



Government Women Engineering College, Ajmer, Makhupura, Nasirabad
Road, Ajmer -305002

INVITATION LETTER

Package Code: TEQIP-III/2019/RJ/gwec/90

Current Date: 11-Jul-2019

Package Name: GWECA/Mechanical/Vibration Lab

Method: Shopping Goods

To,

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Sub: INVITATION LETTER FOR GWECA/Mechanical/Vibration Lab

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	Universal Vibration set up	1	ME Deptt, GWEC Ajmer	Yes
2	Trifler Suspension Apparatus	1	ME Deptt., GWEC Ajmer	Yes
3	Electro Dynamic Exciter	1	ME Deptt., GWEC Ajmer	Yes
4	Vibration Meter	1	ME Deptt., GWEC, Ajmer	Yes

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme [TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

3. **Quotation**

3.1 The contract shall be for the full quantity as described above.

3.2 Corrections, if any, shall be made by crossing out, initialling, dating and re writing.

- 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit Price.
- 3.4 Applicable taxes shall be quoted separately for all items.
- 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- 3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **90**days after the last date of quotation submission.
6. Evaluation of Quotations: The Purchaser will evaluate and compare the quotations determined to be Substantially responsive i.e. which
 - 6.1 are properly signed; and
 - 6.2 Confirm to the terms and conditions, and specifications.
7. The Quotations would be evaluated for all items together.
8. Award of contract The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
 - 8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of Contract.
 - 8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be Incorporated in the purchase order.
9. Payment shall be made in Indian Rupees as follows:

Satisfactory Delivery and Installation - 90% of total cost
Satisfactory Acceptance - 10% of total cost
10. Liquidated Damages will be applied as per the below:
Liquidated Damages Per Day Min % :N/A
Liquidated Damages Max % : N/A
11. All supplied items are under warranty of **36** months from the date of successful acceptance of items and AMC/Others is .
12. You are requested to provide your offer latest by **14:30** hours on **25-Jul-2019**, failing which it would be summarily rejected. GWEC Ajmer will not be responsible for postal

delay or non-receipt of quotation.

13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any) **Yes**
15. Testing/Installation Clause (if any) **Yes**
16. Performance Security shall be applicable: **3%**
17. **Information brochures/ Product catalogue**, if any must be accompanied with the quotation clearly indicating the model quoted for.
18. Sealed quotation (complete in all respects) to be submitted/ delivered at the address mentioned below, **Government Women Engineering College, Ajmer,Makhupura, Nasirabad Road, Ajmer -305002**
19. You are requested to provide the company details viz. **Firm Registration Certificate, GST Registration Certificate** and any other necessary documents duly certified by **Chartered Accountant / Notary Public**.
20. The quotation would be opened on **25-Jul-2019 at 15:00 hrs** at **TEQIP-III Office, Govt. Women Engineering College Ajmer, Rajasthan – 305002, India** in the presence of bidder representatives who choose to attend the opening. The bidder representatives who are present shall sign an Attendance Sheet evidencing their attendance.
21. Notwithstanding the above, the Institute reserves the right to accept or reject any quotation(s) and to cancel the process and reject all quotation(s) at any time.
22. Dispute if any shall be subjected to the jurisdiction of Rajasthan in Ajmer/Jaipur.
23. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)

Name & Designation

Annexure I

Sr. No	Item Name	Specifications
1	Universal Vibration set up	<p>Universal Vibration Apparatus (in three parts)Universal Vibration Apparatus with software interface</p> <p>The apparatus provided comprehensive unit to perform the vibration experiments. A universal frame is provided upon which quick and easy assemblyof various experiments can be done. The students can easily assemble the experiments and study the theory of vibrations practically.</p> <p>Following experiments can be performed with this unit:</p> <ul style="list-style-type: none"> • To verify the relation simple pendulum • To verify the relation of compound pendulum & to determine the radius of gyration • To study radius of gyration of bi-filar suspension • To study the undamped free vibration of spring mass system • To study the longitudinal vibration of helical coiled spring. • To study the forced vibration of simply supported beam for different damping. • Undamped torsional vibrations of single rotor system. • Undamped torsional vibrations of double rotor system. • To study the damped torsional vibration of single rotor system and to determine the damping co-efficient. • Verification of Dunker ley's Rule • To study the forced damped vibration of spring mass system. <p>In Universal Vibration Apparatus, following experiment can be done using software:</p> <ol style="list-style-type: none"> 1) To study the Forced damped Vibration of Equivalent Spring Mass System. 2) To study the forced vibration of the beam for different damping. <p>FEATURES</p> <ul style="list-style-type: none"> • Number of Steel Beam = 3 nos. • Number of Shaft = 3 nos. • Number of Springs of Varying Stiffness = 2 nos. <ul style="list-style-type: none"> • Bar, rigid: LxWxH: 700x25x12mm, 1.6kg • Bar, flexible: LxWxH: 25x4x700mm, 0.6kg • Tension / compression springs <ul style="list-style-type: none"> • - 0.75N/mm • - 1.5N/mm • - 3.0N/mm • Imbalance exciter <ul style="list-style-type: none"> • - 0-50Hz • - 100cmg • Oil-filled damper: 5-15Ns/m • Absorber <ul style="list-style-type: none"> • - leaf spring, wxh: 20x1.5mm • - total weight: approx. 1.1kg

		<ul style="list-style-type: none"> • - adjustable 5-50Hz • Groove width of frame: 10mm • Drum recorder: 20mm/s, width 100mm • Polar diagram recorder: D=100mm • Arrangement for changing the damping positions. • Operating/instruction manual and sample calculations should be provided. • Equipments has to be demonstrated at college site, results should be repeatable within $\pm 5\%$ of the sample calculations provided. <p>Utilities Required (Not to be supplied with equipments)</p> <ul style="list-style-type: none"> • Power Supply: 230V AC. 5 Amp with earth. • Latest Computer with printer.
2	Trifler Suspension Apparatus	<p>Trifler Suspension Apparatus</p> <p>The experimental set up consists of M.S. Channel frame at the bottom side and three M.S. Pipes in vertical position. At top an angle frame is fitted. Three drill chucks are fitted on each arm of this angle frame. String can be fixed in these chucks at the top and a disc is fixed at the bottoms. The length of string can be easily varied. A stop watch (digital) is supplied with apparatus</p> <p>Pendulum bodies</p> <ul style="list-style-type: none"> • beam LxWxH: 40x40x160mm· mass: 2kg • cylinder· diameter: 160mm· height: 19mm <ul style="list-style-type: none"> ○ mass: 3kg • circular ring <ul style="list-style-type: none"> ○ outer diameter: 160mm ○ inner diameter: 100mm ○ height: 41mm· mass: 4kg • Thread length: up to 2000mm • Stopwatch: 1/100s • LxWxH: 205x200x2000mm • Weight: approx. 12kg • Operating/instruction manual and sample calculations should be provided. • Equipment has to be demonstrated at college site, results should be repeatable within $\pm 5\%$ of the sample calculations provided.
3	Electro Dynamic Exciter	<p>The vibrators are having drive armature connected rigidly to the moving platform and positioned in the magnetic field. When AC current flows in this drive coil gives rise to a force by converting an electric current into mechanical force, which moves the platform. The vibrator can operate in the frequency range from 5 Hz to 2500 Hz from either or random input waveform.</p> <p>The function of a vibration system is to produce a selected waveform with required vibration level (i.e. Acceleration, velocity or Amplitude) and frequency to test specimen mounted on the vibration exciter. The Electrodynamics vibrator is very much reliable as there are no rolling parts to wear out and axial resonance frequency is kept quiet high to avoid self-resonance. The system force rating and moving element mass are the primary characteristics which determine the vibration level.</p> <p>Consisting of</p>

		<p>(a) Moving armature suspension : Link arm type</p> <p>(b) Size of table : 8" x 8"</p> <p>(c) Frequency generation : 5- 2.5kHz</p> <p>(d) Vibrating table displacement : Max. 5mm</p> <p>(e) Acceleration : 0-5g</p> <p>(f) Power supply : Single phase 220-250V AC.</p> <p>(g) Cooling: Natural</p>
4	Vibration Meter	<p>Electrical 220V AC with magnetic pickup for measurement of displacement 0-5 mm</p> <p>Velocity 0-50 m/sec</p> <p>Accelerating upto 5g with a function selector switch</p>

FORMAT FOR QUOTATION SUBMISSION
(In letterhead of the supplier with seal)

Date: _____

To: _____

Sl. No.	Description of goods \ (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex-Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Amount in figures) (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No. _____