TENDER FOR SUPPLY OF EQUIPMENTS, INSTRUMENTS & ITEMS FOR PHYSICS LABORATORY



BIJU PATNAIK UNIVERSITY OF TECHNOLOGY, ODISHA, CHHEND, ROURKELA-769015

Sh

TENDER FOR SUPPLY OF EQUIPMENTS, INSTRUMENTS & ITEMS FOR PHYSICS LABORATORY

Tender Notice No. BPUT/CAPGS/76/2022/5868

Dated: 29.09.2022

BIDDING DATA SHEET

A. GENERAL INFORMATIONS:

SI. No.	Item	Details
01	Bid Identification No.	BPUT/CAPGS/76/2022/5868 Dated: 29.09.2022
02	Name of the Work	PROCUREMENT OF LAB APPARATUS FOR PHYSICS DEPARTMENT
03	Officer inviting tender	REGISTRAR, BPUT ODISHA, ROURKELA
04	Accepting Authority	VICE CHANCELLOR, BPUT ODISHA, ROURKELA

B. BID INFORMATIONS:

SI. No.	Item	Details
01	Pre-Bid Discussion	11.10.2022 at 4.00pm
02	Last date of Bid submission	29.10.2022 by 5.00pm
02	Date of Opening of Technical bid	01.11.2022 at 11.30am
03	Date of Opening of Financial bid	02.11.2022 at 4.00pm
04	Bid Processing Fee	Rs. 1000 (DD in favour of "Biju Patnaik University of Technology" payable at Rourkela)
05	Earnest Money Deposit (EMD)	Rs. 10,000/- (DD in favour of "Biju Patnaik University of Technology" payable at Rourkela)
06	Intended completion period/Time period assigned for Completion of supply.	By 30.11.2022

Quotations are invited for supply of the items (as specified at Annexure-I) sealed in <u>Two Bid system (one is Technical Bid and second is Financial Bid)</u> separately super scribing the cover with "<u>Tender for Supply of Equipments</u>. <u>Instruments & Items for Physics Laboratory</u>" for CAPGS, BPUT, Rourkela. The outer cover should bear only the addresses. Offer with complete details on the following should reach <u>The Registrar</u>, <u>Biju Patnaik University of Technology</u>, <u>Chhend</u>, <u>Rourkela-769015</u> on or before <u>29.10.2022</u> by <u>5.00pm through Speed Post or Registered Post only</u>. Technical Queries if any please contact: <u>The Director I/c</u>, <u>CAPGS</u>, <u>BPUT</u> (capgs.rkjena@bput.ac.in).

You are requested to kindly go through the detailed instructions and terms & conditions mentioned below and overleaf and submit your most competitive offer by the last date and time of submission cited above.

INSTRUCTIONS

- 1. Bidders must submit their bids in three separate sealed covers i.e., the first sealed cover is "Bid Processing Fee & EMD", the second sealed cover is "Technical Bid" and the third sealed cover in "Financial Bid". These three bids should be put in a separate cover. This outer cover must be sealed and mentioned Tender for Supply of Equipments, Instruments & items for Physics Laboratory on the top of the envelope.
- 2. Please submit copy of your Income Tax return copies of last three years and copy of PAN &

SN & SAZ

h

- GST along with offer.
- 3. The offer must be submitted in <u>Two Bids</u> in a single cover. Tender should be sent through Speed Post / Registered Post only addressing to <u>The Registrar</u>, <u>Biju Patnaik University of Technology</u>, <u>Chhend</u>, <u>Rourkela-769015</u>. Other mode of delivery shall not be accepted.
- 4. Tenders/Quotations must be sent sufficiently in advance so that it reaches us on or before the due date and time. Quotation received after the due date & time will not be considered.
- 5. Quotation document (s) and all enclosures must contain the signature on each page of the competent authority of the firm.
- 6. The Bank/RTGS detail must be submitted along with the quotations /Tenders on the letter head. A Scan copy of the cancelled Cheque can also be attached for verification of IFSC code (if required).
- 7. The firm quoting for mentioned items should be the authorized dealer of the manufacturer / manufacturer. Copy of authorization certificate should be enclosed with the quotation. Offers submitted without proper authorization shall be rejected summarily.

ELIGIBILITY CRITERIA FOR BIDDERS

- 1. The bidder must be a Proprietary/Partnership firm/Limited Company/Agency/Society legally constituted or registered under the relevant Act.
- 2. Must be in the same business for supplying of above items for at least Five or more years as on 29.10.2022.
- 3. Must be registered and submit the documents such as PAN, TAN, Goods & Service Tax Registration etc. with proper validity.
- 4. Must have an average annual turnover of **Rs.50lakhs** or more from supply of items during the last three financial Years [2018-19, 2019-20, 2020-21 and 2021-22] in the books of account.
- 5. The Bidder must have provided minimum 05 nos. or more of the items in at least one Government Organisation during a given last three financial year.
- 6. The bidder must submit Customer Satisfactory Performance Report (CSPR) from these organisations for the Financial Year in which they have supplied similar type of items.
- 7. Where the Bid is signed by any official other than MD/CMD or Proprietor / Owner of the Agency, then the person signing the Bid must have to submit duly signed power of attorney from the MD/CMD or the proprietor/owner of the Agency to the effect that the person signing the bid is legally authorised and competent to sign the bid and negotiate on behalf of the Agency concerned. All the pages of the bid must be serially numbered and duly signed and sealed by the Authorized signatory giving detail of the page numbers in the index of the bid.
- 8. Self-Attested copy of Memorandum of Understanding (MoU) shall be provided in case the Bidder comprises of Joint venture/Consortium/Partnership or relevant document about sole proprietorship.
- 9. The bidder shall submit full details of his ownership and control or, if the Bidder is a partnership, joint venture or consortium, full details of ownership and control of each member thereof.
- 10. The bidder shall submit an Undertaking that the said items(s) of respective item should be delivered on or before One month of the work order.
- 11. All supporting documents in respect of the Bid must be submitted duly self-attested by the person signing the Bid.
- 12. Non-submission of these documents will make the bid as un-responsive and such bids shall not be considered as valid.

Dar.

Sp. B

L

- 13. Canvassing or offer of an advantage or any other inducement by any person with a view to influencing acceptance of a bid will be an offence under Laws of India. Such action will result in the rejection of bid, in addition to other punitive measures.
- 14. Bank Mandate as per the format at Annexure-IV is required to be submitted.
- 15. The Bidder/ Firm should not have been blacklisted by any Government Organization nor should have any criminal background. An undertaking in this regard shall be submitted by the bidders.

TERMS & CONDITIONS

The offer must comprise of the following failing which it will be treated as non-responsible hence rejected:

- 1. The basic price must not be higher than price of the principal, if any additional accessories required, as per technical specifications, it must be quoted separately. Price list in case of proprietary items must be submitted.
- 2. Bid Processing fee (Non-refundable) Rs.1000/- (One Thousand Only) in favour of BPUT, Rourkela, to be submitted in the form of Demand Draft (DD) only. EMD (Refundable) of Rs. 10,000/- in favour of BPUT, Rourkela, to be submitted in the form of Demand Draft (DD) from any Nationalized/ Scheduled Commercial Bank payable at Rourkela and it should be valid for a period of 45 days beyond the bid validity period. Bids received without, Bid Processing fee, EMD, Bank mandate, and other essential documents will be rejected. The EMD amount will be refunded after submission of Performance Bank Guarantee.
- 3. NSIC/SSI/MSME Units are exempted for submitting EMD as per Govt. Of India order.
- 4. Conditional tenders will not be accepted.
- 5. Late and delayed quotation: Late and delayed tender will not be considered. If, in any case, unscheduled holiday occurs on prescribed closing/opening date, the next working day shall be the prescribed date of closing/opening. It will be the sole responsibility of the firm that quotation should reach on or before the due date and time.
- 6. **Pre-installation Requirement:** The bidder should mentioned pre-installation requirements for the equipment like ambient temperature, humidity, weather specification, power specifications, etc., when items are provided full performance satisfactions, should be demonstrated.
- 7. **TAXES:** The percentage of taxes must be either inclusive/extra in exact figure and should be mentioned clearly by the supplier.
- 8. Authorization Dealer Certificate of Principal or manufacturer certificate shall be submitted.
- 9. The exact days of delivery period, installation & commissioning schedule.
- 10. The exact figure of percentage of discount offered.
- 11. The quoted price (final offer) must be F.O.R (Freight on Road), i.e. BPUT, Rourkela including Packing & Forwarding, Freight, and Insurance etc. with detail break-up.
- 12. Packing, Forwarding, Transporting, Postage/Courier, Octroi, Freight, Insurance, Any Certificate(s), Extra Warranty, Installation, Commissioning any, any levy, any other charge(s) must be included in the price bid.
- 13. Finance Bid: The L1 bidder of respective item(s) shall be selected as per the recommendation of the Tender Committee.
- 14. DELIVERY: The Items should be supplied on the basis of free delivery at BPUT, Rourkela on working days.
- 15. **SPECIFICATION AND MAKE:** Quotation should be given for the exact specification and make as shown in the **Technical Specification (Annexure-I)** against the items along with

on asp &

h

the order copy of similar equipment supplied to any Govt. Organization including detail of price & all charges must be attached.

The supplier should also provide a list of Govt. Institutions (if any) to which similar product has been supplied with product details in the Technical bid.

- **16.** The date of delivery should be strictly adhered to failing which the purchase order is liable to be cancelled. Penalty may be imposed as per P.O. terms & conditions. Goods should be securely, safely and adequately packed & dispatched at the risk of supplier and packing costs quoting this order reference should be kept in all package.
- 17. **VALIDITY PERIOD:** The validity period of the offer should be clearly specified. It should be at least for **180 days** from the last date of submission of quotations.
- 18. **PAYMENT:** Full payment within 30 days from the date of received, tested/inspected/commissioned and found satisfactory with regard to quality, quantity and specifications and acceptance by the Indenter subject to submission of 10% PBG.
- 19. PERFORMANCE BANK GUARANTEE (PBG): The firm has to submit Performance Security of 10% of the total order value to be submitted on or before installation of equipment. Performance Security must valid for 38 (Thirty Eight) months i.e. 2 months beyond the warranty period to cover the warranty. Performance security is to be issued and sent directly from an Indian Nationalized bank.
- 20. **WARRANTY:** The items should be onsite comprehensive Warranty/Guarantee against any manufacturing defect for a period of **03 years** from the date of successful installation and authorization. In case any part or whole of the equipment is found to be defective during the guarantee period, then the same will have to be replaced/repaired free of cost at our premises by the supplier.
- 21. **LIQUIDATED DAMAGES:** As time is the essence of this order, the date of delivery should be strictly adhered to, otherwise the delivery in full or in part may not be accepted and penalty for late delivery will be imposed @ 0.5% per week subject to a maximum of 10% of the total value of supply order & beyond 10% subject to approval of Vice Chancellor, BPUT. In case of delay in installation/ supply the same rate of penalty shall be leviable. In case of cancellation of order no compensation will be paid towards progress of order/procurement.
- 22. All communications are to be addressed to the Registrar, BPUT, Chhend, Rourkela only. Any kind of canvassing visit to the Institute Premises for enquiry of the status of the tender without prior permission may lead to rejection of the bid.
- 23. BPUT reserves the right to accept or reject or cancel any or all enquiries or quotations at any stage without assigning any reason thereof.
- 24. For any dispute, the place of jurisdiction shall be Odisha, India only.

Registrar

0

cfr

1

TECHNICAL SPECIFICATIONS

01	Determination of Young's Modulus by Searle' Method	Steel Strip L=1m, B= 2.5cm, T=5mm. Knife edges acting as G-Clamp (MS) Stirrup with hook Hanger 500g+9x500g slotted weight of MS Vernier Calliper Screw Gauge Bulb holder on Plastic base with bulb Cell holder with cell 1.5 V Red lead of 50cm Black lead of 50cm Connecting leads Banana with U Clips
02	Determination of Rigidity Modulus by static method	Barton apparatus Hanger 0.5kg+6x500gm slotted iron weightsScrew gauge Meter scale
03	Determination of surfacetension by capillary rise Method	a) Capillary stand and breaker holder Capillary tube: Changeable(3 different Diameter) / Glass capillary tube of length 38cm on stand Graduated cylinder 100ml b) Digital Travelling Microscope, LCD Display with least count: 0.01mm
04 (a)	Determination of acceleration due to gravityby Bar pendulum	Brass Bar: 100 x 3.75 x 0.5 cm³ (Drilled with 19 holes at equal distance of 5cm) Wall brackets: Meter Scale: 100cmStop Watch Count: 1/100 Second Time display: Hour, Minute, Seconds
04 (b)	Determination of acceleration due to gravityby Kater's pendulum	Steel Rod: 100 cm in length, 1.2 cm diameterSS adjustable masses: 600g & 300g (each) Meter scale: length 1m Stopwatch: Count: 1/100 Second, Time display: Hour, Minute, Seconds Removable sharp knife edges-2nos Adjustable wooden light masses-2nos Wall bracket-1no
05	Determination of unknown Resistance using meter bridge	Carey-Foster-bridge Teak wood with jockey, Resistance module 10 ohm, Resistance Modules 0.5, 1,1.5 & 2.5(each), Sensitive Galvanometer 20µA/Div., Thick brass strip, Power supply 12V/100mA Connecting leads (red & black) 50cm Connecting leads black 25cm Unknown low

ON & SER.

1

		Resistance (0.22 & 2.0)
06	Determination of wave lengthof light by Newton's ringapparatus	Digital MICROSCOPE: LCD Display Eyepiece: Ramsden 10x Objective: 3x, Scale length: 110mm. Lease count: 0.01 mm NEWTON's RINGS REFLECTOR Housing: PVC finish
	· SECTATIONS I	Matt black painted glass Plate SPHEROMETER (DISC BRASS) :- Types : 3 legs Vertical scale : 6mm x 6mm (WXT) Micrometer : Dia 40mm,
		Brass, Lower disc: Dia. 60mm, Range: 10-0-10mm, Least Count: 0.01mm, Sodium Light Source, Sodium Light Lamp 35W. Transformer with Metal Box
07	Determination of gratingelement	OPTICAL BENCH : Black Ionised, Aluminium
	of a diffraction grating.	alloy, Type: Hexagonal section, Least count;
		1mm, Transverse Saddle with Locking Facility DIODE LEASER: Peak wavelength: 63 nm,PIN HOLE PHOTO DETECTOR- detector Silicon Photocell, CROSS WIRE- 1 No. 300lines / mm, Single silt: Tapered, Double slit, Tapered, Metal gauze: 300 mesh, All individually mounted in slide frames and
00	51 6 1	protected by two Glass plates.
80	Plotting of characteristiccurve of a	P-N Junction Setup, Selector Switch L V-I and V- T experiment, Bias & Junction Selector Switch
	PN junction diode (with Temp Oven upto 200C)	at V-I Position/ Junction :- Voltmeter Display:3 ½ digit 7 segment LED, auto polarity, Voltage Range: 0.000-1 999V
	The extension of the second of	Current Display: 3 ½ digit, 7 segment LED, Current Range: 0-2mA Selector Switch at V-T position / Junction:-
		voltage Display: 3 ½ digit, 7 segment LED, Voltage Range: 0.000- 1.999V Temperature
	Common to enter the state of the control of the con	Display: 3 ½ digit,.7 segment Led, Temperature Range 273K to 353 K, CRO in Bias Position, Frequency: 5KHZ & 20 KHz, Voltage: 220mV
	(100 ki 2 Marchard 1984 2 Marchard 1984	(pp) Output connector: 3 Pin DIN type, Voltage Range: 0.001-10.00V, Oven: Heater pin 4 & 5, Temperature pin 1 & 2 Oven
09	Plotting of characteristic curves of BIJ	Wo dual dc regulated power supplies 0-5/15 volts and four analogue meters are provided on front panel to measure the DC voltage and current, AC supply of 0.17-34 V. Load resistance
	Debrica de la composition della composition dell	100 ohms to 1000 ohms, Fixed resistance R1-1K Ω , Ω 2-2, 2K Ω , R3=10K Ω are provided for different uses.
10.	Verification of laws of vibration of	Potentiometer of 22 K ohms are is provided Wooden Sonometer 110 x 10 x 8.5cm ² Hanger
10.	string using sonometer	500g + 6 x 500g slotted weights, Rubber Pad Screw Gauge Tunning forks (512,480, 440Hz)
		with hammer Weighing balance (not supplied) Step down transformer: 8V/3A Electromagnet.







11	Determination of wavelength of	OPTICAL BENCH : Black Ionised, Aluminium
	laser source by diffraction rating method.	alloy, Type: Hexagonal section, Lease court 1mm, Transverse Saddle with Locking Facility DIODE LASER- Peak wavelength 635nm, PIN HOLE PHOTO DETECTOR- Detector: Silicon photo cell, Cross Wire- 1 No. DIFFRACTION SLIDE: Diffraction grating 300 lines / mm, single slit: Tapered. Double slit, Tapered, Metal gauze: 300 mesh, all individual mountedin slide frames and protected by two glass plates.
12	Study of Hall Effect (Compact Design)	Compact Design Hall Effect apparatus with P Type PCB Crystal: Coils: 400 turns, Coil current: 4.5 Amp (Max.) connection: 4mm safety Socket U Core: 150 x 130 mm (L x H), 40 x 40mm cross section, I Core: Length = 150mm 40 x 40 mm cross section, core material: Ferromagnetic, Base dimension: 360 x 180 x 33mm Flexible Plug leads 50 cm Black Flexible Plug leads 100cm, Black flexible Plug Leads, 50cm, Red, Flexible Plug leads 100 cm, Red, Flexible Plug leads 50cm Yellow Power Supply- Dual Digital 0.20v, 5Amp Dual DC continuously variable & Stabilized, Voltage display: 3 ½ digit LED Ripple: Less than 25mV, Overload: Current limiting protection, Current: 5A continuously variable, 10% to full rating, current display 3 ½ digit LED Constant current source- Dual Display 0.20mA DC,Resolution,: 10 micro ampere, Power: 220V ± 10% 50 Hz,A 3 ½ digit LED Digital Gauss meter- Range 200 Gauss & 2k Gauss, Resolution 0.1 Gauss at 0.200 Gauss, 3 ½ digit LED
13	Study of RC circuit	Built in DC Regulated Power Supply o-12V (Variable) voltmeter : 0-12V(Moving Coil), Resistances : 1-0-1 (Moving Coil), Galvanometer : 1-0-1 (Moving Coil) Resistance : $10K\Omega$, $15K\Omega$ & $18K\Omega$, Capacitors L: $1000~\mu f$, $2200\mu f$ & $4700~\mu f$ Toggle switch : 2 way, Dump Switch : 1 No. component are mounted on board.
14	Determination of Young'smodulus by bending of beams	Steel strip L – 1m, B – 2.5cm, T= 5mm, Knife edges acting as G-Clamp (MS) Stirrup with book Hanger 500g + 9 x 500g slotted weight of MS Vernier Calliper Screw Gauge Bulb holder on plastic base with bulb Cell holder with Cell 1.5V Read lead of 50 cm Black lead of 50cm connecting leads Banana with U clips.
15	Michelson Interferometer	MICHELSON INTERFEROMETER Base dimension: 290 x 212 x 168mm (LxWxH) Distance Beam Splitter: 50 x 38 x 7mm (LxWxT) compensating Mirrors M1 and M2: 30 mm dia, thickness 10mm.

ON 2 5 h

		Dual Source - SODIUM LIGHT SOURCE and Leaser Source- MICROSCOPE OBJECTIVE IN HOLDER
16	Determine of reduction factor of the given tangent galvanometer and horizontal component of earth's magnetic field by using tangent galvanometer	Tangent galvanometer



De g

& L

Tender Notice No. BPUT/CAPGS/76/2022/5868

Dated:29.09.2022

TENDER DOCUMENT FOR SUPPLY OF APPARATUS FOR PHYSICS LABORATORY

TECHNICAL BID

(A) General Information:

SI.No	Item	Description
1	Name of the Proprietary/Partnership firm/Limited Company/Agency/Society	
2	Address of the Firm / Company (i) Head Office (ii) Branch in Odisha (if any) (iii) Factory Location.	
3	Year of establishment.	gradients for
4	E-mail address.	
5	Telephone Number(s)	
6	Fax No:	
7	EMD DD no. Date & Bank (Total Amount as per the respective items)	
8	Bid Processing Fee DD no. Date & Bank	although the second
9	Is your firm registered under a) The Indian Companies Act, b) The Indian Partnership Act (Enclose documentary proof)	
10	If your firm is a sole proprietorship firm (give details with documentary proof).	4-03-10-07
11	If your firm comes under any other categories (give details with documentary proof).	Part States and Tolland
12	Whether insured against fire, theft, and burglary. If so, please state the amount for which insured, the name of the insurance firm and policy no.	
13	GST Regn.No.(give details with documentary proof).	
14	Permanent Account No (PAN). (Copy to be enclosed)	

(B) Experience of the Firm:

Please enclose Work Orders of supply similar items

SI. No.	Name of Government Organisation	Item	Quantity
1			
2			

C) Annual Turnover of last three years. (Enclose documentary proof):	
Year	Annual Turnover (in Rupees)	

Authorized Signature of the Bidder with Seal & Date

0 L

Ser h

Page | 10

FINANCIAL BID

Tender Notice No.: BPUT/CAPGS/76/2022/5868

Date:29.09.2022

SI. No.	Description of Items & Specifications	Quan tity	Unit Price in INR	Discount %	GST %	Cust om Duty % (if any)	Insta Ilatio n & Com missi onin g Char ges	Char ges for Train ing	Total Prince in INR
01	Steel Strip L=1m, B= 2.5cm, T=5mm. Knife edges acting as G-Clamp (MS) Stirrup with hook Hanger 500g+9x500g slotted weight ofMS Vernier Calliper Screw Gauge Bulb holder on Plastic base with bulb Cell holder with cell 1.5 V Red lead of 50cm Black lead of 50cm Connecting leads Banana with U Clips	1							
02	Barton apparatus Hanger 0.5kg+6x500gm slotted iron weightsScrew gauge Meter scale	1							
03	a) Capillary stand and breaker holder Capillary tube: Changeable (3 different Diameter) / Glass capillary tube of length 38cm on stand Graduated cylinder 100ml b) Digital Travelling Microscope, LCD Display withleast count: 0.01mm	1							
04(a)	Brass Bar: 100 x 3.75 x 0.5 cm ³ Drilled with 19 holes at qual distance of 5cm) Wall brackets: Count: 1/100 Second Time display: Hour, Minute, Seconds	Sant Ind		S250 - 332		1 50 Sec. 1		a ight	68 (0)
04(b)	Steel Rod: 100 cm in length, 1.2 cm diameterSS adjustable masses: 600g & 300g (each) Meter scale: length 1m	1							

N

Da

West for

SAV

_					,				¥	
		Stopwatch : Count : 1/100								
		Second , Timedisplay : Hour,								
	13	Minute, Seconds Removable							Panest Project	
		sharp knife edges-2nos							28,27	
		Adjustable wooden light						100		
		masses-2nos Wall bracket-1no								
T	05	Carey-Foster-bridge Teak	1							
		wood with jockey,								
		Resistance module 10								
-		ohm, Resistance Modules				T THE	18 X 19	Marc 1		
1		0.5, 1,1.5 & 2.5(each),				AL HUE		Dirin		
-		Sensitive Galvanometer				1182				
		20μA/Div., Thick brass				1.49	THE R			
1		strip, Power supply						Sale N	Amus V	
							-23	and the	into a	
		12V/100mA						45.5	100000	
	4 19	Connecting leads (red & black)						Salant		
		50cm Connecting leads black								
		25cm Unknown lowResistance							Principal E	
-	00	(0.22 & 2.0)								
	06	Digital MICROSCOPE : LCD	1				ope as	Side va		
		Display Eyepiece:Ramsden						Sandy F		
1		10x Objective :3x, Scale						4		
		length								
		:110mm. Lease count : 0.01					3 3 7 7			
		mm NEWTON's RINGS								
		REFLECTOR Housing: PVC								
		finishMatt black painted glass								
		Plate SPHEROMETER (DISC				111111111111111111111111111111111111111			THE REAL PROPERTY.	
1		BRASS) :- Types : 3 legs								
1		Vertical scale : 6mm x 6mm				72- 73-				
1		(WXT) Micrometer : Dia		1					en one	
		40mm, Brass, Lower disc : Dia.				111.00	1 44 104		Tarea	
		60mm, Range: 10-0-10mm,				1988			A 16	
1		Least Count : 0.01mm,								
		Sodium Light Source,							Establish I	
		Sodium Light				5 TO 15			65.75	
		Lamp 35W. Transformer with				600	275663251	939	Alexan.	
		Metal Box		1 11 11			5 5 7 10			
+	07	OPTICAL BENCH : Black	1							
		Ionised, Aluminium alloy,				3.633	7226			E BEL
		Type : Hexagonal section,						Letters.	2 2 2 2	
		Least count ; 1mm,								
		Transverse Saddle with				THE REAL PROPERTY.				
		Locking Facility DIODE				100000				
		LEASER: Peak wavelength :				-			100	
		63 nm,PIN HOLE PHOTO				-				
		DETECTOR- detector							Beet 1	
		Silicon Photocell, CROSS						Times	10000	
		WIRE- 1 No. 300lines / mm,								
		Single silt : Tapered, Double				550		4.15		
		slit, Tapered, Metal gauze :				1		ST. SHIP		
		300 mesh, All individually								
		mounted in slide frames							3	
		and	1.88			To the same				
		protected by two Glass plates.								

2

W M

ch h

00	T		T						
08	P-N Junction Setup, Selector	1							
1	Switch L V-I and V-T				100	e esting	Beweis.	(m= 100)	
13	experiment , Bias & Junction				- Tare		1000000	and the	
6.9	Selector Switch at V-I					100000	-	i mono	
	Position/ Junction :-					1000		-	
	Voltmeter Display: 3 ½ digit 7				S. 15				
	segment LED, auto polarity,								
	Voltage Range : 0.000-1								
	999V								
	Current Display: 3 ½ digit, 7								
	segment LED, Current Range								
	: 0-2mA								
	Selector Switch at V-T position								
	/ Junction :-voltage Display : 3								
	½ digit, 7 segment LED,								
	Voltage Range : 0.000-								
	1.999V TemperatureDisplay:								
	3 ½ digit, 7 segment Led,								
	TemperatureRange 273K to								
	353 K, CRO in Bias Position,								
	Frequency :5KHZ & 20 KHz,								
	Voltage: 220mV (pp) Output								
	connector: 3 Pin DIN type,								
	Voltage Range: 0.001-10.00V,								
	Oven: Heater pin 4 & 5,					SHOWN .			
	Temperature pin 1 & 2 Oven								
09	Wo dual dc regulated power	1							
	supplies 0-5/15 volts and								
	four analogue meters are		19						
	provided on front panel to								
	measure the DC voltage and								
	current, AC supply of 0.17-								
	34 V. Load resistance 100								
	ohms to 1000 ohms, Fixed								
	resistance R1- 1 K Ω , Ω 2-2,								
	2K Ω , R3=10K Ω are								
	provided for different uses.								
	Potentiometer of 22 K ohms								
	are is provided		1						
10	Wooden Sonometer 110 x	1			4,24444				
	10 x 8.5cm ² Hanger 500g + 6		1 3 1						
	x 500g slotted weights,				THE COST				
	Rubber Pad, Screw Gauge								
	Tunning forks (512,480,			THE PARTY					BALLER K
No.	440Hz) with hammer							3314	
	Weighing balance (not							1. 4.5	
	supplied)							- 1	
	Step down transformer :				2000				
	8V/3A Electromagnet								
11	OPTICAL BENCH : Black	1						Market 1	
	Ionised, Aluminium alloy,								
	Type: Hexagonal section,								
	Lease court 1mm,								
	Transverse Saddle with								
-	Locking Facility DIODE								
					Activities of Contraction		The state of the s	AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	

IN ON

1

Soft

	LASER- Peak wavelength 635nm, PIN HOLE PHOTO DETECTOR- Detector: Silicon photo cell, Cross Wire- 1 No. DIFFRACTION SLIDE: Diffraction grating 300 lines / mm, single slit: Tapered. Double slit, Tapered, Metal gauze: 300 mesh, all individual mounted in slide frames and protected by two glass					
12	Compact Design Hall Effect apparatus with P Type PCB Crystal: Coils: 400 turns, Coil current: 4.5 Amp (Max.) connection: 4mm safety Socket U Core: 150 x 130 mm (L x H), 40 x 40mm cross section, I Core: Length = 150mm 40 x 40 mm cross section, core material: Ferromagnetic, Base dimension: 360x 180 x 33mm Flexible Plug leads 50 cm Black Flexible Plug leads 100cm, Black flexible Plug leads 100cm, Black flexible Plug Leads, 50cm, Red, Flexible Plug leads 50cm Yellow Power Supply- Dual Digital 0.20v, 5Amp Dual DC continuously variable & Stabilized, Voltagedisplay: 3 ½ digit LED Ripple: Less than 25mV, Overload: Current limiting protection, Current: 5A continuously variable, 10% to full rating, current display 3 ½ digit LED Constant current source-Dual Display 0.20mA DC, Resolution,: 10 micro ampere, Power: 220V ± 10% 50 Hz, A 3 ½ digit LED Digital Gauss meter- Range 200 Gauss & 2k Gauss, Resolution 0.1 Gauss at 0.200 Gauss, 3 ½ digit					
13	Built in DC Regulated Power Supply o-12V (Variable)	1				







					1			T	
	Coil), Resistances : 1-0-1						1 Person		
- 1/4	(Moving Coil), Galvanometer						12.5	100	
- 3	: 1-0-1 (Moving Coil)				75-9115			100	
	Resistance				-		11111	Lanes .	
	: 10ΚΩ, 15ΚΩ& 18ΚΩ,							a nig	
	Capacitors L: 1000 μf,					to Lair	AL SELECT	and the same	
	2200µf & 4700 µf Toggle						Simport		
	switch : 2 way, Dump					racrains			
	Switch: 1 No. component								
- 255	are mounted on board.				100		Ser Ma		
14	Steel strip L – 1m, B – 2.5cm,	1							
	T= 5mm, Knife edges acting								
	as G-Clamp (MS) Stirrup with							Section 1	
	book Hanger 500g + 9 x 500g				13.13	HALL BE			1
	slotted weight of MS Vernier								
	Calliper Screw Gauge Bulb								
	holder on plastic base with								
	bulb Cell holder with Cell								
	1.5V Read lead of 50 cm								
	Black lead of 50cm								
	connecting leads Banana								
	with U clips.								
15	MICHELSON	1							
1000	INTERFEROMETER								
	Base dimension: 290 x 212 x								
	168mm (LxWxH)Distance								
	Beam Splitter: 50 x 38 x								
	7mm (LxWxT) compensating								
	Mirrors M1 and M2: 30 mm		141				ALC: U.S.		
	dia, thickness 10mm.								
	Dual Source- SODIUM							BIREN	
	LIGHT SOURCE and Leaser						gleite.		
	Source- MICROSCOPE		A STATE			HANDE!	Market St.		
	OBJECTIVE INHOLDER			7.					
16	Tangent galvanometer	1		i i i					
10	rangent galvanometer								

1	Make & Model	
2	Delivery Mode	FREE DELIVERY AT BPUT, ROURKELA
3	Total Bid price per un unloading, etc. The se	nit should be inclusive of all taxes and levies, transportation, loading, election of bidder shall be considered item wise L1 value.
4	Delivery Period	Days
5	Validity Date	Maximum days from the date of opening of Technical Bid
6	Payment Term	Payment term within 30 days from the date submission of bill Acceptance Certificate to concerned Dept. subject to submission of 10 % PBG.

PAN No.: GST Registration No.: Signature: Authorized Signature: Name: Bank Address: Affix Rubber Stamp:





Place	:	
	1	

Date:

ANNEXURE - IV

Mandate Form for Electronic Fund Transfer/RTGS Transfer

To

The Registrar, Biju Patnaik University of Technology Chhend, Rourkela-769015, Odisha

Sub: Authorization for release of payment / dues from BPUT, Rourkela through Electronic Fund Transfer/RTGS Transfer.

- 1. Name of the Party/Firm/Company/Institute:
- 2. Address of the Party:

City:	
E-Mail	ID:

_Pin Code:

Mob No:

Permanent Account Number:

o. I di tiodidio di Daili.	3.	Particulars of Bank:
----------------------------	----	----------------------

IFS Code:(11 digit alph Account Type Account Number:	na numeric code) Savings		Current		C	ash (Credit		
			Current		TC	ash (Credit		
IFS Code:(11 digit alph	na numeric code)								
	ring on the MICR Bank on the for ensuring accuracy								cop
MICR No.:									
PIN Code:		Bra	Branch Code:			9 10 3		e e	
Branch Place:		Bra	Branch City:					The States Addition	

DECLARATION

I hereby declare that the particulars given above are correct and complete. If any transaction delayed and not effected for reasons of incomplete or incorrect information I shall not hold Registrar, BPUT, Rourekla responsible. I also undertake to advise any change in the particulars of my account to facilitate updating of records for purpose of credit of amount through NEFT/RTGS Transfer.

Place:

Date:

Signature & Seal of the Authorized Signatory of the Party

Certified that particulars furnished above are correct as per our records. Bankers Stamp:

Dr &

h

Page | 16

ANNEXURE - V

FORMAT FOR PERFORMANCE BANK GUARANTEE

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT ODISHA OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT ROURKELA OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT ROURKELA. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.)

To The Registrar, Biju Patnaik University of Technology Chhend, Rourkela-769015, Odisha

LETTER OF GUARANTEE

WHEREAS Biju Patnaik University of Technology, Rourkela (Buyer) have invited Tenders vide Tender No
AND WHEREAS the said tender document requires that any eligible successful tenderer (seller) wishing to supply the equipment etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favour of "Registrar, Biju Patnaik University of Technology, Rourkela" in the form of Bank Guarantee for Rs
days from the date of acceptance as a successful bidder. NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document/purchase order/performance of the equipment/machinery, etc. this bank shall pay to BPUT, Rourkela on demand and without protest or demur Rs
This bank further agrees that the decision of BPUT, Rourkela (Buyer) as to whether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.
We,
Notwithstanding anything contained herein:
1. Our liability under this Bank Guarantee shall not exceed Rs. (India Rupees
This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at
Yours truly,
Signature and seal of the guarantor: Name of Bank: Address:

Page | 17

Instruction to Bank: Bank should note that on expiry of Guarantee Period, the Original Guarantee will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.

SN &

Au.

CHECK LIST OF MANDATORY DOCUMENTS TO BE ENCLOSED

SI	Details of Documents	Page No.
1.	Bid Processing fee of Rs. 1000/- in form of DD in favour of BPUT payable at Rourkela	
2.	EMD DD(Rs.10,000) in form of DD in favour of BPUT payable at Rourkela	
3.	Bid submitted along with no. of items and list duly signed	
4.	Bid should be serially numbered, signed, seal and indexed	
5.	Copy of PAN Card	
6.	Copy of GST Registration Certificate	
7.	Income Tax Return copies for last 3 years	
8.	Cancelled Cheque for A/C no and IFSC code	
9.	Certified copy of authorized Dealer/ Manufacturer	
10.	Copy of Company/ Partnership/ Proprietorship/ Society registration certificate	
11.	Copy of experience certificate for last five years or more	
12.	Copy of Turnover of more than Rs. 50lakhs during last 3 years (duly certified by the Chattered Accountant from 2018-19 to 2021-22)	
13.	Copy of challan or other documents showing supply of 05 nos or more items to any one Government organization during last 3 financial years	
14.	Customer Satisfactory Performance Report (CSPR) to be signed by supplied organization on or after 29.10.2022	
15.	Power of Attorney from MD/CMD/ Proprietor/ Owner in case of submission of bid other than MD/CMD/ Proprietor/Owner	
16.	Full details of ownership and other members/ partners	
17.	Undertaking for supply of items within stipulated period	
18.	Bank Mandate as per format at Annexure –IV of Tender Document	

Note : All the documents to be signed and sealed

Sar

8 h