INVITATION FOR QUOTATION

TEQIP-III/2019/dced/Shopping/____

15-Feb-2019

Τo,

WHOMSOEVER IT MAY CONCERN

Sub: Invitation for Quotations for supply of Goods

Dear Sir,

 You are invited to submit your most competitive quotation (in hard copy only) for the following packages (one quotation for one package) with item wise detailed specifications given at annexure I,

Sr. no.	Tender ID	Package Code	Package Name
1	TEQIP-III/2019/dced/Shopping/142	TEQIP- III/BH/dced/136	Physics P1
2	TEQIP-III/2019/dced/Shopping/84	TEQIP- III/BH/dced/137	Physics P2
3	TEQIP-III/2019/dced/Shopping/85	TEQIP- III/BH/dced/138	Physics P3
4	TEQIP-III/2019/dced/Shopping/143	TEQIP- III/BH/dced/225	Physics P4

Note: Package wise detailed specification is attached (annexure-I) with this invitation letter and also made available on the institute website.

- 2. You must also submit the following information along with the bid.
 - i. Supplier Name:
 - ii. Address (with Pin Code):
 - iii. Contact person Name:
 - iv. Email ID:
 - v. Mobile No.
 - vi. GST No.
 - vii. PAN No.
- 3. 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.

4. Quotation,

- 4.1 The contract shall be for the full quantity as described above.
- 4.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
- 4.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.
- 4.4 Applicable taxes shall be quoted separately for all items.
- 4.5 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.
- 4.6 The Prices should be quoted in Indian Rupees only.
- 5. Each bidder shall submit only one quotation for one complete package.

The bidder may submit separate quotation (as separate bid document) for each of the package advertised. The package wise detailed specification is available on the institute website https://www.dce-darbhanga.org/teqip-iii/tenders/ and also attached here for the reference.

- 6. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.
- 7. Evaluation of Quotations,

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

- 7.1 are properly signed ; and
- 7.2 confirm to the terms and conditions, and specifications.
- 8. The Quotations would be evaluated for all items together.
- 9. 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.

9.1 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.

- 9.2 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.
- 10. Payment shall be made in Indian Rupees as follows:

Delivery and Installation - 90% of total cost

Satisfactory Acceptance - 10% of total cost

- 11. All supplied items are under warranty of **minimum 12** months from the date of successful acceptance of items.
- 12. You are requested to provide your offer latest by 16:00 hours on 30-Mar-2019.
- 13. Detailed specifications of the items are at Annexure I.
- 14. Training Clause (if any): Yes, as per the requirements of individual item that will be notified in PO while awarding the contract.
- 15. Testing/Installation Clause (if any) Yes.
- 16. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
- 17. Sealed quotation to be sent through speed post/registered post/courier only to the following address:

Darbhanga College of Engineering, Darbhanga, Mabbi, Post - Lal Sahpur, VIA - PTC, Darbhanga – 846005, Bihar.

The Tender ID, Package code and Package name must be written on top of the envelop of the bid document.

- 18. The bidder must mention the details of prior requirement for the installation and commissioning of the items quoted. A separate sheet with item wise requirements in a tabular form may be submitted.
- 19. Payment will be made only after the successful completion of set milestones and the adequate fund allocation from NPIU under TEQIP-III project.
- 20. Principal, Darbhanga College of Engineering, Darbhanga, reserves the rights to accept the lowest or any tender and also of rejecting all or any tender without assigning any reason for the same.

- 21. The entire dispute with regard to the contract of purchase of items/packages will be subject to Legal jurisdiction of Darbhanga only.
- 22. The Dealer must have Annual Turnover of Rs. 1 (One) Crore or more for last 3 consecutive years. Copy of Balance Sheets and PL statements must be submitted with the Bid.
- 23. The Bidder / Authorised Dealer / Manufacturer whosoever is submitting the tender must have at least 3 years' experience of successful execution of contracts of similar nature to Central / State Govt. Departments / Organizations / Technical Institutions / TEQIP-III Institutions. Relevant Proofs (Order Copies) must be attached with the Bid.
- 24. The Bidder must have valid PAN / GST No., Copy of which must be attached.
- 25. The Bidder must submit last 3 years ITR.
- 26. The Bidder has to submit an Affidavit that his firm has not been blacklisted by State Govt. / Central Govt.
- 27. The Bidder must give warranty of at least 12 months of the products/items supplied.
- 28. The quotation submitted must contain mandatory information such as GSTIN, HSN code, Bifurcation of CGST & SGST, Taxable value and Invoice value, etc.
- 29. Preference will be given to:
 - The Bidders possessing relevant certification by an authorized body such as ISO etc.
 - The bids that have quoted the items certified for standard, quality and safety such as BIS, ISI etc.
 - The Bidders having dealer/supplier base in Bihar to prove its capability to provide after sales services as and when required.

30. We look forward to receiving your quotation and thank you for your interest in this project.

Sing

(Dr. A K Rai) Principal – cum – IPD TEQIP-III, DCE, Darbhanga

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To:

SI. No.	Description of goods (with full	Qty.	Unit	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	
	Specifications)					In %	In figures (B)
			T	otal Cost			

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

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: _____

DARBHANGA COLLEGE OF ENGINEERING, DARBHANGA <u>PHYSICS DEPARTMENT</u>

1. Package Name: Physics P1

S. No.	Item name	Detailed specification of the instruments / equipment	Qty.
1	Gyroscope setup	 The setup should include 1. Gyroscope disc with double ball bearings, balanced and freely movable via three axes, which is wound up by hand with the aid of a thread 2. Mounted on a metal stand 3. Sliding counterweight for calibrating the gyro disc Equipment and technical data Disc diameter: 245 mm Disc diameter: 245 mm Disc thickness: 25 mm Disc weight: approx. 1317 g Counterweight: approx. 925 g 4. Hand held counter 5. Counter weight 6. Stand 7. Power adapter 8. Right angle Clamp 9. Weight holder for slotted weights 10. Slotted weight 10 g and 20 g 	2 set
2	Moment of Inertia set- up	 Moment of Inertia Table Setup should consists of 1. Micro controller based Measurement Unit. 2. Engraved and ruled inertia discs. 3. Inverted U- shaped metal body with chuck screw connection. 4. Measurement unit giving instant result of moment of inertia. 5. Three experimental bodies. 6. For time measurement of rotation, measurement unit with manual and automatic mode. 	2 set
3	Bar pendulum experimental set-up	 The setup should consists of 1. Steel bar 100 cm × 3.75 cm × 0.5 cm drilled with 19 holes at equal interval of 5 cm 2. Wall bracket 	3 set

		3. Meter scale	
		4. Stopwatch	
		5. Removable sharp edges	
		6. Instruction manual	
4	Fly Wheel	The setup should consists of	2 set
	Set-up	1. Flywheel (200 mm Diameter) with axle supported	
	-	on bearings	
		2. Hanger 100 g + 9 \times 100 g slotted weights	
		3. Stop watch	
		4. Vernier Calliper	
		5. Meter Scale	
		6. Thread	
		7. Instruction manual	

2. Package Name: Physics P2

S. No.	Item name	Detailed specification of the instruments / equipment	Qty.
2	LC Circuit and LCR Circuit kit Helmholtz coil set-up	Instrument should comprises three Resistances, three capacitors and one Inductance connected inside and connections brought out at sockets 2 AC moving coil meters to measure voltage and current. Digital Gaussmeter Range: 0-200 Resolution: 0.1G Accuracy: ± 0.5% Display: 3 ½ digit 7 segment LED with autopolarity. Constant Current Power Supply Current: 0-0.5A Smoothly adjustable Line Regulator: ±0.2% for 10% mains variation. Load Regulator: ± 0.2% for 0 to full load Display: 3 ½ digit 7 Segment LED Display Protection: Against overload/ short current. Two Coil Diameter: 200mm	2 set
3	Dielectric	Number of turn: 1000 The Setup should consists of	2 set
	Constant	1. Digital Voltmeter (0-99 Vac) @ 1KHz	2 500
	measurement Set-up	2. Audio Oscillator (1KHz) 2. Standard Conscience (2 nos) (in af and af range)	
	Sci-up	3. Standard Capacitors (2 nos) (in pf and nf range)4. Gold Plated parallel plate dielectric Cell-I (75 mm)	

		 5. Gold Plated parallel plate dielectric Cell-II (25 mm) 6. Dielectric Sample for dielectric Cell-I (Glass – 2 	
		nos, Bakellite-1 no, PCB -1 no) 7. Dielectric Sample for dielectric Cell-II (PZT-2 nos, Barium Titanate -1 no 25 mm diameter with silver plated on both faces)	
		8. Instruction manual Complete unit should be housed in metal cabinet of 416x230x165mm with effective electromagnetic shielding with proper connecting cables	
4	Hydrogen Atom	The setup should consists of 1. Spectrometer	2 set
	Spectrum	 i. Collimator with an adjustable slit at one end and convex lens at the other end. ii. Prism Table: The prism table should be in circular shape and is provided with three leveling screws. A central horizontal shelf should be provided for mounting either a prism or a grating. iii. Vernier table: The Vernier table should be in circular shape and can be rotated about a vertical axis. Two verniers are attached to the Vernier table and they can be moved along the circular scale. It can be fixed in any position by means of radial screw. It should have 4 verniers (Telescope and Prism Table) iv. Telescope: The telescope should be attached to a circular scale and can be rotated about a vertical axis through the center of the scale. Equipped with objective lens and eye piece v. The base should be 220 mm diameter or more 	
		 2. Diffraction grating: Size (38mm × 50mm), Lines/inch = 15000 3. Prism (38mm × 38mm × 38mm) 3. Hydrogen discharge tube 4. Cabinet 5. Magnifier with LED 6. Allen Key 	
5	Frank-Hertz set-up	Argon filled tetrode Filament Power Supply : 2.6-3.4V continuously	2 set
	P	variable Grids Power Supplies	
		VG1K : 1.3-5V continuously variable VG2A : 1.3 - 12V continuously variable VG2K : 0 - 95V continuously variable All the power supplies should be highly stabilised	

and output voltages can be read on 3 ¹ / ₂ digit, 7	
segment LED DPM with autopolarity and decimal	
indication through a selector switch	
Saw tooth waveform should be on CRO display	
Scanning Voltage : 0-80V	
Scanning Frequency : 115±20Hz	
Multirange Digital Ammeter	
Display : 3 ¹ / ₂ digit 7 segment LED	
Range Multiplier : 10-7, 10-8 & 10-9	
wer: 220V±10% mains, 50 Hz	
	segment LED DPM with autopolarity and decimal indication through a selector switch Saw tooth waveform should be on CRO display Scanning Voltage : 0-80V Scanning Frequency : 115±20Hz Multirange Digital Ammeter Display : 3 ½ digit 7 segment LED Range Multiplier : 10-7, 10-8 & 10-9

3. <u>Package Name: Physics P3</u>

S. No.	Item name	Detailed specification of the instruments / equipment	Qty.
1	He-Ne Laser source and diffraction grating set- up	He-Ne LASER Source• Output power: $0.5 \text{ mW} - 5 \text{ mW}$ • Wavelength: 632.8nm • polarized or randomly polarized output• TEM ₀₀ mode• beam divergence: <1.0 mrad	4 set
2	Refractive Index set-up	The set-up should consist of Spectrometer, Diffraction Grating, Mercury light source, Prism, Reading lens etc. Spectrometer standard: 7" dia circle reading 30 seconds. The used in telescope and collimator has to be achromatic and provided with rack and pinion focusing arrangement Telescope arm and prism table are to be provided with fine and coarse adjustment. The prism table is provided with three leveling screws and is engraved with concentric rings & lines. The scales and verniers are of stainless steel	2 set
3	Lycopodium Powder	Lycopodium Powder	2 packets

4. Package Name: Physics P4

1Forced oscillator and resonance setupIt should consists of Base unit with frequency generator (mass attached to spring which is connected to a cord passing over a pully and further connected to drive wheel), spring of known spring constant, scale attached to setup, weight 50g four each.2 setup	set
 2 Oscilloscope, Frequency generator Equipment and Technical Data Frequency range: 0.1 Hz to 1 Mhz Steps: 0.1 Hz Distortion factor: <0.5% Signal forms: Sine, triangle, square, frequency ramp, voltage ramp Amplifier output, short-circuit-proof, via BNC and 4-mm connectors: Output voltage : 0 - 20 Vpp for R out > 40 Ohm DC offset: ±10 V (steps 5 mV) Power output: 5 W (for up to 1 A) where R out = 20 Ohm Headphone output via 3.5 mm jack socket: Switch for selecting standard headphones or speakers Output voltage: 0 - 1 Vpp for R out = 400 Ohm Sync (trigger) output via BNC: Coutput voltage: 0 - 1 Vpp for R out = 400 Ohm Sync (trigger) output via BNC: Coutput voltage: 0 - 1 Vpf or R out = 400 Ohm Sync (trigger) output via BNC: Sweep function for frequency in the form of a proportional voltage 0 10 V (01 MHz) Sweep function for frequency ramp Monochrome graphic display with continuous setting for background illumination: 128 x 64 pixels 	set

 USB 2.0 port Settings via buttons and knob or software- assisted via USB Power supply 240 V at 50 Hz Impact-resistant plastic case with carrying handle Digital storage oscilloscope, 20 MHz, 2 channels Bandwidth: 20 MHz 2 Channels with sampling rate of 100 MS/s for each channel Vertical sensitivity: 5 mV - 5 V/div. Vertical resolution: 8 Bits (both channels simultaneously) Sampling range: 0.5 S/s100 MS/s Trigger: Auto, Normal, Single, trigger type: Edge/Video Record length: 10,000 points/channel High-resolution TFT color display with 800 x 480 pixels 17.5 cm (7") TFT color display USB port for real time data transmission or reading of internal data Saving of measured values and graphics directly onto the USB-stick Handy and flat case design with carrying handle Autoset function for easy operation Internal memory of 10 k points per channel or 16 waveforms 30 automatic measurement modes and FFT function Accessories: USB cable, software CD for Windows, power cable, 2 probes and manual Operation voltage: 240 V; 50Hz 	 -
 channels Bandwidth: 20 MHz 2 Channels with sampling rate of 100 MS/s for each channel Vertical sensitivity: 5 mV - 5 V/div. Vertical resolution: 8 Bits (both channels simultaneously) Sampling range: 0.5 S/s100 MS/s Trigger: Auto, Normal, Single, trigger type: Edge/Video Record length: 10,000 points/channel High-resolution TFT color display with 800 x 480 pixels 17.5 cm (7") TFT color display USB port for real time data transmission or reading of internal data Saving of measured values and graphics directly onto the USB-stick Handy and flat case design with carrying handle Autoset function for easy operation Internal memory of 10 k points per channel or 16 waveforms 30 automatic measurement modes and FFT function Accessories: USB cable, software CD for Windows, power cable, 2 probes and manual 	 Settings via buttons and knob or software- assisted via USB Power supply 240 V at 50 Hz Impact-resistant plastic case with carrying handle
 2 Channels with sampling rate of 100 MS/s for each channel Vertical sensitivity: 5 mV - 5 V/div. Vertical resolution: 8 Bits (both channels simultaneously) Sampling range: 0.5 S/s100 MS/s Trigger: Auto, Normal, Single, trigger type: Edge/Video Record length: 10,000 points/channel High-resolution TFT color display with 800 x 480 pixels 17.5 cm (7") TFT color display USB port for real time data transmission or reading of internal data Saving of measured values and graphics directly onto the USB-stick Handy and flat case design with carrying handle Autoset function for easy operation Internal memory of 10 k points per channel or 16 waveforms 30 automatic measurement modes and FFT function Accessories: USB cable, software CD for Windows, power cable, 2 probes and manual 	
	 2 Channels with sampling rate of 100 MS/s for each channel Vertical sensitivity: 5 mV - 5 V/div. Vertical resolution: 8 Bits (both channels simultaneously) Sampling range: 0.5 S/s100 MS/s Trigger: Auto, Normal, Single, trigger type: Edge/Video Record length: 10,000 points/channel High-resolution TFT color display with 800 x 480 pixels 17.5 cm (7") TFT color display USB port for real time data transmission or reading of internal data Saving of measured values and graphics directly onto the USB-stick Handy and flat case design with carrying handle Autoset function for easy operation Internal memory of 10 k points per channel or 16 waveforms 30 automatic measurement modes and FFT function Accessories: USB cable, software CD for Windows, power cable, 2 probes and manual