Manual/continuous

Data Storage: 2500 records

Display: 2-line by 16 character LCD

Control: 2 button keypad with rotary dial

PM (particulate matter) Ranges: PM1, PM2.5, PM4, PM10, TSP

Concentration range: 0 – 1,000 µg/m³

Resolution: 0.1µg/m³ (display / serial output)

Sensitivity: High = 0.3µm, Low = 0.5 µm

Accuracy: ± 10% to calibration aerosol

Flow Rate: 0.1 CFM (2.83 lpm)

Light Source: Laser Diode, 780 nm, 40 mW typical

AC Adaptor: AC to DC module, 100 – 240 VAC to 8.4 VDC

Battery: Li-ion rechargeable Battery

Communication: USB Mini B Type

Operating temperature: 0° to +50°C

The system should be supplied with Battery Charger / Adapter, suitable USB Cable, Operation Manual, Calibration Certificate and required software

Make: Met One Instruments Inc or Equivalent

Or,

The system is capable of measuring air quality, with capability to simultaneously monitor and record mass concentrations and number concentration of PM1.0, PM2.5 along with Temperature (AT) & Relative Humidity (RH).

System Specifications

- Principle: Light Scattering (Particulates , PM1.0, PM2.5)
- Measurement: Mass Concentration, PM1.0, & PM 2.5
- Accuracy: +- 10% PM1.0/PM2.5
- Response Time: 30 sec
- Memory: 4 GB
- PC Interface: RS232 or USB
- Software: Windows compatible. Data directly opens in MS Excel
- Display: In-built graphics LCD
- Recording Interval: Programmable-5, 15, 30 m
- Running Modes :Surveyor Recording (with locationid &date-timestamps)
- Operating Modes: Desktop or Handheld
- Battery: In-built, rechargeable Li-Polymer (lastsfor6-8hours)
- Weight: Approximately 0.5 Kg. (with battery)
- Accessories: Carry incase, Charger, USB data transferable, Windows software

Make: Serrax Technologies or Equivalent

10. Indoor CO₂ , CO
Quantity: One No.

Estimated Price: Rs 4.0 lacs

Meter Measures CO & CO₂

- Accurately measure CO₂ with built-in, maintenance-free non dispersive infrared sensor, Meter calculates statistical weighted averages of TWA (8 hour time- weighted average) and STEL (15 minutes short term exposure limit). Accurately measure CO₂ at altitudes other than sea level with the pressure compensation adjustment
- Must have InnoCal Calibration Services & Certification
- Display CO₂, CO, temperature, humidity, dew point, or wet bulb temperatures with real time clock
- Programmable audible alarm alerts you to high carbon monoxide levels
- Manually store and recall 99 readings with continuous data logging of up to 32,000 readings
- Download readings to a computer with the included software and USB cable

System Specifications

• Min CO ₂ (ppm)	0
• Max CO ₂ (ppm)	9999
• Max Temperature (° F)	140
• Min Temperature (° F)	-5
• Max Temperature (° C)	60
• Min Temperature (° C)	-20
• Min Humidity (RH)	0.1
• Max Humidity (RH)	99.9
• Min CO (ppm)	0
• Max CO (ppm)	1000
• CO ₂ Resolution (ppm)	1
• CO Resolution (ppm)	1
• RH Resolution (%)	0.1
• Temperature Resolution (° F)	0.1
• Temperature Resolution (° C)	0.1
• CO Accuracy	±10 ppm <100 ppm, ±10% 101-500 ppm, ±20% >500 ppm
• CO ₂ Accuracy	±30 ppm +5% of reading
• Temperature Accuracy	±1°F/0.6°C
• Humidity Accuracy	3% RH

InnoCal NIST-Traceable Calibration; Carbon Dioxide Meter - Optional

Make : : Antylia Scientific or Equivalent

11.	<p>Electronic Burette Quantity: Two Nos.</p> <p style="text-align: right;">Estimated Price: Rs. 2.5 lacs</p> <p>Electronic-Burette with controller, amber window, telescopic tube, adapter set (28, 32, 36, 40, 45 mm), USB drive for software and driver, mini-USB cable, stylus, charging AC adaptor, and 2000 mAh Li-ion rechargeable batteries, and calibration certificate.</p> <ul style="list-style-type: none"> • Motor-controlled filling and dispensing • Easy, user-friendly, TFT touch screen helps to perform quick and accurate titrations • Motor-controlled piston movement, help in eliminating the errors • Three pre-set dispensing speeds allows achieve the end point very accurately. • Conforms to ISO 8655 standards & GLP compliant. • Accuracy: $\pm 0.2\%$ • 20 results can be saved in the memory. • Computer connectivity is available through a micro- USB cable for transferring and recording data. • Rechargeable, long-life, replaceable batteries are provided in the control panel. • Amber colored window is provided as an accessory for those chemicals/reagents that are sensitive to light • Capacity: 50ml <p>Make: : Antylia Scientific or Equivalent</p>
12.	<p>Solution Temperature Analyser Quantity: One No.</p> <p style="text-align: right;">Estimated price: Rs 0.20 lacs</p> <ul style="list-style-type: none"> • Usable temperature range: -55 to 125°C (-67°F to +257°F) • 9 to 12 bit selectable resolution • Uses 1-Wire interface- requires only one digital pin for communication • Unique 64 bit ID burned into chip • $\pm 0.5^{\circ}\text{C}$ Accuracy from -10°C to +85°C • Temperature-limit alarm system • Query time is less than 750ms • Usable with 3.0V to 5.5V power/data

13.	<p>Dual-Laser Infrared Thermometer Quantity: Two Nos.</p> <p style="text-align: right;">Estimated Price: Rs 1.0 lacs</p> <p>Measurements by IR gun with NIST-traceable calibration, Traceable® Products have an individually-numbered Traceable® Certificate to be provided and should assure accuracy from our ISO/IEC 17025:2017(1750.01) calibration laboratory accredited by A2LA The infrared thermometer should be FDA cleared IR Range: –76 to 1022°F and –60 to 550°C Resolution is 0.1°, accuracy is ±2% or 2°C + 2% Adjustable emissivity may be set from 0.1 to 1.00 in increments of 0.01 Field of view: 12:1 (distance to target ratio) Probe Type: k range and range: –83 to 2552°F and –64 to 1400°C Features like MIN/MAX, average, current temperature along with: emissivity value, maximum memory, minimum memory, differential, average (time weighted), high temperature alarm, low temperature alarm, and probe temperature, °F/°C to be available in the system Backlight display permits viewing in low light conditions. Emissivity: should be adjustable Sighting Type: Dual-point lasers Laser Class: Class II Make: : Antylia Scientific or Equivalent</p>
14.	<p>Portable water sampler Quantity: One No.</p> <p style="text-align: right;">Estimated Price: Rs. 4.0 lacs</p> <p>Should be light weight, portable and compact housing. The operating structure should allow an untroubled sampling process.</p> <p>Technical Specs: Sampling method: Vacuum-System Sampling fractioning: Collection container (PE): 1 x 13 lit or suitable (± 25%) Dosing: 20 ... 350 ml Sampling modes: Time-, amount-, event-proportional or manual Volume accuracy: < 2.5 % or ± 3 ml Sampling temperature+32 ... +104 °F (0 ... +40 °C) Ambient temperature+32 ... +122 °F (0 ... +50 °C) Suction height: Max. 21 ft (6.5 m) at 1013 hPa Suction tube: PVC, 16 ft (5 m), 0.39 in (10 mm), fabric reinforced Signal inputs: 2 x 0(4) ... 20 mA. 8x digital (amount, event, freely programmable Programming: 12 programs (freely programmable); with function to link programs Program start: Immediately, at a certain time, by an external signal Program stop: End of sampling program after one program run, continuous operation or x-runs Pause mode: Interruption of program run at any time Signal outputs / status messages: 8 x digital, 1 x collective malfunction message Data logging: 3000 entries, non-volatile data memory, storage of sampling and malfunction data (sampling extraction, bottle changes, messages, external signals) Interfaces: Mini-USB, RS422/485, Ethernet RJ45 Housing: ABS, double-walled insulation Power supply: 12 V battery Standards: CE, sampling according to ISO 5662-10 and EN 16479 To be supplied with 13 lit or suitable sampling containers this is compatible to the system.</p> <p>Make: Xylem or Equivalent</p>

B. Terms & Conditions:

- 1** The tenderer(s) should be either manufacturer of base machine / equipment / tool or an authorized business partner / marketing agent / service agent / reseller etc. of the OEM. In case of authorized business partner / marketing agent / service agent / reseller etc authorization certificate should be attached along with the tender. *It is expected that the tenderer(s) should quote product of renowned company with global presence and acceptance, however upcoming companies may quote with documentary evidence (including product quality & certification, customer base & order copy, business volume in last years, period of operation in India /Eastern region etc.) to establish their credentials.*
- 2** A few add-on items are mentioned in the specifications. These needs to be integrated with the system and comprehensive warranty for three (3) years is to be provided by the manufacturers of different add-on items along with the base machine. The tenderer(s) (integrator) should provide necessary supporting documents to authenticate their claim. Warranty will start from the date of installation and commissioning.
- 3** The brands / models / specifications mentioned are indicative. Equivalent higher configuration products may also be quoted whenever suitable, Additional models may also be quoted separately. Tenderer(s) from authorized agents of reputed manufacturer of equipment along with add-on items will be preferred.
- 4** The quoted system should be as per the specification and should be 100% compatible with the exiting system available in the institute. Prospective tenderer(s) may visit National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata with prior appointment for this purpose. The Institute at its discretion may upgrade / modify the specification if required.
- 5** The rate quoted must be F.O.B. NITTTR, KOLKATA inclusive of packing, forwarding etc. GST and insurance, if any must be indicated separately. Discount for educational institute is to be indicated clearly. For imported items, Custom duty shall be indicated separately. The institute will provide the necessary documents for Excise and Custom duty exemption on selected items while placing the purchase order.
As a research institute NITTTR Kolkata is subject to GST at rate not more than 5% as National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata, West Bengal is registered with Department of Scientific and Industrial Research (DSIR) for purpose of availing Customs Duty exemptions in terms of Notification. No.: 51196 – customs dt.23.07.1996, Notification. No.: 2812003 – customs dt.01.03.2003, Notification. No.: 4312017 – customs dt. 30.06.2017 & notification. No.: 4712017 – Integrated Tax (Rate) dt.14.11.2017, Notification. No.: 10/2018 – Integrated Tax (Rate) dt 25.01.2018 and Notification. No.: 4512017 – central Tax (Rate) dt. 14.11.2017, Notification. No.: 4512017 – Union Territory Tax (Rate) dt. 14.11.2017, & Notification. No.: 9/2018 – central Tax (Rate) dt. 25.01.2018, Notification. No.: 912018 – Union Territory Tax (Rate) dt. 25.01.2018, as amended from time to time for research purpose only.
5.1 GST must be quoted as extra in the quotation as applicable.
5.2 All legal disputes shall be under the jurisdiction of the Kolkata Courts in the state of West Bengal.

- 6 Earnest Money Deposit (EMD):
- 6.1 **“EMD at the rate of 4% of the Estimated price”** in the form of Crossed Account payee demand draft, fixed deposit receipt from commercial bank or Bank guarantee from a commercial bank drawn in favour of **Director, NATIONAL INSTITUTE OF TECHNICAL TEACHERS’ TRAINING AND RESEARCH, KOLKATA** on any scheduled bank at Kolkata shall be submitted along with the Tender in a separate envelope marked as EMD. Tender without earnest money deposit shall be **OUTRIGHTLY REJECTED**. A model format of bank guarantee for furnishing EMD is enclosed in **Annexure – A**.
- 6.2 No EMD is required from bidder who are registered with (i) Central Purchase Organisation (ii) NISC (iii) the concerned Min. or Dept. & similar other organisation as applicable.
- 6.3 **Forfeiture of EMD:** EMD of a tenderer will be forfeited if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender. Further, if the successful tenderer fails to furnish the required performance security within the specified period, its EMD will be forfeited.
- 6.4 **Refund of EMD:** EMD furnished by all unsuccessful tenderers should be returned to them without any interest, at the earliest after expiry of the final tender validity period but not later than 30 days after conclusion of the contract. EMD of the successful tenderer should be returned, without any interest, after receipt of performance security from it as called for in the contract.
- 7 Each bidder shall submit only one tender.
- 8 **Validity of Tender:** Tender shall remain valid for a period not less than 6 months after the deadline date specified for submission.
- 9 **Delivery Period:** Early period of delivery shall be mentioned in the tender.
- 10 **Evaluation of Tender:**
NITTTTR, KOLKATA will evaluate and compare the tenders determined to be substantially responsive i.e., which are
- 10.1 properly signed; and
- 10.2 conform to the technical specifications and terms and conditions
- 10.3 The tender would be evaluated separately for each item.
- 11 **Submission of Documents:** The tender should inter alia include the following (as applicable):
- 11.1 Printed copy of the literature/broucher/leaflet containing, Make, Model No. and specifications.
- 11.2 Copy of PAN card
- 11.3 Copy of current GST Return along with acknowledgement thereof.
- 11.4 Copy of last Income Tax Assessment order and acknowledgement of Income Tax Return for current year.
- 11.5 Copy of Valid Trade License.
- 11.6 Copy of valid registration certificate from State/Central Government.
- 11.7 Copy of valid registration certificate of SSI Unit if any.
- 11.8 The Tenderer(s) should be required to furnish a list of clients serviced during the last **three (3) years** and a list of such projects/supply handled in the last three years, and also furnish the details of the annual turn over during last three years.
- 11.8 Copy of audited financial statement of accounts for last three years.
- 12 **Bid Price:** While furnishing the quoted price, the tenderer(s) may note the following:
- 12.1 The contract shall be for each item of equipment / instrument / software as mentioned in the schedule of goods/services. Corrections, if any in quoted price, shall be made by crossing out, initialing, dating and rewriting.
- 12.2 **All duties, taxes and other levies payable by** the contractor under the contract shall be included in the total price and Taxes should be quoted separately.
- 12.3 The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- 12.4 The prices should be quoted in Indian Rupees only.
- 12.5 The rate quoted must be both in words and figures.
- 12.6 The quantity against each item mentioned in the tender may vary according to the actual requirement at the time of placing Purchase Order.

- 13 Award of Contract:** The NITTTR, KOLKATA will award the contract to the bidder whose tender has been determined to be substantially responsive in terms of technical specifications, terms & conditions and price quoted.
- 13.1** Notwithstanding the above, NITTTR, KOLKATA reserves the right to accept or reject any tenderer(s) and to cancel the bidding process and reject all tenderer(s) at any time prior to the award of contract.
- 13.2** The bidder whose bid is accepted will be notified of the award of contract by the NITTTR, KOLKATA prior to expiration of the tenderer(s) validity period. The accepted terms of the offer shall be incorporated in the purchase order
- 14 Performance Security:**
- 14.1** Performance security at the rate of 8% of the contract value in the form of account payee demand draft, fixed deposit receipt from commercial bank or Bank guarantee from a commercial bank in favour of Director, NITTTR, Kolkata shall be submitted within 21 days after the notification of the award of contract. Performance security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations. A model format of Bank guarantee for providing performance security is enclosed at **Annexure – B**
- 14.2** Forfeiture of Performance Security: Performance security is to be forfeited and credited to the Institute Account in the event of a breach of contract by the supplier, in terms of the relevant contract.
- 14.3** Refund of Performance security: Performance security should be refunded to the supplier without any interest, whatsoever, after it duly performs and completes the contract in all respects but not later than 60 days of completion of all such obligations under the contract.
- 14.4** Liquidated Damages will become payable in case of delay in delivery.
- 14.5** In case of delay in supply on part of supplier, a penalty @ 0.5% per week of order value will be charged for delayed period subject to a maximum of 10% of the order value.
- 14.6** The same rate of penalty shall be applicable for late installation of the equipment also.
- 15 Payment:** Payment will be made after delivery & satisfactory commissioning of the goods / services and training of personnel.
- 16 Normal Commercial Warranty/ Guarantee:** Normal commercial warranty/ guarantee of three years shall be applicable to the supplied goods/ services and this should be specified clearly by the bidder.
- 17 Live Demonstration:** Live demonstration of the item(s) should be arranged by the vendors at their cost, if asked by the Institute
- 18** Points which are not explicitly covered under “**terms and conditions**” above shall be covered by Manual on Policies and Procedures for Purchase of Goods circulated by Ministry of Education, Govt. of India. A copy of the same is available in the office for perusal of the tenderers. Tenderers are advised to go through the manual before submission of their tenderers. A soft copy of the manual can also be downloaded from <http://finmin.nic.in/>.
- 19 Demonstration / Service / Repair** will be given by the trained engineer from manufacture only.

You are requested to provide your offer as per schedule provided in Notice Inviting Tender in the sealed envelope super-scribing “**Tender Advt. No.: 09/2022- 23**”

To

The Director,
National Institute of Technical Teachers' Training and Research,
Block – FC, Sector – III,
Salt Lake City, Kolkata – 700 106
PIN: 700 106 Tel. No. +91(033) 2337-0497/4125

MODEL BANK GUARANTEE FORMAT FOR FURNISHING EMD

Whereas
.....(hereinafter called the "tenderer")..... has submitted their offer dated. for the supply of.....
.....(hereinafter called the "tender")..... against the purchaser's tender enquiry No. KNOW ALL MEN by these presents that WE of having our registered office at are bound unto having at office at..... are (hereafter called the "Purchaser") in the sum of for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this.....day of2020/21.

THE CONDITIONS OF THIS OBLIGATION ARE:

- 1 If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2 If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity: -
 - (a) If the tenderer fails to furnish the Performance Security for the due performance of the contract.
 - (b) Fails or refuses to accept / execute the contract.

WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force upto and including 45 days after the period of tender validity or after receipt of performance security from the successful tenderer and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank)
Name and designation of the officer
Seal, name & address of the Bank and address of the Branch

ANNEXURE - B

MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY

To

The Director,
NITTTTR, Kolkata

WHEREAS..... (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no. dated to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby, affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the..... day of, 2022/23/24

(Signature of the authorized officer of the Bank)
Name and designation of the officer
Seal, name & address of the Bank and address of the Branch