

राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर हमीरपुर 177005-(हि .प्र.) NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P.)-177005

[An Institute of National Importance under Ministry of Education (शिक्षा मंत्रालय)]

E-TENDER NOTICE

Sealed online e-Tender in two bid system are hereby invited by the undersigned for the supply of following items on behalf of the Director, NIT, Hamirpur from the Eligible/ Experienced/ Resourceful, manufacturer's dealer/authorized distributor etc. having experience in appropriate field and who have successfully completed works of similar type, so as to reach in the office of the undersigned as per date & time mentioned below.

ir. No.	Name of works/item	Qty/ No.	Money In Rs.	Time Limit
1	Automated deflection of beam apparatus with inbuilt data acquisition system (For detailed specifications please refer to SBD) Automated column and strut apparatus with data acquisition system (For detailed specifications please refer to SBD) Automated deflection of truss apparatus with data acquisition system (For detailed specifications please refer to SBD)		45 days	
2				
3				
4	Automated three hinge arch apparatus with data acquisition system (For detailed specifications please refer to SBD)	1		
5	Automated two hinge arch apparatus with data acquisition system (For detailed specifications please refer to SBD)			
6	Automated elastic beam and continuous beam with data acquisition system (For detailed specifications please refer to SBD)	1		
7	Automated shear force in beam apparatus with data acquisition system (For detailed specifications please refer to SBD)	1		
8	Automated pin joint truss apparatus with data acquisition system (For detailed specifications please refer to SBD)	1		
9.	Automated portal frame with data acquisition system (For detailed specifications please refer to SBD)	1		

 Availability of bid document and mode of submission:-The bid document is available online and bid should be submitted in online mode on website http://www.eprocure.gov.in/ and http://www.nith.ac.in/. Bidder would be required to register in the web-site which is free of cost. For submission of bids, the bidder is required to have Digital Signature Certificate (DSC) from one of the authorized certifying authorities (CA).

2. Key dates: (1)

1	Date of online publication	29.04.2021 at 6.00 PM
2	Document download start and end date	29.04.2021 to 19.05.2021 10.30 AM
3	Bid submission start and end date	29.04.2021 to 19.05.2021 10.30 AM
4	Physical submission of EMD, technical documents and cost of tender document etc.	On or before 05 30 PM on 19 05 2021
5	Date of opening of technical bid	20.05.2021 at 11.30 AM

- (II) Objections/representation if any against the bidders will be entertained only within three days after publication/uploading of technical bid opening summary on net and thereafter that the date of opening of financial bid of technically qualified bidders will be published /uploaded on net.
- 3. Tender Details:-The tender Documents shall be uploaded in 2 cover:-

Cover 1:-Shall contain scanned copies of all "Technical Documents/Eligibility information".

Cover 2:- Shall contain "BOQ/Financial Bid", where supplier will quote his offer for each item.

- (a) Submission of Original Documents: The bidders are required to submit (a) original demand draft towards the cost of bid document if any and (b) original bid security/Earnest Money deposit (EMD) and other technical documents in the Store & Purchase section, NIT Hamirpur-177005 (HP) as specified in the key dates of Sr. no.2 on tender opening dates & schedule, failing which the bids will be declared non-responsive. EMD in the form of DD/FDR must be attached with in favour of Director, NIT, Hamirpur (H.P) -177 005. The EMD should be remained valid for a period of 90 days beyond the final bid validity period. EMD of unsuccessful bidders shall be returned after the expiry of the final bid validity or before the 30th day of the award of contract. The EMD of the successful bidder shall be released after successful execution of supply order. The above condition is applicable to all & no relaxation will be given.
- 4. BID OPENING DETAIL: The bids shall be opened as per schedule specified in the key dates of <u>Sr. no.2</u>, in the store & Purchase section, NIT, Hamirpur by the authorized officer. In their interest the tenderer are advised to be present along with original documents at the time of opening of tenders. If the office happens to be closed on the date of opening of the bids as specified, the bids will be opened on the next working day at the same time & venue.
- 5. The bids shall remain valid for acceptance for a period of not less than 90 days after the deadline date for bid submission. Other details can be seen in the bidding documents. The officer inviting tender shall not be held liable for any delays due to system failure beyond its control. Even though the system will attempt notify the bidder of any bid updates. The Employer shall not be liable for any information not received by the bidder. It is the bidders responsibility to verify the website for the latest information related to the tender.
- The copy of enlistment order & renewals, Copy of PAN issued by Income tax Department and copy of GST Certificate must accompany in the cover-1
- 7. The bidder preferably must have successfully supplied similar items in recent years. The bidders shall have to produce supporting documents giving date of award, date of commencement and completion from the concerned competent authority and should be included in cover-1

8. Destination: F.O.R. destination i.e. NIT, Hamirpur (HP) and the rates must include the charges for Packing, Forwarding, Freight, etc., if any.

9. Price/Rate: The price of items may be quoted in Indian rupees.

10. GST:- All the firms may invariably mention their GST/PAN numbers on tender failing which quotations may not be considered valid. Further, this Institution does not issue any C/D Concessional form, so the GST applicable as per actual rates must be mentioned in the offer. In case GST is not mentioned, the rates shall be treated as inclusive of all taxes.

11. The bidders/firms have to supply the complete catalogue/brochure of the products to be

supplied along with the Technical bid.

12. The technical bids will be evaluated on the basis of terms & conditions of the tender and details of the product to be supplied as per condition 11 of the tender notice. The committee reserves the right to reject any technical bid on the basis of technical specifications/catalogue/brochure submitted.

Conditional/ telegraphic tenders shall summarily be rejected.

14. For any clarifications bidders are requested to contact FI (Purchase), NIT Hamirpur at his E-mail ID i.e. fip@nith.ac.in.

15. The tender/bid shall be kept in a sealed envelope superscribed as "Tender for (Name of work and date of opening

16. The jurisdiction of the law of court shall be at Hamirpur (HP).

No: NIT/HMR/CED/ 2021/DPR/ 143-145

FI (Purchase) Dated: - 29 04 2021

Copy forwarded to the following for information please:-

The HOD, Civil Engineering Department.

Dr. Vimal Kumar, Assistant Professor, CED.

3. The FI(CC), for getting the advertisement displayed in the Institute website for wider publicity under head: - Supply and installation of various items (09 Equipments) viz. Automated deflection of beam apparatus with in built data acquisition system etc for structural Engineering Lab of Civil Engineering department of NIT Hamirpur.

FI (Purchase)



राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर हमीरपुर177005-(हि.प्र.) NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P.)-177005 [An Institute of National Importance under Ministry of Education (शिक्षा मंत्रालय)]

NIT-SBD

Subject: - Supply and installation of various items (09 Equipments) viz Automated deflection of beam apparatus with in built data acquisition system etc for structural Engineering Lab of Civil Engineering department of NIT Hamirpur.

Sealed online E-Tender in two bid system are hereby invited by the undersigned for the supply of following items on behalf of the Director, NIT, Hamirpur from the Eligible/ Experienced/ Resourceful, manufacturer's dealer/authorized distributor etc. having experience in appropriate field and who have successfully completed works of similar type, so as to reach in the office of the undersigned as per date & time mentioned in the tender notice.

Sr. No.	Name of works/item	Qty/ No.	Money In Rs.	Limit
1	Automated deflection of beam apparatus with 1 72000 inbuilt data acquisition system (For detailed specifications please see below)		45 days	
2	Automated column and strut apparatus with data acquisition system (For detailed specifications please see below)	1		
3	Automated deflection of truss apparatus with data acquisition system (For detailed specifications please see below)	1		
4	Automated three hinge arch apparatus with data acquisition system (For detailed specifications please see below) Automated two hinge arch apparatus with data acquisition system (For detailed specifications please see below)			
5				
6	Automated elastic beam and continuous beam with data acquisition system (For detailed specifications please see below)	1		
7	(For detailed specifications please see below) Automated shear force in beam apparatus with data acquisition system (For detailed specifications please see below)			
8	Automated pin joint truss apparatus with data acquisition system (For detailed specifications please see below)	1		
9.	Automated portal frame with data acquisition system (For detailed specifications please see below)	1		

Detailed Specification

Sr. No.	Name of the Equipment/ Setup	Specifications
	Automated deflection of beam apparatus with inbuilt data acquisition system	 Deflection of beam apparatus: independently complete setup with sensors, operating software, data logger, computer system and required accessories etc. Two beam supports with two fixing methods Support with Digital Deflection Indicator of resolution 0.01 mm Five different beams of length 850 mm and nominal cross sections: Aluminium 19 x 3.2 mm, 19 x 4.8 mm and 25.4 x 3.2 mm Brass 25.4 mm x 3.2 mm Mild Steel 25.4 mm x 3.2 mm One cable for computer display and data acquisition Nine Mass Hangers 50 x 20 g masses Hexagon tools for beam fixings Vernier Caliper 0-150 mm Storage Tray Simulation Software User Guide and experimental procedure: both in soft
		Universal structure stand Material: Made of anodized Aluminum Extrusion (heavy duty) Size of each aluminum extrusion: 50 X 100 mm with T slots (2 in nos.) Overall dimension: 1500 X 600 mm Hexagonal tools (for assembling) USB interface hardware USB cable Data acquisition software
		Desktop Requirement: The desktop should include RAM: 8 GB installed with additional free slots OS: Windows 10 64 bit (Activated) Hard Disk: 1 TB, SATA Processors: Intel i5 (version: 7th gen on higher) CD/DVD reader and writer Ethernet port: Minimum 1 Nos.

	USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 port. Graphic card: inbuilt HDMI and VGA Supported Wired keyboard and Mouse (USB type) Monitor: Display between 20 to 23 inch, Full HD with VGA/HDMI Ports, 1920x1080 resolution Complete accessories etc.
2 Automated column and apparatus will data acquisis system	vith complete setup with sensors, operating soliware,

	Desktop Requirement: The desktop should include RAM: 8 GB installed with additional free slots OS: Windows 10-64 bit (Activated) Hard Disk: 1 TB, SATA Processors: Intel i5 (version: 7th gen or higher) CD/DVD reader and writer Ethernet port: Minimum 1 nos. USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 port. Graphic card: inbuilt HDMI and VGA Supported Wired keyboard and Mouse (USB type) Monitor: Display between 20 to 23 inch, Full HD with VGA/HDMI Ports, 1920x1080 resolution Complete accessories etc.
3 Automated deflection of truss apparatus with data acquisition system	Deflection of truss apparatus: independently complete setup with sensors, operating software, data logger, computer system and required accessories etc. Truss with different length bars Height of truss: max. 450 mm Length of truss: max. 900 mm Different length bars available: 150mm, 250mm, 300 mm, 400 mm, 425 mm, 520 mm Maximum bar force: 200 N Load application device measuring range: 500 N max. Dial gauge connection cable: 0

		mm with T slots (2 in nos.)
		Overall dimension: 1500 X 600 mm
		Hexagonal tools (for assembling)
		USB interface hardware
		USB cable
		Data acquisition software
		Desktop Requirement: The desktop should include RAM: 8 GB installed with additional free slots OS: Windows 10-64 bit (Activated) Hard Disk: 1 TB, SATA Processors: Intel i5 (version: 7th gen or higher) CD/DVD reader and writer Ethernet port: Minimum 1 nos. USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 port. Graphic card: inbuilt HDMI and VGA Supported Wired keyboard and Mouse (USB type) Monitor: Display between 20 to 23 inch, Full HD with VGA/HDMI Ports, 1920x1080 resolution Complete accessories etc.
h	utomated three inge arch pparatus with	 Three hinge arch apparatus: independently complete setup with sensors, operating software, data logger, computer system and required
d	ata acquisition	accessories etc.
S	ystem	 Two arch supports, holding an arch of 0.5 m span x 0.1 m height
		 One cable for computer display and data acquisition
		Nine Mass Hangers
		 50 x 20 g masses
		Storage Tray
		Simulation Software
		 User Guide and experimental procedure: both in soft
		and hard copy
		Material: Made of anodized Aluminum Extrusion (heavy duty) Size of each aluminum extrusion: 50 X 100 mm

		 Overall dimension: 1500 X 600 mm
	THE RESERVE OF	 Hexagonal tools (for assembling)
		 USB interface hardware
		USB cable
		Data acquisition software
		Desktop Requirement: The desktop should include RAM: 8 GB installed with additional free slots OS: Windows 10-64 bit (Activated) Hard Disk: 1 TB, SATA Processors: Intel i5 (version: 7th gen or higher) CD/DVD reader and writer Ethernet port: Minimum 1 nos. USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 port. Graphic card: inbuilt HDMI and VGA Supported Wired keyboard and Mouse (USB type) Monitor: Display between 20 to 23 inch, Full HD with VGA/HDMI Ports, 1920x1080 resolution Complete accessories etc.
5	Automated two hinge arch apparatus with data acquisition system	Two hinge arch apparatus: independently complete setup with sensors, operating software, data logger, computer system and required accessories etc. Two arch supports, holding an arch of 0.5 m span x 0.1 m height One cable for computer display and data acquisition
		Nine Mass Hangers
		• 50 x 20 g masses
		Storage Tray
		Simulation Software
		User Guide and experimental procedure: both in soft and hard copy
		Universal structure stand Material: Made of anodized Aluminum Extrusion (heavy duty) Size of each aluminum extrusion: 50 X 100 mm with T slots (2 in nos.) Overall dimension: 1500 X 600 mm Hexagonal tools (for assembling)

		 USB interface hardware
		USB cable
		Data acquisition software
		Desktop Requirement: The desktop should include RAM: 8 GB installed with additional free slots OS: Windows 10-64 bit (Activated) Hard Disk: 1 TB, SATA Processors: Intel i5 (version: 7th gen or higher) CD/DVD reader and writer Ethernet port: Minimum 1 nos. USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 port. Graphic card: inbuilt HDMI and VGA Supported Wired keyboard and Mouse (USB type) Monitor: Display between 20 to 23 inch, Full HD with VGA/HDMI Ports, 1920x1080 resolution Complete accessories etc.
6	Automated elastic	Elastic beam and continuous beam apparatus:
	beam and continuous beam with data acquisition system	independently complete setup with sensors, operating software, data logger, computer system and required accessories etc. Two simple supports measuring vertical reaction A universal support that measures vertical reactions and can act as a fixed or sinking support A moment support measuring fixing moment Industrial deflection indicator of resolution 0.01 mm A rigid beam of length 850 mm and 19 x 6.3 mm section A flexible beam of length 600 mm and 18 x 2 mm section Four cables for computer display and data acquisition Nine Mass Hangers and 50 x 20 g masses Hexagon tools Steel Rule and Vernier Caliper Storage Tray Simulation Software User Guide and experimental procedure: both in soft and hard copy

	Material: Made of anodized Aluminum Extrusion (heavy duty) Size of each aluminum extrusion: 50 X 100 mm with T slots (2 in nos.) Overall dimension: 1500 X 600 mm Hexagonal tools (for assembling) USB interface hardware USB cable Data acquisition software Desktop Requirement: The desktop should include RAM: 8 GB installed with additional free slots OS: Windows 10-64 bit (Activated) Hard Disk: 1 TB, SATA Processors: Intel i5 (version: 7th gen or higher) CD/DVD reader and writer Ethernet port: Minimum 1 nos. USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 port. Graphic card: inbuilt HDMI and VGA Supported Wired keyboard and Mouse (USB type)
7 Automated shape	 Monitor: Display between 20 to 23 inch, Full HD with VGA/HDMI Ports, 1920 x 1080 resolution Complete accessories etc.
7 Automated shear force in beam apparatus with data acquisition system	Shear force in a beam apparatus:independently complete setup with sensors, operating software, data logger, computer system and required accessories etc. Two supports, holding a beam of 0.8 m length and 0.5 m span Bending moment load cell built into the center span of the beam. One cable for computer display and data acquisition Four Mass Hangers 50 x 20 g masses Two UDL bars Storage Tray Simulation Software User Guide and experimental procedure: both in soft

	and hard copy
	Material: Made of anodized Aluminum Extrusion (heavy duty) Size of each aluminum extrusion: 50 X 100 mm with T slots (2 in nos.) Overall dimension: 1500 X 600 mm Hexagonal tools (for assembling) USB interface hardware USB cable Data acquisition software
	Desktop Requirement: The desktop should include RAM: 8 GB installed with additional free slots OS: Windows 10-64 bit (Activated) Hard Disk: 1 TB, SATA Processors: Intel i5 (version: 7th gen or higher) CD/DVD reader and writer Ethernet port: Minimum 1 nos. USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 ports. Graphic card: inbuilt HDMI and VGA Supported Wired keyboard and Mouse (USB type) Monitor: Display between 20 to 23 inch, Full HD with VGA/HDMI Ports, 1920 x 1080 resolution Complete accessories etc.
8 Automated pin joint truss apparatus with data acquisition system	 Pin joint truss apparatus: independently complete setup with sensors, operating software, data logger, computer system and required accessories etc. Strain Gauge Amplifier, 16 input Pinned and roller supports Additional Upright Trammel Arm with Digital Indicator of resolution 0.001 mm Three cables for computer display and data acquisition Square-section Frame Members: 7 x long, 4 x medium and 2 x short 8 Joint Bosses Load Cell of maximum capacity 650 N

		 Hexagon tools for fixings Storage Trays for general items and Frame Members Inclinometer Simulation Software User Guide and experimental procedure: both in sof and hard copy Universal structure stand Material: Made of anodized Aluminum Extrusion (heavy duty) Size of each aluminum extrusion: 50 X 100 mm with T slots (2 in nos.) Overall dimension: 1500 X 600 mm Hexagonal tools (for assembling) USB interface hardware USB cable Data acquisition software Desktop Requirement: The desktop should include RAM: 8 GB installed with additional free slots OS: Windows 10-64 bit (Activated) Hard Disk: 1 TB, SATA Processors: Intel i5 (version: 7th gen or higher) CD/DVD reader and writer Ethernet port: Minimum 1 nos. USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 ports. Graphic card: inbuilt HDMI and VGA Supported Wired keyboard and Mouse (USB type)
9	Automated portal frame with data acquisition system	 Portal frame apparatus: independently complete setup with sensors, operating software, data logger, computer system and required accessories etc. Two supports, one with horizontal reaction load cell, the other with a fixing moment load cell Uniform frame of 250 mm height x 500 mm length and nominal cross-section: 15 mm x 2 mm Non-uniform frame of 250 mm height x 500 mm length.

Nominal cross-sections 15 mm x 2 mm and one vertical of 15 x 1.5 mm

- Three cables for computer display and data acquisition
- Three Mass Hangers
- 25 x 20 g masses
- Vernier Caliper
- Hexagon Tool
- Storage Tray
- · Simulation Software
- User Guide and experimental procedure: both in soft and hard copy

· Universal structure stand

- Material: Made of anodized Aluminum Extrusion (heavy duty)
- Size of each aluminum extrusion: 50 X 100 mm with T slots (2 in nos.)
- Overall dimension: 1500 X 600 mm
- Hexagonal tools (for assembling)
- USB interface hardware
- USB cable
- Data acquisition software

. Desktop Requirement: The desktop should include

- RAM: 8 GB installed with additional free slots
- . OS: Windows 10-64 bit (Activated)
- Hard Disk: 1 TB, SATA
- Processors: Intel i5 (version: 7th gen or higher)
- CD/DVD reader and writer
- Ethernet port: Minimum 1 nos.
- USB PORT: Minimum 3-USB 3.0 ports and 3-USB 2.0 ports.
- · Graphic card: inbuilt
- HDMI and VGA Supported
- Wired keyboard and Mouse (USB type)
- Monitor: Display between 20 to 23 inch, Full HD with VGA/HDMI Ports, 1920 x 1080 resolution
- Complete accessories etc.

TERMS AND CONDITIONS:-

- Validity: Minimum validity of the quotation will be 03 months from the date of opening of the quotation/tenders.
- Time Limit: The firm/supplier has to the supply and install the equipments within 45 days from the date of the award letter.
- Guarantee/warranty: The supplier has to provide equipment guarantee/warranty supplied
 for next 03 years from the date of successful installation of the equipment supplied.
 (Certificate of the same to be given by the supplier)
- Demonstration & Training:- The supplier will have to demonstrate and impart training to concerned users at NIT, Hamirpur after successful supply & installation. (Certificate of the same to be given by the concerned user/indenter).
- 5. EMD: EMD in the form of DD/FDR /Bank Guarantee must be attached in favour of Director, NIT, Hamirpur (H.P) -177 005. The EMD should be remained valid for a period of 90 day beyond the final bid validity period. EMD of unsuccessful bidders shall be returned after the expiry of the final bid validity or before the 30th day of the award of contract. The EMD of the successful bidder shall be released after expiry of warranty period.
- 6. Technical Evaluation:- Technical evaluation of the participating firms will be done strictly on the basis of catalogues/brochures/literature/technical details of the product to be supplied along with relevant experience & fully complying all the terms & conditions of the SBD & tender notice. It is mandatorily required to supply all the technically documents physically. NIT Hamirpur also reserves the right to seek clarification from any of the participating firm during technical evaluation.
- Destination: F.O.R. destination i.e. NIT, Hamirpur (HP) and the rates must be quoted inclusive of all taxes and charges.
- 8. Penality: In case the firm/vendor fails to supply the equipments within the stipulated period penalty without assigning any reasons @ 1/2% (half percent) of the total value of the item covered in order as penalty per day subject to a maximum of 5% (five percent) will be imposed unless extension is obtained in writing from the office on valid ground before expiry of delivery period
- Price/Rate: The price of equipment/items may be quoted as per BOQ clearly mentioning
 the Basic rate & GST in the specific columns of BOQ in Indian rupees. Tender will be
 awarded to the participating bidder who will be lowest in terms of total of all items
- 10. GST: All the firms may invariably mention their GST/PAN numbers on quotation/tender failing which quotations may not be considered valid. Further, this Institution does not issue any C/D Concessional form, so the GST applicable as per actual rates must be mentioned in the offer. In case GST is not mentioned, the rates shall be treated as inclusive of all taxes.
- NIT/NIQ Opening: Representative of the firm may be present at the time of opening of the Quotations, if it wishes.
- 12. Payment: 100% payment shall be made immediately after receipt of material in good condition and successful installation of the same. (Certificate of the same to be given by the indenter/inspection committee NIT, Hamirpur)
- 13. Right of Acceptance/Rejection: Right of acceptance and rejection of any tender/quotation in part or full without assigning any reason are reserved with the institution authorities. The number of items to be purchased could be increased or decreased depending on the requirement of end user.
- 14. In case of any dispute the jurisdiction of Hamirpur (HP) Courts shall apply.