

Tender Document
on
Procurement of various equipment/ machines/software for
Mechanical Engineering Department

Advertisement No : 10/2017-18



Pathfinder for Excellence in Technical Education

Mechanical Engineering Department
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 (Under Ministry of HRD, Govt. of
India) BLOCK FC, SECTOR III, SALT LAKE CITY,
KOLKATA- 700 106**

TENDER NOTICE

ON

**SUPPLY OF VARIOUS EQUIPMENT/MACHINES/SOFTWARE FOR
MECHANICAL ENGINEERING DEPARTMENT**

Sealed tenders are invited in **TWO BID FORMAT** from the Manufacturers/ Bonafide Suppliers / Authorized Dealers for **SUPPLY OF VARIOUS EQUIPMENT/MACHINES/SOFTWARE FOR MECHANICAL ENGINEERING DEPARTMENT**. The two **BID FORMAT** are as follows (1) Part one – **TECHNICAL BID** giving detailed terms and conditions with documents mentioned in the tender document and (2) Part two- **FINAANCIAL BID**.

Both Part one – **TECHNICAL BID (Envelop-I)** and Part two – **FINANCIAL BID (Envelop-II)** in separate sealed covers which shall be contained within another main envelope mentioned 'Advertisement No. ' and should mention '**SUPPLY OF VARIOUS EQUIPMENT/MACHINES/SOFTWARE FOR MECHANICAL ENGINEERING DEPARTMENT**'. Item wise bidding in the TWO BID SYSTEM will be accepted.

For the details please visit NITTTR website www.nitttrkol.ac.in and CPP Portal, Govt. of India. The tender documents can be downloaded from the website. The tender document is also obtainable from the office. The cost of Tender paper is Rs.500/- by way of Demand Draft drawn in favour of 'The Director, NITTTR, Kolkata' payable at Kolkata. The tender should be accompanied by DD/ Bank Guarantee of 4 % of estimated price as Earnest Money Deposit (EMD).

The Tender Documents with detailed requirement and other terms & conditions can be submitted as per the dates mentioned below:-

| Sale of Tender Document | Last Date & Time of submission of Tenders | Tender opening (only Technical Bid) at NITTTR, Kolkata |
|---|--|---|
| 8/ 01/2018 to 25 / 01 /2018 (11:00 AM to 5:00 PM) | 29/ 01 / 2018 Up to (3:00 PM) | 29 / 01 / 2018 4-30 PM onwards |

Adv.No : 10/2017-18

SPECIFICATIONS FOR SUPPLY OF VARIOUS EQUIPMET/MACHINES/ SOFTWARE

Item No 1: 3D Printer with 3D Scanner and 3D Modelling Software (Quantity: 01 set; Estimated Price: Rs. 18.0 Lakhs)

1.1 3D Printer

| S N | Features | Description |
|----------------------|---------------------------------|--|
| 1 | Basic Technology | i) Ability to create high quality 3-D print based on Fused Deposition Modelling (FDM) Technology ii) Must have provision for automatic bed levelling/calibration iii) Ability to print even without computer, through inbuilt USB port/Micro SD card (Preferable) |
| 2 | Filament type and support | i. Ability to support a wide range of ABS, PLA, Nylon etc. ii. Ability to support other thermoplastic polymers, e.g. polycarbonate (Preferable) iii. Minimum filament weight in filament cartridge 500 gm iv. Versatile filament cartridge to accommodate more than one type of filament (Preferable). |
| 3 | Filament Diameter | 1.5 mm to 3 mm (depending on the extruder) |
| 4 | Nozzle working temperature (°C) | 200-300 |
| 5 | Extruder | i. Diameter 0.2 to 0.8 mm ii. Extruder type: Single/Dual/more |
| 6 | Layer resolution | 60 microns to 0.5 mm |
| 7 | Accuracy | ± 100 micron for 3D print |
| 8 | Print head speed | Minimum 50 to maximum 200 mm/second (depending on quality/polymers) |
| 9 | Build size | 500 mm x 500 mm x 500 mm or more |
| 10 | Software | i. Complimentary software ii. Software should support 3D digital files into buildable model files iii. Support Windows/Mac iv. Clear, familiar and easy-to-use interface v. Scaling, rotating and movement of parts on a simulated print bed vi. Ability to create custom profiles as needed (Preferable) vii. Imperial/metric conversion available (Preferable) |
| Mandatory Conditions | Warranty | Three years |
| | Others | Installation, demonstration, training and operating manual |

1.2 3D Scanner

| S N | Features | Description |
|----------------------|------------------------------|--|
| 1 | Measurement System | Multi Stripe Laser Triangulation (MLT) Technology. |
| 2 | Object size | No preset limit, Objects larger than field can be assembled with supplied software. |
| 3 | Field size | Around 5.1"x3.8" (marco) and around 13.5"x10.1" (wide) Software; Extended Mode around 22.5" x 16.75" (Preferable) |
| 4 | Resolution | 3D point density on target surface is 300 to 600 dpi in micro mode and 150-300 dpi in wide mode. |
| 5 | Dimensional accuracy | Up to $\pm 100 \mu$ in Macro Mode minimum and up to $\pm 300 \mu$ in Wide Mode |
| 6 | Acquisition speed | About 50000 processed point/sec throughput. Around, 2 minutes per scan of each facet. |
| 7 | Scan time | 15 minute or less |
| 8 | Sensors | Twin 5.0 megapixel or better, CMOS image sensors. |
| 9 | Auto Drive | High precision rotary indexing table (positioner), servo positioned, auto controlled by scanner. Around, 20 lb loading capacity. |
| 10 | Part gripper | Universal part holder to adjust height, angle and operation of capture. Capacity, around 10 lb. |
| 11 | Operating voltage | 100-240V, 5.4-2.2A, 50/60 Hz, 350W |
| 12 | Scanning Software | <p>Basic features (Please refer to A3):</p> <p>Scan: Control Scanner & auto drive</p> <p>Align: Automatic alignment of scan sets</p> <p>Fuse: Merge scan into single mesh model</p> <p>Advanced features (Preferable):</p> <p>Higher Processing (2x or more)</p> <p>Further reduce edge artificates & noise</p> <p>4x sampling: Higher quality points through over sampling</p> <p>Large area Ultra-wide mode 23x17 inches</p> <p>4x Density 4 times more point (4 million approx.)</p> |
| 13 | Photo Surface | Optically synchronous 7-color surface capture for precision-locked geometry correlation. |
| 14 | Interface | USB 2.0 high-speed interface. USB cable should be included. |
| 15 | Typical Dataset | 200 MB for typical model, based on 10 facet scans |
| 16 | Reverse Engineering Software | Compatible software with at least 3 User License |
| 17 | Minimum System | 2.5 GHz Quad Core, 32 GB RAM, Compatible with Windows7 & 8 (64-bit) |
| Mandatory Conditions | Safety feature | Should be safe for eyes |
| | Warranty | Three years. |
| | Others | Installation, demonstration, training and operating manual |

1.3 3D CAD Modeling Software

- Perpetual permanent license
- Unique Solid-Surface Hybrid Modeling
- Cutting-edge Non-solid Mold Parting Technology
- Healing model combined with freeform tools.
- Translators for IGES, PARASOLID, STEP, DWG/DXF, VDA, STL
- Associative Import
- Option for direct editing and 3D PDF.
- Flexible splitting methods: parting lines and face region definition.
- Multi-cavity supported.
- Links to KeyShot, FEA, Trace parts.
- Shape Morphing, Wrapping and Flex Tools
- Part Library Design with configurations
- Support dimension drive movement while direct editing
- Build-in reverse engineering module tools to build surface or 3D model from STL files, point cloud or scan data
- Minimum 5 users.
- Installation, demonstration, training and operational manual.
- Online and offline support up to 5 years.

Item 2: Micro ECM (Quantity: 01; Estimated Price: Rs. 11.0 Lakhs)

- Tool Area: Not less than 300 square mm
- Cross Head Stroke: Not less than 40 mm
- Supply: Single phase 230 V. A.C.
- Electrical Output Rating: 0 - 100 Amps and voltage from 0 - 25 V DC
- Tool Feed Rate: In the range of 0.2 to 1 mm / min.
- Machine Time: 0 to 1800 seconds or more, variable through touch screen.
- Display: For voltage, output current, feed rate electrolyte temp.
- Protection: For Current overload, short circuit
- USB Port: For data storage.
- All Setting Parameters: Through LCD touch screen panel
- Pulsating Facility LCD: On time 100 microseconds to 1 second variable off time 100 microseconds to 1 second variable plus amplitude 1v-10v variable
- Display: For forward & reverse, feed rate settings
- Warranty: Three years.
- Installation, demonstration, training and operating manual.

Item 3: Micro Hardness Tester (Quantity: 01; Estimated Price: Rs. 10.0 Lakhs)

- Test force (kgf): 10, 25 ,50 ,100 ,200, 300 ,500 ,1000
- Test force control: Auto (load, duration, unload)
- Test force duration time: 5 to 60 s
- Indenter approach speed: 60µm/s
- Specimen dimensions: Height: 95 mm; Depth: 150 mm
- Objective lens: 10X, 50X
- Minimum display: 0.1µm
- Manual XY stage: Table Size 100X100 MM and measuring XY range 25mm x25 mm
- Data processing function: Indentation diagonal length, Hardness value, Pass/failure decision function
- Vise: 50 mm Jaw opening to be supplied with equipment
- Test block: 4 Nos test blocks to be supplied with instruments
- Installation, demonstration, training and operating manual.
- Warranty: Three years.

Item 4: Ultrasonic Welding Machine (Quantity: 01; Estimated Price: Rs. 15.0 Lakhs)

| | | |
|--|--|-----------------------|
| Electrical Specification: | | |
| Power requirements | Minimum 1 kW | |
| Line voltage | 200- 240V AC, 50/60 Hz, 1Ø | |
| Input current | Not less than 13 amps | |
| Output power | 1100 watts | |
| Frequency: | 20 kHz | |
| | | |
| Parameter : | Range | Increment/step |
| Weld & hold time range: | 0.1 to 1 sec | 1 milliseconds |
| | 1-10 seconds | 10 milliseconds |
| After burst delay and duration | “Off ” or 50-1000 millisecond (1 sec) | 1 milliseconds |
| | 1-10 seconds | 10 milliseconds |
| Signals at Ambient temperature: | | |
| Ready Signal | 5 -50 °C Both 24V DC and dry (clean) contact closure available | |

| | |
|---------------------------------|---|
| General Alarm | 24V DC, negative Logic |
| Weld on | 25 mA max |
| External Reset | +24V DC, 25 mA max |
| Mechanical Specification | |
| Force on Part | 1.96 kN at 670 kPa or more |
| Stroke length | Not less than 100 mm |
| Cycle rate | At least 90 CPM at 1" stroke length |
| Material to be welded | Thermoplastic e.g. ABS, PC, PP, PE etc. |
| Warranty | Three years |
| Other Condition | Installation, demonstration, training and operating manual. |

Item 5: Thermal Imaging Camera (Quantity: 01; Estimated Price: Rs. 15.0 Lakhs)

- Temperature range: -20°C to 2000°C
- IR resolution - 320 × 240 pixels
- MSX resolution - 320 × 240 pixels
- Thermal sensitivity/NETD - <40 mK @ +30°C (+86°F)
- Field of view (FOV) - 25° × 19°
- Minimum focus distance - 0.4 m (1.31 ft.)
- Spatial resolution (IFOV) - 1.36 mrad
- Image frequency – 60 Hz
- Focus – Automatic (one shot) or manual
- Digital zoom – 2X and 4X or more
- Spectral range – minimum 7.5–13 μm
- Display – Touch screen, minimum 3.5 in. LCD, 320 × 240 pixels
- Auto orientation - Automatic landscape or portrait
- Image adjustment - Auto or manual
- Multi Spectral Dynamic Imaging (MSX) - IR image with enhanced detail presentation
- Picture in Picture - Resizable and movable IR area on visual image
- Low Temperature Option – from -20 °C
- High Temperature Option – upto 2000 °C
- Accuracy - ±2°C (±3.6°F) or ±2% of reading
- Warranty: Three years
- Installation, demonstration, training and operating manual.

Item 6: Precision weighing balance (Quantity: 01; Estimated Price: Rs. 3.0 Lakhs)

- Weighing Range: 100 g or more
- Readability: 0.1mg or less
- Reproducibility: 0.05mg or less
- Stabilization Time: 10 sec or less
- Calibration: Fully Automatic time and temperature control internal calibrations (FACT)
- Power Supply: 230 \pm 10V / 50Hz AC
- Weighing Pan: 70 mm to 100 mm
- Display: LCD Colour Display
- Installation, demonstration, training and operating manual.
- Warranty: Three years

Item 7: Hydraulic compression molding press with heating & cooling for plastics (Quantity: 01; Estimated Price: Rs. 6.0 Lakhs)

- Operation through Hydraulic Power pack system with Pressure regulating system with mechanical needle gauge range up to 250 kg/cm²
- Capacity: 0-10 Tons
- Platen size: 300mm X 300mm or more
- Working platen size: 200mm X 200mm or more
- Specimen thickness tolerance: 0.05mm to 0.1mm.
- Stroke : Day Light opening about 200 mm
- Temperature Controller: For temperature and cooling control for both platens.
- Temperature Controller: Working range ambient to 300°C or more
- Digital pressure indication on screen display Digital temperature reading
- Cooling system: Required
- Anti-vibration system: Preferred.
- Operating Power Supply: Standard.
- Machine Paint : Powder Coated (Preferable)
- Safety feature to avoid burn injury.
- Installation, demonstration, training and operating manual.
- Warranty: Three years.

Item 8: Extruder (Quantity: 01; Estimated Price: 20.0 Lakhs)

- For Plastics, Plastic based Composites and Nanocomposites
- Screw diameter (mm): 15 x 2 or less
- Diameter ratio (Do/Di): 1.5 or less
- Flight depth (mm): 2.0 or less
- Barrel to screw clearance: about 0.15 mm
- Screw to screw clearance: about 0.25 mm
- Maximum drive power: about 2 kW

- Maximum Screw Speed: 1000 rpm or more
- Specific Nominal Torque /shaft (Nm): about 8.0
- Specific torque (Nm/cm³): about 7.0
- Maximum Process Temperature: 300 °C or more
- Throughput (kg/h): 0.2 or less to 1.0 or more
- Operating Power Supply: Standard.
- Installation, demonstration, training and operating manual.
- Warranty: Three years.

Item No 9: Thermocouple Attachment Unit (Quantity: 01; Estimated Price: Rs. 0.35 Lakh)

- Power Consumption: 5.0 VA
- Battery Voltage: 12 Volts
- Battery Capacity: 2.7 Ah
- Thermocouple Diameters: 0.5, 1 & 2 mm selectable
- Discharge Voltages: 50 / 70 / 83 V D.C nominal
- Battery Monitor: Monitoring LED and Automatic Full Discharge Protection
- Number of discharges: Approximately 1000 on setting 2 at a rate of 200 discharges per day with fully charged battery.
- Warranty: Three years.
- Installation, demonstration, training and operating manual.

Item No 10: Disc Grinder for Polishing (Quantity: 01; Estimated Price: Rs. 3.0 Lakhs)

- Type: Table Top only
- Disc Diameter: 8-10" (200-300mm)
- Number of disk: Single/Double Disc
- Wheels: Aluminum or Brass
- Disc Speed / variability: up to 400 rpm
- Polishing & grinding cloth holding clamp required
- Drain out let & bowl flush jet required
- Motor capacity: 1 to 2 HP, 220-240 V
- Automatic polishing head required
- Head direction /speed: Clockwise / anticlockwise up to 100 rpm
- Installation, demonstration, training and operating manual.
- Warranty: Three years.

Item No 11: Solid Works Software (Estimated Price: Rs. 5.0 Lakhs)

Design Software

- SolidWorks Educational software Bundle
- Version-2018
- Solid Work Manuals & lesson plan
- Perpetual Licenses up to 10 users
- Online & Offline technical support -5 years

- Installation & Training program (1week)

Item No 12: Fuel Testing equipment for thermal lab (Bomb Calorimeter, Junkers Gas Calorimeter, Viscometer-Redwood / Viscometer Bath, Flash/Fire Point Apparatus, Thurston Oil Tester) (Quantity: 01 set each; Estimated Price: Rs. 3.0 Lakh)

- Junkers Gas Calorimeter
 - Range: 1000 to 20000 kg/c
 - Type: Non Recording Flow Type
- Redwood Viscometer
 - Power: 220V
 - Frequency: 50Hz
 - Driven Type: Electric
- Bomb Calorimeter
 - Power Consumption: 220/230V, AC Supply 50 Hz
 - Material: Brass/ S. Steel
- Flash and Fire Point Apparatus
 - Control: Fully Automatic Control
 - Power Source: 220V, 1Ph, 50Hz AC Supply
 - Range: 0-999 temperature (to note)
- Warranty: Three years for all items
- Demonstration, training and operating manual for items.

TERMS & CONDITIONS

1. The quotation is divided into the two following parts-

A) TECHNICAL BID :

This part should include

- Specification ,Make & Model ,Brochure
- Validity period of quote
- Payment terms (not Value)
- Supporting papers: GST registration & Income Tax Certificates, Trade Licenses etc.
- Client list

[Details are given in the section C.7]

B) FINANCIAL BID

To be considered only when Technical Quotation is accepted by NITTTR.

This part should include:

- Specification ,Make & Model
- Price (inclusive all taxes) {with back up of basic price (GST)}
- Terms & Conditions (Comprehensive)

C) Other terms and conditions

1. The bidder(s) should preferably be either manufacturer of base machine / equipment / tool or an authorized business partner / marketing agent / service agent (second preference) of the OEM. In case of authorized business partner / marketing agent / service agent, authorization certificate should be attached along with the tender. The brands / models / specifications mentioned are indicative. Equivalent higher configuration products may also be quoted.
2. The rate quoted must be F.O.B. NITTTR, KOLKATA inclusive of packing, forwarding etc GST insurance, if any must be indicated separately. Educational discount, if any should be indicated clearly. For imported items, Custom duty shall be indicated separately.
 - 2.1 All legal disputes shall be under the jurisdiction of the Kolkata Courts in the state of West Bengal.
 - 2.2 Director, NITTTR,Kolkata reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever and decision of the Director, NITTTR,Kolkata in the matter shall be final and binding.

NB: Only relevant information (s) need to be submitted/complied with along with quotation(s)

3. Earnest Money Deposit (EMD):

- 3.1 “EMD at the rate of 4% of the estimated price” in the form of Crossed Account payee demand draft or 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.
 - 3.2 Tender without earnest money deposit shall be **OUTRIGHT REJECTED**. A model format of bank guarantee for furnishing EMD is enclosed in Annexure- A.
 - 3.3 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.
 - 3.4 Refund of EMD: EMD furnished by all unsuccessful tenderers shall be returned to them without any interest whatsoever, 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 shall be returned, without any interest whatsoever, after receipt of performance security from it as called for in the contract.
 - 3.5 No EMD is required from bidders who are registered with (i) Central Purchase Organization (ii) NSIC, (iii) the concerned Ministry or Department, and (iv) similar other Organization as applicable.
 - 3.6 EMD in the form of DD should be in a separate envelop superscribing “EMD”.
4. **Each bidder shall submit only one tender.**
 5. **Validity of Tender:** Tender shall remain valid for a period not less than 3 months after the deadline date specified for submission.
 6. **Delivery Period:** Delivery period shall be 45 days from the date of issuing purchase order.
 7. **Submission of Documents:** The Technical Bid should contain the following :
 - Printed copy of the brochure/leaflet containing, Make, Model No. and Specifications.
 - Copy of Two Years Income Tax acknowledgment (F. Y 2015-16 and F.Y 2016-17) and copy of PAN Card.
 - Copy of Valid Trade license.
 - Copy of GST Registration Certificate.
 - Copy of up-to-date custom duty clearance certificate, if applicable
 - Copy of valid registration certificate from State/Central Government.
 - Copy of valid registration certificate of SSI Unit, if any.
 - The Tenderer (s) may furnish a list of clients serviced during the last three (3) years along with satisfactory completion certificates
 - Copy of latest audited statement of accounts
 - In case of foreign manufacturer Authorization Certificate.

8. **Bid Price:** While furnishing the quoted price in the Financial Bid , the bidder (s) may note the following:
- 8.1 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.
 - 8.2 All duties, taxes and other levies payable by the vendor under the contract.
 - 8.3 All duties, taxes and other levies payable by the vendor under the contract shall be included in the total price and Taxes should be quoted separately.
 - 8.4 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, except revision of taxes and duties.
 - 8.5 The rate quoted must be both in words and figures.
 - 8.6 The quantity against each item mentioned in the tender may vary according to the actual requirement at the time of placing Purchase Order.

The rates quoted by the bidder should be in Indian Rupees.

Late Bids: In the case of advertised tender enquiry, late bids(i.e. bids received after the specified date and time for receipt of bids) should not be considered.

9. **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.
- 9.1 Notwithstanding the above, NITTTR, KOLKATA reserves the right to accept or reject any bidder(s) and to cancel the bidding process and reject all bids at any time prior to the award of contract.
 - 9.2 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.

10. Performance Security:

- 10.1 Performance security at the rate of 6% 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 vendor, including warranty obligations. A model format of Bank guarantee for providing performance security is enclosed at Annexure –B
- 10.2 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 vendor, in terms of the relevant contract.
- 10.3 Refund of Performance security: Performance security should be refunded to the vendor without any interest, whatsoever, after it duly performs and completes the contract in all respect and beyond 60 days of completion of all such obligations under the contract.

11. Liquidated Damages Clause for late Delivery and Late Installation:

- a) If the supplier fails to deliver any or all the goods or to perform services like installation, erection, testing, commissioning, or other allied works on or before specified time period mentioned in the purchase order or extended date of completion time granted by institute if any, he shall without prejudice to any other right or remedy available under the law to the institute on account of such breach, the vendor will pay as agreed compensation the amount calculated at the rate stipulated below:

- b) LD Clause for delay of delivery, installation, testing, commissioning, or other allied works will be as follows:-
0.5% of delivered price of delayed goods (or services) for each week or part thereof subject to maximum 10% of contract value.
12. **Payment:** Payment will be made immediately after delivery & satisfactory commissioning of the goods / services and training of personnel. Payment in settlement of the bills will be subject to the deductions of income tax/ GST at applicable rates under TDS.
13. **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.
14. **Live Demonstration:** Live demonstration of the item(s) should be arranged by the vendors at their cost, if asked by the Institute.
15. 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 MHRD, Govt. of India. A copy of the same is available in the office of the Department of Mechanical Engineering for perusal of the tenderers. Tenderers are advised to go through the manual before submission of their tenders. A soft copy of the manual can also be downloaded from <http://finmin.nic.in>
16. The non-transferable tender document excluding standard agreement form can be obtained from the Office of the Accountant as per above users on payment of **500/- (Rupees Five Hundred only)** in cash or Demand Draft in favour of the Director, NITTTR, Kolkata. **The users of downloaded tender document shall have to pay the cost of tender document i.e. 500/- by way of Demand Draft in favour of the Director, NITTTR, Kolkata payable at Kolkata while submitting their tender. Otherwise the Tender will not be accepted.**
17. The Competent Authority may cancel the whole tender process without assigning any reason.

You are requested to provide your offer as per schedule provided in Notice Inviting Tender in the sealed envelope super-scribing “**Tender Advt. No. /2017-18**”

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

ANNEXURE - A
MODEL BANK GUARANTEE FORMAT FOR FURNISHING EMD

Whereas.....
.....(hereinafter called the "tenderer").....
has submitted their offer date.....
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 atare 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 of2018.

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 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,
NITTTR, 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 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, 2018.

(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