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MAHATMA GANDHI UNIVERSITY

KOTTAYAM, KERALA, INDIA

School of Food Science and Technology

Priyadarshini Hills P.O.Kottayam, Kerala-686560

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P. D.Hills
08/02/2022

SHORT TENDER NOTICE FOR PURCHASE OF SCIENTIFIC EQUIPMENTS

TENDER NOTICE No: **SFST/T-2/ 2021-22**

Date: 08/02/2022

Competitive tender in sealed cover for the supply of Scientific Equipments for the project “Augmentation of Scientific Facilities for Technological Innovation in Food Science Research”- Plan Fund 2021-22 are invited from reputed firms and authorized dealers so as to reach the office of the undersigned not later than 12.00 pm on 23/02/2022. Technical bid of the tenders will be opened on 23/02/2022 at 2.30 pm in the presence of authorized representatives of tendered firms. The financial bid of the Tender will be opened on 23/02/2022 at 3:30 pm

Sl.No	EQUIPMENT	SPECIFICATIONS	QTY
1	Laboratory Refrigerator	190 L Double door Capacity 258 Ltr Door Types Double Door Energy Efficiency more than or equal to 2 Star Defrosting Type Frost Free Body Material Stainless Steel Number Of Shelves more than or equal to 2 Warranty 3 years	1
2	Laboratory Refrigerator	Single door type Top mount Defrosting: direct cool Reciprocatory compressor 47 L	1

		Warranty 3 years	
3	Fully automatic Kjeldhal analyzer	Usage/Application Chemical Laboratory Frequency 50 Hz Display LCD display Voltage AC 220V Weight 30kg Repeatability 0.5% or less Measurement Range > 0.1mg N Recovery Rate 99.5% or higher Ambient Temperature 10 Deg ~ 28 Deg Peak Power 2.5 KW Warranty 3 years	1
4	Cabinet driers	Material Stainless Steel Automation Grade Automatic Heating Media Electric Dimension 120 x 240 x 90 cm Tray Capacity 12-96 L Outer Material Stainless Steel Warranty 3Years	1
5	Fume hood	Fume exhaust hood With 1.5 m exhaust piping Working table in cm: 120×60×60 External dimension in cm; 126×75×240 Hood CR sheet Outer surface & inner surface epoxy coating Working table covered with acid proof granite slab 20mm thick Provided with water tap and SS sink Provided gas/ air cock, additional power points, diffused fluorescent tube. Impeller coupled with TEFC motor Front glass shutter provided with counter weight arrangement for easy vertical sliding Supply 415V 50Hz	1
6	Dessicator	Temperature (Deg. Celsius) 400 degC Color Transparent Material Borosilicate Glass 3.3 Maximum Temperature Capacity 400degC Warranty 3 Years	1
7	Chemical storage cabinet	Color as per customer Material :Stainless Steel Features Superior Quality,Smooth Finish Product Type Laboratory Furniture	1

11	Distillation Unit	Usage/Application LABORATORY Material Borosilicate Glass Brand Reliable Color Transparent Capacity 5 Litre Per Hour Automatic water level cut off mechanism Warranty 3 years	1
12	Bomb calorimeter	Digital Bomb calorimeter Automation Grade Fully Automatic Usage/Application Lab Material SS Color White Warranty 3 years	1
13	Baking oven	Capacity (Litre): 30l Body Material Stainless Steel Warranty 3 years	1
14	Muffle furnace	Frequency 50 Hz Material MS Voltage 220V Maximum Temperature 1000deg C/1200deg C/1400deg C Working Temperature 950deg C/1150deg C/1350deg C Phase Single Phase Warranty 3 years	1
15	Automatic fibre estimation	Two Place Economic Version Automatic Autosequencing PC Compatible crude Fibre Estimation System for hot extraction with built in heating and filtration. Warranty 3 years	1
16	Photoelectric calorimeter	Type: Digital Photo Colorimeter Wavelength Range (nm): 400 - 700 nm Resolution: 0.01 A Photo Detector: Photo Cell/Photo Diode Display: 2 digit LED Warranty 3 years	1
17	Photo fluorimeter	<ul style="list-style-type: none"> 3 Digit LED display Covers entire visible range Determines the concentration of Fluorophores & Quinine Warranty 3 years	1
18	Digital pH meter	pH Range -2.00 to 16.00 pH Resolution 0.01 pH Accuracy ± 0.01 pH Cal. Points Up to 5	1

		<p>Buffer Sets USA (1.68, 4.01, 7.00, 10.01, 12.45), NIST (1.68, 4.01, 6.86, 9.18, 12.45) ORP Range ± 2000 mV Rel. mV Range ± 2000 mV Resolution 0.1 mV (± 199.9 mV) / 1 mV (beyond) Accuracy ± 0.2 mV (± 199.9 mV) / ± 2 mV (beyond) Temperature Range (Meter) 0.0 to 100.0 °C / 32.0 to 212.0 °F Resolution 0.1 °C / 0.1 °F Accuracy ± 0.3 °C / ± 0.5 °F (0 to 70 °C) Compensation ATC / MTC (0 to 100 °C) (pH only) Calibration Offset in 0.1 °increments; offset range: ± 5.0 °C / ± 9.0 °F Power Requirements 9 V DC adapter, 1.3 A (100/240 VAC, SMPS) Electrode: Glass Warranty 3 years</p>	
19	Vaccum packaging machines	<p>Table Top Mini Vacuum Packaging Machine Vacuum Chamber size: 365 Width x 375 Length x 80 mm Height. Over all Size: 515 x 490 x 350 Construction: Complete SS 304. Lid: Transparent flat Acrylic. Vacuum Pump: 8 cum/133LPM Gas: Optional with 4 nozzles. Vacuum monitoring & control: German, dial gauge & vacuum sensor optional. Electrical consumption: Maximum 1 KW, can be operated on domestic connection. Packing cycle: 1 to 2 Cycles/ minute depending upon the product to vacuum packed. Winner special: Maintenance free Vacuum actuator for lifting sealing bars. Fiber glass sealing bars for short circuit free. Warranty 3 years</p>	1
20	Infrared moisture balance	<p>Usage/Application Laboratory Industries Measuring Range 0.01 to 100.00% Operating Temperature 60-160 Degree Celsius Power Source Electric Warranty 3 years</p>	1

21	Candy thermometer	Colour Silver Cooking Thermometer MaterialStainless steel Maximum Storage Temperature 200 degrees_celsius Upper Temperature Rating200.0 degrees_celsius Warranty 3 years	4
22	Gas stove with double burners	Number Of Burner: 2 Color Steel Usage/Application Kitchen Material STAINLESS STEEL Mixing Tube Aluminum Ignition Type Manual Warranty 3 years	8
23	Viscometer	Material Steel Power Electric Standard ISO certified Display Digital Screen LCD warranty 3 years	1
24	Homogeniser	Capacity (litres/hour) 100-1000 Pressure 0-100 Bar Portable Yes Application Pharmaceuticals Warranty 3 years	1
25	Milkometer	Usage/Application Laboratory Use Automation GradeAutomatic Display Type Blue Material ABS Color White Warranty 3 years	1
26	Cream separator	Type Electric Capacity 60 LPH Machine Body Material SS Automation Grade Automatic Voltage 240V Warranty 3 years	1
27	Dough Kneader	Material Stainless Steel Usage/Application Bakery Power Source Electric Automation Grade Automatic Capacity 10 kg Used for Making Bread Warranty 3 years	1
28	Lactometer	Usage/Application Milk Purity Test Material Borosilicate Glass Shape Round Warranty 3 years	1

29	Bread slicer	Operation Mode Automatic Cutting Thickness > 12 mm Number Of Blades 31 Power Source Electric Application/Usage Bakery, Food Processing Industry, Hotels & Restaurant Stroke 3 Inches Machine Body Material Stainless Steel Speed Of Slicer High Speed Warranty 3 years	1
30	Vaccum pump	Head 5-10 m Number Of Stages Single stage Material stainless Steel Max Flow Rate 15 LPH Power 0.5 HP Warranty 3 years	1
31	Can sealing machine	Usage/Application For Cap Sealing Automation Grade Automatic Capacity 40 CPM Driven Type Electric Voltage 220 V Height Of Conveyor 2 feet Material Stainless Steel (Body) Cap Diameter 40mm No. Of Heads 1 Frequency 50 Hz Phase Single Phase Warranty 3 years	1
32	Texture analyser	Cabinet Material Stainless Steel Application Industrial Use Material Stainless steel Test Frame Range EZ-SX Depth of Test Space 100 mm Data Capture Travel 1000 Hz Test Frame Load Capacity Max. 500N Warranty 3 years	1
33	High shear mixer	Speed (RPM) 1000 to 3000 RPM Material Stainless Steel Working Flow Rate 30000 to 185000 L/H Motor Power 1.1 to 37 kw Voltage 380 to 450V Frequency 50-60 Hz Shaft Length 750 to 1650mm Phase 3 Phase Warranty 3 years	1
34	Gluten testing device	Machine Type Display reader Weight 200 Gm Material Plastic Usage/Application Laboratory Use Parameters Provides quantitative, semi-	1

		quantitative & qualitative results Voltage 230 V Frequency 50 Hz Display Size Analog Features Easy to use reader for standard lateral flow assays Warranty 3 years	
35	Laminar air flow	Type Horizontal Material SS Surface Finish Powder Coated Usage/Application Laboratory Noise Level 65 +-5 db Frequency 50 Hz Velocity Approx. 90 feet per minute Surface Treatment Coated Air Filtration Pre-Filter - 10 microns (washable) HEPA filter (0.3 Microns) Standard Fittings Air/gas cock Mains on/off switch Light on/off switch UV Light on/off switch Blower on/off switch Warranty 3 years	1
36	Ice cream freezer	Size Medium Capacity 300 L Temperature Range -24C TO +8C Warranty 3 years	1
37	Fruit juice dispenser	Frequency (Hz) 50/60 Hz Condition New Machine Type Semi-Automatic Material SS Voltage 220 V Warranty 3 years	1
38	Hardness tester	Weight 72 kg Voltage 230 V Frequency 50 Hz Phase Single Phase Total Test Force 1kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50 kg Height of specimens 200MM Scale Least count 0.001MM Depth of Throat 135MM Optical Magnifications 70X Dimensions 540mmx280mmx850mm (L x W x H) Warranty 3 years	1
39	Grain moisture meter	Calibration Automatic Measurement Range Moisture content 8-20% Temperature -10 to 55 Centigrade (14-131 D F) Resolution 0.1 Grains Type Paddy, Rice, Corn, Wheat Moisture Accuracy +/- 1% Operation Humidity 85%	1

		Display 4-digits 10mm LCD Power supply 4 x 1.5V AA batteries (not included) Meter Dimension Approx. 17.8cm(L) x 6.8cm(W) x 3.9cm(Thick) Probe Length Approx. 36.5cm Cable Length Approx 102cm Meter Weight Approx 280g (batteries not inserted) Probe and Cable weight Approx 260g Warranty 3 years	
40	Fire extinguisher	Capacity 2Kg Discharge Time More than 8 secs Operating Position Upright Minimum Effective Discharge 95 % Operating Temperature Range -20 to +55 Degree C Filling Ratio 0.667 Type Of Extinguisher CO2 Minimum Trow(Mtr) 1 to 2 Warranty 3 years	1
41	Tearing strength tester	Capacity 200, 400, 800, 1600, 3200, 6400 gms Weight 15.2 kg Accuracy 0.2% of Pendulum Capacity Dimensions 483 x 398 x 578 mm Software Available DAS, WinWedge Warranty 3 years	1
42	Stiffness tester	Color grey Display Digital Power Source Electric unit 10000 warranty 3 years	1
43	Food thermometer	Range : - 50 c + 300(-58F+572F) Resolution: 0.1C Accuracy: $\pm 1^{\circ}\text{C}$ upto 200C or $\pm 2^{\circ}\text{C}$ Hi/ low alarm setting Max/ min memory, C/F Stainless steel probe with 1 meter wire cord Battery : 1AAA pencil cell Wire storage in batt. Compartment Backstand for table use/ wall hang Warranty 3 years	1
44	Tray dryer	Capacity 300 Kgs/Hrs Material :Stainless Steel Dryer Type Hot Air Tray Dryer Driven Type Electric Air Blower 2 of 1 HP/3ph Operating Temperature 50 Deg C to 250 Deg C with accuracy of $\pm 1^{\circ}\text{C}$ Warranty 3 years	1

45	Fruit pulper	Capacity Baby Pulper Stages Single Automation Grade Semi-Automatic Electricity Phase Single Phase Motor 2 HP Material Stainless Steel Suitable for All Type Warranty 3 years	1
46	Blender	Hand held 160 watts motor R.P.M. 12,000 on no load Power Consumption(Watt) 400 Watts Warranty 3 years	1
47	Cooking range with oven	Number Of Burner 4 Burner Material Stainless Steel Shape Square Knob Material Bakelite Number Of Knob 5 Finishing Chrome Finish Warranty 3 years	1
48	Laboratory centrifuge	Voltage 220V Phase Single Frequency 50 Hz Digital Speed Indicator 0 - 99 min Digital Count Down TimerDisplay Digital Max Speed 4500 rpm Max Capacity 6000 ml Warranty 3 years	1
49	Burner	Product Type Bunsen Material CAST IRON Color Blue and Black Size/Dimension 100mm (4") height, 75mm (3") base diameter Gear TypeSEMI AUTOMATIC Warranty 3 years	2

50	Analytical Balance	Weighing Capacity 220g Minimum Display 0.001 mg Pan Size Approx. 91 mm dia. Dimensions Approx. W213 x D356 x H338 mm Weight Approx. 6.2 kg Approx. 6.0 kg Required Power Supply AC adapter (input 100-240V AC, 50/60 Hz, output 12V, 1A) I/O Terminals RS232C (D-sub 9P plug), USB device (Type B) Calibration Weight Built-in External weight Warranty 3 years	1
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****QUOTE SHOULD ALSO COVER CHARGES INCLUDING INSTALLATION, TESTING, CALIBRATION AND COMMISSIONING.**

Application for tender should be written the tender no., date and should be sent to the address
Honorary Director, School of Food Science and Technology, Mahatma Gandhi University, P.D.
Hills P.O, Kottayam, 686560.

LAST DATE OF APPLICATION FOR TENDER: 23.2.2022

TIME: Before 12.00 PM

TIME OF OPENING OF TENDER: 2.30

TENDER FORM RATE: Rs. 250/-

SECURITY DEPOSIT: Rs. 1500/-

Dr. Jisha M.S.
Director, SFST

NOTE:

(1) PLEASE SEE THE ANNEXURES I, ANNEXURE II, ANNEXURE III and ANNEXURE IV ATTACHED BELOW

(2) ALL THE DOCUMENTS RELATED TO THE TENDER CAN BE DOWNLOADED FROM THE UNIVERSITY WEBSITE- www.mgu.ac.in, in the section “Quotation/tender”.

ANNEXURE I

TERMS AND CONDITIONS:

1. The fee for tender application form should be remitted by online payment and the receipt of payment should be sent along with the application.
2. Tenders must accompany a copy of the “General Terms and Conditions, Annexure I and Annexure II and III” section of this document, signed and stamped on each page indicating that they agree to these
3. The amount should include all types of taxes, packing charge, transportation charge and loading and unloading charges.
4. The DD for EMD (2.5% of the item) or any other accepted document must be drawn in of favor of Hon. Director, School of Food Science and Technology, M. G. University, Kottayam, Kerala payable at SBI Mahatma Gandhi University Campus Branch.
5. As the essentiality certificate is submitted, maximum of 5% GST included amount should be given.
6. Equipment should be supplied within 10 days from the order date.
7. Tenders that are given after the last date will not be considered.
8. If the date of opening of tender is a holiday the opening will be on next day same time. The authority would have the right to postpone or reject the tender without prior notice.
9. The Delivery Schedule, Payment Terms & Warranty/Guarantee etc must be clearly indicated in the technical bid. The charges for extended warranty and/or Annual Maintenance Contract after the expiry of offered warranty period should also be specified in the financial bid.
10. The manufacturers’ printed literature/catalogue/drawing/user’s list in respect of range of product being quoted should also be submitted with the offer.
11. Our Institute is registered with the Department of Scientific & Industrial Research (DSIR), so Excise duty exemption will be provided.
12. Other requirements for delivery and complete installation:
 - Delivery at School of Food Science and Technology, Mahatma Gandhi University, Kottayam.
 - It will be the responsibility of the supplier to deliver the ordered materials at the respective laboratory of, School of Food Science and Technology, Mahatma Gandhi University, Kottayam.
 - All required materials for satisfactory installation are to be provided by the supplier at their own cost.

ANNEXURE II: TENDER FORM PART-I (TECHNICAL BID)

PART-I (TECHNICAL BID) OF TENDER NO:

Last date for receipt:

Due date for opening Part –I (TECHNICAL BID):

Tenderer's Offer No:

Date:

From,

M/s.
.....

To,

The Hon. Director,
School of Food Science and Technology,
M. G. University,
Kottayam, Kerala, India

Dear Sir,

I/We have gone through the tendering conditions pertaining to the Tender and General Terms and Conditions of Contract and other requirement for delivery and complete Installation and Special Conditions of Contract contained herein with this tender document. I/we hereby agree to supply the stores conforming to the tender specifications incorporated in ANNEXURE I of the tender document and also agree to abide by your General Conditions of all Contracts and Special Conditions of Contract contained in the ANNEXURE I of the Tender document.

You will be at liberty to accept any or more of the items of stores offered by us and I/we shall be bound to supply you the stores as may be specified in the Purchase Order/Contract. I/We hereby agree to keep the price valid for your acceptance for a period of 30 days from the date of opening of Part-II (Financial bid) of the tender.

I/We are also enclosing herewith all the leaflets catalogue etc. pertaining to the stores offered.

Yours faithfully

Stamp and Signature of the Tenderer

ANNEXURE III TENDER FORM PART-II (FINANCIAL BID)

PART-II (FINANCIAL BID) OF TENDER NO:

Last date for receipt:

Due date for opening Part –II (FINANCIAL BID):

Tenderer's Offer No:

Date:

From,

M/s.....
.....

To,

The Hon. Director,
School of Food Science and Technology,
M. G. University,
Kottayam, Kerala, India

Dear Sir,

In response to your invitation and as per your tendering and contracting conditions, the prices applicable for the scope of supply contained in ANNEXURE-I (TECHNICAL BID) of our tender are indicated in the format at annexure "A" to this tender.

We hereby agree to keep the price valid for your acceptance for a period of 30 days from the date of actual opening of Part-II (FINANCIAL BID) of the tender.

Yours faithfully,

Stamp and Signature of the Tenderer