

Tel No.- 03221-255022/ 258700 Fax- 03221-258700 Website: https://jrc.ac.in

# Office of The Principal Jhargram Raj College, Govt. of West Bengal

P.O. & Dist.-Jhargram, Pin-721507

Memo No: 321/DBT-1 Date: 27.07.2020

#### NOTICE INVITING TENDER

Quotations are invited from the manufacturers, authorized distributers and or suppliers for small equipment for the **Department of Chemistry** under the DBT star College grant (San. No. 102/IFD/SAN/4679/2018-2019 dated 01.03.2019). The interested manufacturers, authorized distributers/suppliers/dealers may submit quotations in the prescribed proforma (Annexure I) to the office of the Principal, Jhargram Raj College, Jhargram latest by August 4, 2020. Quotation in any other format will not be entertain and will be rejected outrightly. The Principal, Jhargram Raj College reserves the right to select the items (in single or multiple units) or to reject any quotation without assigning any reason. Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected. Interested venders may follow the instructions as given below for submission of their tenders through speed post only and no other mode of submission will be entertained due to COVID-19 pandemic situation. The envelope containing bid must clearly be superscript the name of the Department and the memo number of the tender notice.

For details, please visit College website- www.jrc.ac.in.

#### Terms and Conditions of Bid

- 1. Only manufacturer(s) or their sole authorized distributors/ agents are eligible to bid. Authorization letter in the prescribed format (Annexure II) from original manufacturer in favour of authorized Agent to bid/conclude the order against this tender, must be enclosed with the technical bid.
- 2. All offers should be made in English and should be written in both figures and words. All offers should be quoted in INR currency and comprehensive maintenance for three years for all the equipment. The rates once accepted will remain valid for the period up to 31st March, 2021 and will not be changed under any circumstances.
- 3. No advance payment must not be claimed against any work order before the delivery of the items at a time to the Office of the Coordinator, DBT star College scheme, Jhargram Raj College.
- 4. No installation charge and post-sale service will be claimed at any circumstances.
- 5. The Rate should be quoted as per specification excluding of All Taxes. The L1 bidder will be selected based on the quoted price of the materials excluding taxes.
- 6. Any distortion in the technical specification indicated and also all terms & condition as indicated by the tender inviting authority for any of the items will reject the entire bid of the bidder.
- 7. The bidders must have successfully completed at least 3 similar orders in the central and the state government agency/institution. Copy of the purchase order must be attached with Technical Bid.
- 8. Signed & stamped compliance sheet of the technical specification with make and model of the equipment with technical printed literature along with Bill of Material (BoM) mentioning all the terms & conditions clearly, must be enclosed with the bid.
- 9. Photocopy of the financial statements with net profit, duly audited/certified by the chartered accountant (CA) of the last three financial years along with the copies of income tax return (ITR), IGST certificate, PAN No., current trade license and a cancelled cheque must be enclosed with the bid (Annexure III).
- 10. The tenderer should not have been debarred or blacklisted by any Central/State Government Departments of India. Self-declaration in their letter head must be enclosed with the technical bid in prescribed format. The proforma of the self-declaration is attached with the tender as **Annexure** –**IV**.
- 11. The tender bid will be out rightly rejected if it comes to the notice of the tender inviting authority during scrutiny that the credential or any other paper of a tenderer is fabricated etc. and the tender inviting authority shall verify the above mentioned documents (In original) which are mandatory for the participation before issuance of the work order.

- 12. The tenderer viz. the Indian Agents and / or the foreign firms should furnish a certificate that the rates quoted by the tenderer are not more than those quoted to any other Institution in India or aboard during the last one year, with supporting documents.
- 13. In case of any dispute, the College's decision will be treated as the final and conclusive. All legal actions are subject to Kolkata jurisdiction only.
- 14. The delivery should be made to the office of the coordinator, DBT Star College within seven (07) days from date of issuance of work order (**All the items at a time**). The supplied items will be physically verified and compared with the detail specification of individual items by the coordinator during delivery.
- 15. The violation of any of the conditions will entitle cancellation of the order.
- 16. Payment of bills on its production will be made after successful supply of the items within stipulated time, after the successful installation of each and every individual.
- 17. Any postal delay will not be entertained and bids reach after 5.00 pm of the stipulated date (4<sup>th</sup> August) will not be accepted. Please post your bids well in advance to avoid postal delay.

#### Itemised Detail Specification with Make and Model

Sl No.	Name of the	Technical Specification	Make	Year of post-sale
	instruments			service required
01	Automatic Microcontroller Based Bomb Calorimeter	Automatic Microcontroller Based Bomb Calorimeter with Automatic measurement & mathematical calculation, USB interface for sending data to PC, Full test report printout by inbuilt thermal printer, Weight of sample, water equivalent & sensitivity can be set through keypad on single page and Automatic detection of temperature rise & fall. Technical specifications Operational Principle: Isothermal Fundamental Standards: BIS-1350 (Part-2), IP-12/63T Inner Vessel: Electroplated Copper Outer Jacket: Electroplated Copper Outer Jacket: Electroplated Copper and water Filled Bomb Design: Either Schrader Valve or Pin Valve Design Bomb: Removable Vessel: Fixed Vessel Design Automatic Oxygen Filling: Available Oxygen Filling Time: <1 Minutes Pressure Regulator: Automatic Sensor: Dual Sensor for both Vessel and Jacket Temperature Resolution: 0.001oC (Main Sensor) R.S.D: 1% with Benzoic Acid Range: Upto 12000 Cal/g Temperature Display: Built-in display Experiment Modes: Selectable Auto or Manual Stirrer: Compact 12V DC Bomb Firing: Selectable Auto or Manual Printer Facility (Temp v/s Time): Throw external Primter Calculation: Selectable Auto or Manual Memory: Available Testing Time: 15-20 Minutes Operating Temperature: 15-35Ã,°C Power Input: <1.0KW Power Requirement: 230V+10V, 50 Hz Display: 128x64 Graphical LCD Keypad: 20 keys Temperature Resolution: 0.010C	Advanced Research Instrument Company	Three

	1		T	1
		Interface: USB interface to PC		
		Printer: Inbuilt thermal printer		
		Time Clock: Real time clock with battery		
		backup		
		Power supply: $230V \pm 10\%/50Hz$		
		Steel drum: Safety valve for high pressure		
		Bomb with sample holder: Oxygen pressure		
		gauge		
		Stirrer: Benzoic acid powder		
		Temperature Probe: USB lead		
		Chrome wire: Toll kit		
		Pallet press: Operation manual		
		Cotton thread: Power supply cable (Main lead)		
		Accessories		
		Combustion Bomb (Standard), Combustion		
		Bomb (Halogen Resistant), Crucible (Stainless		
		Steel), Crucible (Quartz), Crucible (Platinum)		
02	Automatic	Automatic Bomb Calorimeter	T 1	TI
02	Microcontroller	Salient Features	Labtronics (Model	Three
	Based Bomb	Technical Specifications	No: LT-1160)	
	Calorimeter	Display: 128x64 Graphical LCD		
		Keypad: 20 Keys		
		Temperature resolution: 0.01°C		
		Internal Memory: 1000 logs with date and		
		time		
		Interface: USB interface to PC		
		Printer: Inbuilt thermal printer		
		Time Clock: Real time clock with battery		
		backup		
		Power supply: 230V ±10%/50Hz		
		Standard Accessories		
		Steel drum: Safety valve for high pressure		
		Bomb with sample holder: Oxygen pressure		
		gauge		
		Stirrer: Benzoic acid powder		
		Temperature probe: USB lead		
		Chrome wire: Toll kit		
		Pallet press: Operation manual		
		Cotton thread: Power supply cable (Main lead)		
03	Microcontroller	Technical Specification:	SYSTRONICS	Three
	based digital pH	Dimension (mm): 235 x 185 x 85		
	meter	Weight: 1.25 kg	(Model 902)	
		pH Range: 0 – 14		
		Millivolt Range: 0 to ± 1999 mV		
		Slope correction: 85% to 115%		
		Resolution: 0.01 pH, 1 mV in mV mode		
		Repeatability: $\pm 0.01$ pH $\pm 1$ digit for pH		
		Standardization range: ± 1 pH		
		Temp compensation: 1 to 100 °C digital		
		display		
		Display: 3 ½ digit red LCD seven segments		
		Polarization current: 10 μA		
		Recorder Output: ± 10 mV/pH in pH mode		
		$\pm 10 \text{ mV}/100 \text{ mV}$ in mV mode		
		Power: 230 V $\pm$ 10% 50Hz		
		Accessories: combined electrode, clamp and		
		stand		
0.4	Digital	Digital Potentiometer with combined Pt.&	CVCTPONICC	TI
04	Potentiometer with	Reference electrode or Pt. and Ref. electrode	SYSTRONICS	Three
	Pt, Silver & calomel	Technical Specification:	(Model 318)	
	Electrode	Dimension (mm): 235 x 185 x 85	( = = = = = = )	
	Licentone	Weight: 1.25 kg		
		mV Range: 0 to $\pm$ 1999mV		
	1	100150. 0 00 = 1///1111	1	1

		Polarization current: 10 µA for metal and metal electrode		
		Input impedance: 1011 ohms		
		Polarity: Automatic		
		Power: 230 V AC $\pm$ 10%, 50 Hz		
		Set Zero range: 0 to $\pm 1500$ mV input		
		Display: 3 ½ digit LED		
		Over Range: Last three-digit blinking		
		Magnetic stirrer: in built with variable control Stirrer speed: 0 to full speed		
	Conductivity Meter	Conductivity Meter with 1 cell constant cell,	SYSTRONICS	
05	with cells and temp.	0.1 cell constant cell, Temp. probe with	(Model 308)	Three
	probe	temp. probe (Pt 100 sensor) and clamp & stand	(1110461600)	
		<b>Technical Specification:</b>		
		Dimension (mm): 210 x 220 x 105		
		Weight: 1.7 kg		
		Source Frequency: 100 Hz or 1KHz		
		automatically selected		
		Conductivity range: 0 µS – 20 mS with 0.1 cell		
		constant and 0 $\mu$ S – 200 mS with 1 cell		
		constant in 5 decadic ranges.  TDS Range:0 ppm - 20 ppt with 0.1 cell		
		constant and 0 ppm – 200 ppt with 1 cell		
		constant decadic ranges		
		TDS Resolution: 0.01 ppm in lowest range		
		with cell constant 0f 0.1		
		Conductivity Resolution: 0.01µs is the lowest		
		range with cell constant of 0.1		
		Temp. resolution: 1°C		
		Accuracy (conductivity/TDS and Temp): ± 1%		
		of f.s $\pm 1$ digit and $\pm 1$ °C $\pm 1$ digit		
		Cond. Cell compensation: 0.09 to 0.11 (0.1 cell constant) and 0.9 to 1.1 (1 cell constant)		
		TDS factor: 0 to 1.00		
		Cond. Tempco range: 0.0 to 10.0% per °C		
		Temperature range: 0 °C – 1000 °C (Auto /		
		Manual)		
		Temp sensor: PT 100		
		Power: 230 V $\pm$ 10% 50 Hx		
		Readout: 3 digits LED		
06	Water (Analyzer	Water"Analyzer (Colorimeter, D.O,Cond,	SYSTRONICS	Three
	(Colorimeter,	TDS, pH,Salinity, Temp.)	(Model 371)	
	D.O.,Cond., TDS, pH,Salinity, Temp.)	Technical Specification: Dimension (mm): 295 x 300 x 145		
	pri,Sammiy, Temp.)	Weight: 3.00 kg		
		Measurement of pH		
		Range: 0 to 14 pH		
		Resolution: 0.01 pH		
		Repeatability: $\pm 0.01$ pH $\pm 1$ digit		
		Deviation of buffer: $\pm 0.5 \text{ pH}$		
		Calibration point: 2, 3, 4, 5		
		Standard buffer: 1.6979, 4.004, 7.00, 9.183 and		
		12.454 (NIST standard)		
		User Buffer: 0 to 14 pH (User Choice) mV		
		Range: 0 to $\pm$ 1999 mV		
		Resolution: 1 m		
		Repeatability: $\pm 1 \text{ mV} \pm 1 \text{ digit}$		
		Electrical conductivity		
		Range: 0.2 µS to 200 µS (6 decadic range)		
		Resolution: $\pm$ 1% of F.S $\pm$ 1 digit		
		Resolution: 0.01 μS in lower range		
1	I	Cell constant: 0.1 to 5.0		

		TDS Range: 0.2 ppm to 200 ppm ppt (6 decadic range) Accuracy: ± 1% of F.S ±1 digit TDS factor: 0.1 to 0.99 at 2.0% Tampco Cell constant: 0.1 to 5.0 Salinity Range: 0.1 to 40 ppt (> sea water) Resolution: 0.1 ppt Accuracy: ± 2% of F.S ±1 digit Cell constant: 1.0 C.C. EC/TDS/Salinity AC voltage source: 100 Hz Temp Co-efficient: 0.00% to 9.99% Batch ID No: 1 to 10 Sample Id No. 1 to 50 Temperature Range and compensation for pH/EC/TDS and Salinity Automatic and ManualTemp. Range: 0°C to 99.9 °C with PT 100 sensor Memory Calibration and data storage Data backup: Max 500 (50 x 10) Display: 240 x 128 monochromatic LCD RTC: Date and time RS-232 port: PC link data transfer Power: 230 V AC ± 10%, 50 Hz Accessories pH combined electrode Glass -conductivity cell 1 0 C C ± 10%			
		Glass -conductivity cell 1.0 C.C ± 10% Glass -conductivity cell 0.1 C.C ± 10%			
		Temp. Probe (PT 100 sensor)			
	Manuali	Clamp/Stand	DEMAG	MC FOO	
07	Magnetic stirrer with digital speed	Technical Specification: Stirring Capacity: 1Ltr or	REMI (I	v15-500)	Three
	indicator	External Dimensions (mm): 150 x 220 x 150 Stirring Paddle (PTFE Coated): 9 x 25 mm			
08	Motorless magnetic stirrer	Motorless magnetic stirrer, Maximum speed 1500 rpm, capacity 800 ml	REMI PLUS)	(MS-800	Three
09	Magnetic stirrer with Hotplate (with	Technical Specification: Stirring Capacity: 1Ltr	REMI (1	MLH)	Three
	Digital Speed	Healing Capacity: 150 watts			
	Indicator)	External Dimensions: 200 x 225 x 185 Stirring Paddle (PTFE Coated): 9 x 25 mm			
10	Digital Automatic	Technical Specification:	SYSTR		Three
	spectrophotometer	Dimension (mm): 420 x 310 x 125 Weight: 6.5 Kg Wave length Range: 340-960 nm Wave length display: dial Spectral bandwidth: 10 nm Photometric accuracy: ±0.005 Abs at 1.00 Abs Photometric resolution: 0.1% T, 0.001 abs Photometric read out: 4-digit 7 segment LED Grating: 600 line/mm Source: Tungsten Halogen lamp Detector: Wide range silicon photodiode Sample Holder: single position 10 mm cuvette holder Min. sample volume: 1 ml in 4 ml cuvette Measuring mode: Auto, %T, Abs and concentration	(Type -		Timee

		Power: 230V ± 10%, 50 Hz		
		Accessories: a) two quartz cuvette + two glass		
		Cuvette		
	Digital Automatic		Labtronics (LT-	
	Digital Automatic Polarimeter	Technical specification Specification Measuring range - $\pm 200^{\circ}$ (sugar scale) $\pm 70^{\circ}$ (optical rotation)	Labtronics (LT-740)	Three
		Accuracy: ±1 <sup>0</sup> (full scale) Resolution: 0.01 <sup>0</sup>		
		Display: Graphical LCD (128X64) Keys: 4-keys for menu operation		
		Calibration mode: 2 point (Zero & span) Interface: USB		
		RTC: In-built clock with data and time		
		display  Data storage capacity: 1000 Logs with data &		
		Time		
	T.T	Power supply: 230V/AC ± 10%, 50Hz	T	
11	Ultraviolet	Technical Specification:	Tarson or Any	Three
	inspection cabinet	Material: Mild Steel (SS Body) Voltage: 220 V	Reputed brand in India	
		Wave Length: 254-365 mm	Illula	
		Frequency: 50 Hz		
10	Digital Melting point	Technical Specifications:	(Labtronics	TI
12	apparatus	Display: 4 Digit Seven Segment LED display	(LT-115))	Three
		Temperature 0-300 0C	//	
		Resolution: 1°C		
		Capillary glass tube: 100mm long, 0.8 to		
		1.1mm internal diameter		
		Boiling Point: 6x75mm glass tube		
		Sample Size: Fine powder properly dried at a		
		temperature considerably below its melting		
		point, 4 to 6 mm high		
		Oil-bath: Silicon oil bath beaker – 200ml		
		capacity with Teflon cover fitted with oil immersion heater. It is having three holes for		
		holding the capillaries, one for boiling point		
		tube and one for thermometer		
		Stirrer Speed: Controllable with front knob		
		Power: 230V ±10% AC, 50Hz		
		Weight: 6 Kg (Approx)		
		Accessories: 2 Box of Capillaries (200 No)		
		Glass Tubes for Liquid Sample (6x75 mm)- 2		
		Nos Magnetia Cangula		
		Magnetic Capsule Bottle of Silicon oil – 500ml		
		Glass Cylindrical Beaker with Teflon cover		
		fitted with immersion heater		
		Instruction Manual, Dust Cover.		
12	Oil free pump	Technical Specification:	Tarson (Rocker	Theres
13	1 1	Max Vacuum Range 60 psi Rockyvac Oil Free	440)	Three
		Compressor 7112		
		Maximum Pressure: 100 psi (without moisture		
		trap)		
		Maximum Pressure: 80 psi (With Moisture		
		trap) Maximum Current: 0.4 A		
		Max. flow: 14 l/min		
		Motor rotation: 1700 RPM		
		Horse power: 1/8 HP		
		Noise level: 50.0d		
		Power Supply:220 Volt, 50 Hz		
		Capacitance: 24 µf, 450 Volt		
		Port thread: 5/16"		

1			Power Output: 85 W		
1	14	Refrigerator	Laboratory Refrigerator	REMI (RLR-400)	There
			Technical Specification:	,	Three
			Capacity: 400 Ltrs		
			Cooling type: Frost free		
			Cooling efficiency: Uniform cooling by force		
			air circulation		
			Temperature range: 1°C to 10°C		
			No. of glass door: 1 (with clear visibility with		
			dual glass)		
			Baskets/Shelves: 4 (adjustable wire coated		
			plastic mesh)		
			External dimension (mm): 582 x 584 x 1702		
			Inner body: Chemical resistance Plastic		
			Outer body: Coated GI sheet		
			Internal temperature Display: Digital		
			Alarm System: Yes		

Principal/Officer-in-Charge,

Jhargram Raj College.

OFFICER -IN - CHARGE
JHARGRAM RAJ COLLEGEDate 27.07.2020

Memo No.

# Copy forwarded for information and taking necessary action to:

- 1. The Hon'ble District Magistrate, Jhargram
- 2. The Sub-Divisional Officer, Jhargram.
- 3. The Treasury Officer, Jhargram.
- 4. The Block Development Officer, Jhargram.
- 5. The Post Master, Jhargram.
- 6. The Chairman, Jhargram Municipality.
- 7. Dr. Gariam Gupta, Program officer, DBT, Gol, New Delhi
- 8. Dr. Tapas Kr. Adalder, Coordinator, DBT Star College Scheme, Jhargram Raj College.
- 9. College Notice Board.
- 10. Mr. Sayantan Roy, Convener website committee, Jhargram Raj College

Principal/Officer-in-Charge, Jhargram Raj College.

OFFICER -IN - CHARGE JHARGRAM RAJ COLLEGE

(b) 2+1+1 to

#### **Proforma for Quotation (Annexure I)**

Sl.	Name of the	Technical specification	Whether technical printed literature	Catalogue Price	% of discount on	Rate excluding GST after
No	instrument	with make and model	along with Bill of Material (BoM) submitted or not	(INR)	the catalogue	Discount
			submitted or not		price	

### <u>Annexure – II</u>

FORMAT FOR MANUFACTURER'S AUTHORISATION LETTER TO AGENT (on letter head)
Ref. No. Date:
To, The Principal/Officer-in-Charge, Jhargram Raj College, Jhargram, West Bengal 721507  Sub.: Authorization Letter
Dear Sir, We,, who are established and reputed manufacturers of, having factory at, hereby authorize M/s (name & address of Indian distributor /agent) to bid, negotiate and conclude the order with you for the above goods manufactured by us.
We shall remain responsible for the tender / contract / agreement negotiated by the said M/s, jointly and severely.
We ensure that we would also support / facilitate the M/s on regular basis with technology / product updates for upgradation / maintains / repairing / servicing of the supplied goods manufactured by us.
In case duties of the Indian agent / distributor are changed or agent / distributor is changed it shall be obligatory on us to automatically transfer all the duties and obligations to the new
Indian Agent failing which we will ipso-facto become liable for all acts of commission or omission on the part of new Indian Agent / distributor.
Yours faithfully,
[Name & Signature] for and on behalf of M/s [Name of manufacturer]
Note: This letter of authorisation should be on the letterhead of the manufacturing concern and should

Note: This letter of authorisation should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer. A copy of notarised power of attorney should also be furnished.

# Bidders Information (Annexure-III ) (On bidder letterhead)

1.	Name of the party (In Capital letter):
2.	Permanent address (proof needed):
3.	(a) Name of the Contact Person
	(b) Contact No.
	(c) Email.ID
4.	Communication address (proof needed)
5.	Trade license No. & date: (Renewed)
6.	(a) PAN card No. (Business):
	(b) (GST No.)
	(c) Annual Turn Over (Prof Needed)
7.	Nature of business
8.	Bank detail (Kindly attach scanned copy of one Cheque) a. A/C No.
	b. Name of the Bank and Branch
9. O	ther Relevant Information of the Bidder:
	a: Copy of the documents should be furnished along with the application. I declared that all terms and conditions will bllowed by me and the submitted documents are true to the best in my sound knowledge and belief.
Date	d: Signature of Party (With seal)

### Annexure-IV

## FORMAT FOR self-declaration of NON-BLACKLISTING OF SUPPLIER (On letter Head)

I/ We	Manufacturer/partner/Authorized Distributor/Agent (strike out which is not
applicable) of (Supplier)	do hereby declare and solemnly affirm that the
individual/firm/company i	s not black-listed by the Union/State Government/Autonomous body. We
hereby confirm that the w	ve will withdraw our bids if the tender inviting authority find us guilty of
blacklisting by any author	ity across the country or the tender inviting authority can cancel our entire
bid at any point of tender p	process.
Signature of the Deponent	
Address	