INFORMATION BOOKLET
ON
QUOTATION CALL NOTICE
(Ref: 2382/FSTN, 12.022)



PG DEPARTMENT OF FOOD SCIENCE TECHNOLOGY
AND NUTRITION
SAMBALPUR UNIVERSITY
JYOTI VIHAR, BURLA-768019
ODISHA

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DETAIL QUOATATION CALL NOTICE (DQCN)

1. Request for Quotation (RFQ):

- The Coordinator, P.G Department of Food Science Technology and Nutrition on behalf of Sambalpur University invites sealed quotations in Two bid system i.e., Part-I General & Technical and Part-II Financial Bid from the interested Manufacturers/Authorized dealers/Registered firms to Supply, Installation, Testing & Commissioning of various Lab Equipment's & Accessories as stated in Annexure-I for the, P.G Department of Food Science Technology and Nutrition, Sambalpur University, Odisha.
- The RFQ document can be downloaded from the official web site of Sambalpur University i.e., www.suniv.ac.in up to 5.00 P.M of 06/03/2025.

2. BID Schedule and Address:

The detailed schedule of bid submission to Sambalpur University and its address is given as below:

Last date and time for submission of RFQ	5.00 P.M of 06/03/2025
Date and time of opening of Technical Bid	5.00 P.M of 06/03/2025
Date and time of opening of Financial Bid	10.00 A.M. of 11/03/2025
Name and address of the officer inviting	То,
quotation	"The Coordinator, P.G. Department of
	Food Science Technology and Nutrition,
	Sambalpur University, Jyoti Vihar-768019,
	Sambalpur, Odisha."

3. Deposit of Ernest Money Deposit (EMD): -

- The bidder has to submit 2% of quoted price in the form of Demand Draft issued from any nationalized bank drawn in favour of "The Coordinator, P.G Department of Food Science Technology and Nutrition, Sambalpur University" payable at Jyoti Vihar, Burla shall be submitted along with quotation documents. The EMD should remain valid for a period of forty-five days beyond the final bid validity period. The quotation without EMD shall be rejected out rightly.
- A bidder's EMD will be forfeited if the bidder withdraws or amends its/his tender or impairs or
 derogates from the tender in any respect within the period of validity of the tender or if the
 successful bidder fails to furnish the required Performance Security within the specified period.
 The decision of the Competent Authority of Sambalpur University in this respect will be final
 and binding on all the stake holders.

4. Exemption of Earnest Money Deposit (EMD):-

• Earnest Money is to be submitted by the all bidders except Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and

Medium Enterprises (MSME) or is registered with the National Small Industries Corporation (NSIC).

5. Scope of work: -

- This involves Supply, Installation, Testing & Commissioning of various Lab Equipment's & Accessories, as stated in Annexure-I for the, P.G Department of Food Science Technology and Nutrition, Sambalpur University.
- Specifications of the above instruments are mentioned in the document vide **Annexure-1**.
- The cost of delivery is in the scope of the bidder. No separate payment shall be made in this regard. Also, in case of any breakage during delivery, then the bidder shall ensure that the instruments are replaced at the bidder's cost. In case of any instruments is not functional during the warranty period then the cost of repair or replacement will be in the scope of the bidder at no additional cost to Sambalpur University.

6. Due Diligence: -

- The Bidders are expected to examine all instructions, terms and specifications stated in this RFQ.
- The Bid shall be deemed to have been submitted after careful study and examination of this RFQ document.
- Failure to furnish all information or submission of a bid not responsive to this RFQ will be at the Bidders' risk and may result in rejection of the bid. Sambalpur University is not bound to disclose the grounds for rejection of Bid. The decision of the Sambalpur University regarding the final declaration of the successful Bidder shall be final.

7. Eligibility Criteria: -

- The invitation to bid is open to all Bidders who qualify the Eligibility Criteria as given below.
 Failure to provide the desired information and documents may lead to disqualification of the Bidder for the next round.
- The Bidder should either be manufacturer of the instruments or should be an authorized dealer/authorised distributor of company and having a registered office in India. (The bidder should provide all necessary supporting documents to substantiate the above respective claims.)
- Either the Manufacturer Company as per RFQ or dealer/distributor duly authorised by the Manufacturing Company shall be eligible to participate in RFQ.
- The Bidder should not be currently blacklisted by any Government / Government agency/ Bank/ institution in India or abroad. The bidder should provide declaration to this effect on their company's letterhead.

Chapter-2

INSTRUCTION TO QUOTATIONERS (ITQ)

- 1. The bid proposals are to be sent in two separate sealed envelopes subscribed with:
- a) Technical bid along with EMD, and
- b) Financial bid.

These two envelopes should be kept in one sealed envelope duly subscribed with tender notice detail and addressed to

Tender For "Supply, Installation, Test	ing & Commissioning of various Lab					
Equipment's & Accessories, as stated in Annexure-I for the, P.G Department of Food						
Science Technology and Nutrition, Sambalpur University".						
From	То					
Mr./Mrs	"The Coordinator, P.G. Department of					
Address	Food Science Technology and Nutrition,					
Contact No	Sambalpur University, Jyoti Vihar-					
Email id	768019, Sambalpur, Odisha."					

The price bid of those firms will only be opened who are found to be technically qualified after evaluation. The bids submitted without EMD will be summarily rejected and no further communication in this regard will be entertained. The authority reserves the right to accept/ negotiate/ reject any or all the tenders and modify the conditions/ specification at any stage without assigning any reason thereof.

- 2. Either the Manufacturer Company as per RFQ or dealer/distributor duly authorised by the Manufacturing Company shall be eligible to participate in RFQ.
- 3. The successful bidder shall give an undertaking to repair/replace the defective materials within the guarantee/warranty period of minimum one year.
- 4. The rate quoted should be valid for one year & supply order will be issued as per requirement. Provided, if during the period of one year or during delivery of material, any reduction of price by the Company shall be applicable against supply order.
- 5. The contract period of the bid is meant for a period of one year.
- 6. The Sambalpur University shall have the right to terminate the contract on the ground of improper performance and violation of the terms of the contract without assigning any reason by giving 15 days prior notice.
- 7. Any conditional and in completed bid is liable for rejection.
- 8. No claim shall be entertained towards any expense made by any bidder for submission of the bid in case of cancellation & rejection.
- 9. Letter of authorization for representing the manufacture to sign the bid document should be enclosed along with the bid document.

- 10. Bids containing overwriting, additions, alteration, erasure, obliteration and other discrepancies should be properly attested.
- 11. This DQCN forms, part of the agreement and each page of the DQCN are to be signed by the bidder as a token of acceptance of the terms and conditions of the notice inviting tender (NIT).
- 12. All bids received will remain ordinarily valid for a period of 120 days from the date of receipt of bids.
- 13. The successful bidder shall submit bill in triplicate along with guarantee certificate for trouble free and satisfactory service for a minimum period of one year in case of fitting.

14. DELIVERY

The delivery of the consignment(s) is/are required to be made within 04- 06 weeks from the issue of the Purchase Order. Delivery of the instruments shall be made at P.G. Department of Food Science Technology and Nutrition. Sambalpur University, Jyoti Vihar-768019 unless otherwise specified. The price shall be inclusive of all taxes, transportation cost and cost of installation/commissioning, trial operation, comprehensive training and clearance charges.

15. PRICES:

The price should be quoted on Door Delivery up to P. G. Department of Food Science Technology and Nutrition. Sambalpur University, Jyoti Vihar-768 019 basis including applicable Taxes, Charges etc. The bidder shall also show the amount of each item, the total of each section and the grand total of the whole tender.

- 16. The Sambalpur University shall deduct the statutory deduction as applicable under the income Tax Act 1961, Odisha value added Tax Act 2004 and may other statutory deductions.
- 17. All the documents furnish by the bidder are subject to verification from the issuing authority in case any manipulation is found in the EMD will be forfeited and steps shall be taken for blacklisting the bidder.
- 18. In case of any dispute in the meaning of specification, description of items, rates, condition of agreement or due to errors/ typo-graphical errors, omissions, the decision of the bid accepting authority of Sambalpur University with due recommendation of the Officer in charge of work is final and binding to the firm.
- 19. Service tax and any other Government tax as applicable from time to time will be borne by the bidder.
- 20. The bidder should quote single rate for each item according to required specification wherever mentioned. More than one rate for particular items will be summarily rejected. The scheduled appended to the Tender notice should be filled up and signed. No other annexure than the scheduled will be entertained.
- 21. The quotationer has to provide the following information in a separate sheet for the instruments/equipment-

- a) Warranty period details (extended warranty/AMC period separately).
- b) The cost of recommended essential spares.
- c) List and cost of consumables/standards etc., required from time to time with all necessary details.
- d) AMC after warranty period (to be shown separately).
- 22. In case of any dispute arising out of the contract, the matter shall be referred to the Registrar, Sambalpur University, whose decision shall be final.
- 23. During the warranty period or later whenever the firm is called upon to attend to the rectification of the defects/faults in the consignments, the firm shall attend to the repair work within 48-72 hours. They should render timely back up service whenever called upon. A certificate to the effect should be attached to the tender.
- 24. A certificate to the effect that instruments/equipment supplied is fully operational and no additional accessory or spare is required to make the instruments/equipment run should be issued along with the delivery challans/invoice. The Coordinator, P.G Department of Food Science Technology and Nutrition Sambalpur University reserves the right to refuse payment in the event of not furnishing this certificate at the time of supply.
- 25. The Quotationer must have a valid GST registration certificate.
- 26. Quotationers are required to submit test certificates of all the instruments.
- 27. Quotationers are required to submit guarantee/warranty certificate for a minimum period of **one** vears.
- 28. The payment will be made within 30 days after completion of the successful installation, commissioning, demonstration of the whole system, imparting training.
- 29. **INSTALLATION:** Installation of the supplied goods/accessories to be done by the successful bidders at our site with your instruments, accessories, tools & tackles and by deploying appropriate manpower as required, at your own cost.
- 30. **TRAINING:** Training on operation, routine maintenance shall have to be provided to the Scientist / Student /Technicians after the installation and commissioning at our site as needed and when requested to do so.
- 31. BANK CHARGES: NEFT/RTGS/Out Station Bank Charges etc. to the beneficiary account.
- 32. **SUPPORTING EQUIPMENT:** If equipment will require indigenous supporting instruments/accessories (computer, printer, online UPS etc.) at the time of the installation, the same should be quoted as per the specification mentioned in the Annexure I.
- 33. **SITE PREPARATION**: The supplier shall inform the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to

ensure its timely installation and smooth operation thereafter. The supplier shall visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre- installation requirements.

- 34. **DOWNTIME:** During the warranty period if the problem is not resolved within three working days, a penalty of 1% of the cost of instrument per week will be imposed. Downtime will be counted from the date and time of the filing of complaint within the business hours.
- 35. **AFTER SALES SERVICE:** The system must be attended within 48 hrs of reporting of any technical problem so that machine down time is minimized. In case the Equipment/System remains non-operational for more than five (05) working days then warranty period will be extended for the equipment period for which Equipment/System remained non-operational. Warranty extension in such case shall be done without prejudice to any Term & Condition of the contract.
- 36. Sambalpur University has all the right to have the tests of the supplied goods if needed through an independent Agency at any moment of time and the cost may be borne by the Firm.
- 37. The Intending Quotationer is required to submit EMD of 2% of quoted price in shape of Demand Draft issued from any nationalized bank drawn in favour of "The Coordinator, P.G Department of Food Science Technology and Nutrition, Sambalpur University" payable at Jyoti Vihar, Burla shall be submitted along with quotation documents. The MSME/NSIC registered firms are exempted from the 2% EMD. Further, the supplier awarded for the supply of laboratory equipment's has to submit the bank draft of 5% of quoted price towards PBG drawn in favour of **The Coordinator, P.G Department. Of FOOD SCIENCE TECHNOLOGY AND NUTRITION, Sambalpur University payable at SBI Jyoti Vihar Branch (code No.6672), Burla.**
- 38. The bids should reach to "The Coordinator, P.G. Department of Food Science Technology and Nutrition, Sambalpur University, Jyoti Vihar-768019, Sambalpur, Odisha" by speed post / registered post/Courier only.
- 39. The technically qualified quotationers shall be eligible for opening of financial bids.
- 40. All the pages of the Bid shall be signed by a person or persons duly authorized to sign on behalf of the Bidder.
- 41. The intending quotationer shall quote their rates (in Rs.) for all the equipment's including all taxes and statutory dues in financial bids as given in Annexure-III.
- 42. Once the rate is approved by purchase committee, supply order is placed to the successful tenderer for supply of the equipment/instrument. The decision of the Purchase Committee shall be final and binding.
- 43. The authority reserves all the rights to cancel the process at any time without assigning any reason thereof. Any dispute arising in this case shall come under the jurisdiction of courts of Sambalpur.

Chapter-3

Technical Specification of A. Texture Analyzer, B. Automatic Dietary Fibre Estimation
System, C. Table top Laboratory mini Spray Drier, D. Accessories for Hunter Lab Colorflex, E.
Nitrogen Evaporator, F. Fat Analyzer, G. Double beam UV-VIS Spectrophotometer

A. TEXTURE ANALYZER

Features:

- ❖ It should quantify texture in force (N/kgf/lbf) to evaluate the textural properties of food.
- ❖ It should have simple operation: Simply choose desired food (your test sample) or a test standard from the list on its touch screen, then it shows recommended measuring conditions.
- ❖ The test results can be seen graphically using software which should be included in it.
- ❖ It should be provided with a touch screen with all the types of food list and measuring parameter details.
- ❖ It should be able to analyse all the food available in the table.

Sweets	Japanese sweets	Dairy products	Butter	Noodles	Bakery	Rice	Meat
Cake, pie, jelly, jam, snack	Manju, rice cracker	Cheese, yoghurt	Butter	boiled noodles, Noodle dough	Bread, cookies, biscuit, donut, kneaded dough, crackers	Un cooled rice, cooked rice	Raw meat, cooked meat
Fish and seafood	Paste	Beans	Nuts	Eggs	Vegetables	Mushrooms	Fruits
Cooked fish, raw fish	Fish sausage, Gravy mix paste	Cooked bean, tofu	Peanut/alm ond/ cashew	Egg shell, raw egg, boiled egg	Carrot, Cucumber, pepper, potato	Mushroom	Apple. Grape,

- ❖ The data management should be easy using a USB flash drive and software.
- ❖ It should have the provision of data storage.
- ❖ The software should be able to show test results graphically.
- ❖ The force distribution can be compared visually.

[Specifications]

Capa	city	5N/50N/100N		
Resolution		5.000N/50.00N/100.00N		
A coursey Force		±0.2%F.S±1digit		
Accuracy	Displacement	0.1mm±1digit		
Force		N / Kgf / lbf		
Unit	Displacement	mm / inch		

Indication	Force	4-digit		
	Displacement	0.001mm (as the minimum resolution)		
Sampling rate		1000Hz		
Sample maxi	mum height	70mm		
Table trave	l distance	Max.100mm		
Spe	ed	0.1 to 10.0mm/sec		
Functions		Should have 3 types of measuring method (Food/Standard), (Program, Manual), Add-a-favorites for measuring conditions (Max.6 conditions), Start-trigger function, Overload preventing function		
Ontont		USB, USB flash drive		
Output		OSB, OSB Hash drive		
Accessory		Should include Graphing software, Power cable, USB cable, USB flash drive, Attachment (4 kinds), Fuse, Inspection certificate		
Operating environment		Temperature: 0 to 40 degree Celsius Humidity: 20 to 80 %RH		
Weight		Body: 7.7kg Control Panel: 0.8kg		
Size		185 x 300 x 400 mm (except its control panel)		

B. AUTOMATIC DIETARY FIBRE ESTIMATION SYSTEM

• A. ENZYMATIC DIGESTION SYSTEM WITH WATER BATH SHAKING

- Water Bath tank should be made of Stainless Steel with Plate to hold shaking clamps
- Heater should be immersion Heater with thermostat (temperature range up to 110 degree Celsius) of 1500 Watts
- Temperature controller should be microprocessor based PID Digital Temperature Controller with Auto tuning facility
- Timer should be inbuilt digital timer: 0 to 99.59 Settable in Hrs. Mins & Secs
- Temperature Range should be Ambient to 100° C
- Temperature Accuracy should be Increments of 1°C
- Temperature & Timer Setting should be Feather touch membrane keys
- Stirring should be 0 to 120 strokes / minute continuously variable designed with Heavy duty permanent magnet DC motor with speed control designed for uniform noiseless reciprocal motion. Can operate continuously 12 -24 hrs. With stirring involving reciprocal shaker
- Speed setting should be Rotary potentiometric knob for continuously variable speed
- Speed Indication should be Digital Display with LED indication
- Enzymatic digestion vessels (Beakers) seated on SS clamps 4 nos.
- Conical Flasks should be 4 Nos of 250 ml each.
- Inbuilt Safety features with CE to fulfill GLP Norms: Over temperature protection, Auto error Indication, Sensor break protection, Heater cut off feature with buzzer indication and alarm, Acoustic signals with visual display, Auto tuning facility, Anti vibration mount, Auto stop & Start feature
- Structure should be Acid prone parts made of stainless steel with Epoxy powder coating. Both tank and platform made of stainless steel of thickness SS 316 grade. Other parts of MS powder coated with anticorrosive epoxy finish.

• B. DIETARY FIBER FILTERATION UNIT

- Filtration Unit should be designed to filter the enzymatic digested solution
- Crucible should be Sintered Silica Glass Crucible (4 Nos.) of 70 mm height each.
- Pore Size should be P1 grade porosity disc (Optional P0/P2 Porosity Disc)
- Should provide 4 Nos. of Holders and Crucibles
- Suction Pressure Pump should be Vacuum suction for rapid filtration
- Should provide 4 Nos. Fixed filtration glass chamber in the filtration module.
- Sample loading should be Individual sample loading with independent mechanical control
- Uniquely designed residue collection vessel
- Counter pressure option with reverse air stream
- Should have 4 mechanical spring loaded valves for sample loading
- Should have 4 individual valves for filtration of soluble fibre
- Should have 4 common valves for filtration of insoluble fibre
- Should have 4 individual switches for Air pump for reverse air stream
- Should have 4 individual valves for drain of soluble fibre
- Should have one common valve for drain of insoluble fibre
- Includes Essential Accessories like Spray Bottle, Crucible Rubber, Extractor Rubber, Teflon Bush & Nylon Bush
- It should be operated with 230V, 50 Hz. AC Mains
- The instrument shall strictly confirm to the specifications with relevant brochure and Images/Photograph.

- The OEM should have proof of atleast 25 installations of long term users using equipments for more than a period of 10 -15 years showing longevity of operations
- The OEM should have atleast 25 installations in Dietary Fibre Estimation System in India with proof of User list.
- The bidders/OEM must show online demonstration of the quoted system during technical evaluation of the bids. This is an essential requirement.
- The OEM should have atleast Rs.5 Crore average Turnover in last three financial years

C. SPECIFICATIONS FOR LABORATORY MINI SPRAY DRYER

Table top Laboratory Mini Spray Dryer:

- The mini laboratory scale Spray Dryer must be capable to spray dry as low as 20 ml of liquid matter. The Spray/Hot air contact system should be based on co-current flow system using either air or nitrogen as spray gas and capable to achieve 1 to 25 µm fine particle. The Spray Dryer must have the Evaporation Capacity of 1000 ml of Water per hour.
- Designed for use with aqueous solutions.
- Two fluid nozzle
- Glass cylinders For Aqueous (Sideways Outlet)
- Inlet filter for prevention of the air entering the equipment from contaminants such as particles of dust, pollen or soot
- Outlet filter for optimal protection of the aspirator from fine particles not separated by the cyclone.
- Built-in nozzle cleaning device for automatic cleaning of the nozzle tip. The user can set the frequency of the cleaning device.
- The Spray Dryer should have the maximum temperature input of 220 deg C.
- The Spray Dryer must have the Heating Capacity of 2300 Watt with temperature control accuracy of +/-3⁰ C. The Spray Dryer must have the facility for inlet and outlet temperature display and control through selector switch for inlet temperature.
- The liquid sample feeding must be through high precision quantitative peristaltic pump of variable flow rate. The spraying must be via two fluids Spray Nozzle with diameter of 0.7 mm standard.
- The Spray Dryer must have the safety feature like overheat warning, protection against overloading, power cut off against overheat. The Cyclone & Dryer Chamber and product vessel must be made up of super hard 3.3 Borosilicate glass.
- The Spray Dryer should have the display & control of parameter like inlet temperature, outlet temperature, atomizing air pressure, hot air flow, drying air volume, sample feed aspirator, overheat warning,, etc.

D. ACCESSORIES FOR HUNTERLAB COLORIMETER

- a) Ring and Disk Set: **02-4579-00**For use in the glass sample cup for sample presentation of liquids, powders, granules and pellets.
- b) Glass Sample Cup: 64mm (2.5 inch)- **04-7209-00** Optically clear glass cup for sample presentation of liquids, powders, granules and pellets.

E. NITROGEN EVAPORATOR

NITROGEN EVAPORATOR – (50 Sample)

Concentrating multiple samples by using nitrogen gas 50 samples

SPECIFICATIONS:

Technology: Vortex Sharing Technology All nozzles and tank Teflon coated 1 years' warranty CE Marking Special design

Display: LED Display for TIME & TEMP Controlled: Fully Microprocessor based Sample capacity: 50 Nos. Gas Line: 5 Nos.

* Auto Cut off Sensor for process Timer, Heating gas and Time Range: 15 sec to 10 hrs

Temperature range: Ambient to 99°C (thermal cutout for safety) Temperature set-up / down arrow keys (1°C)

Start/stop: Green LED indication when process is On

Gas stations: 5 Nos. with LED indication

Gas Pressure range: 0 to 30 up to 100 PSI (approximate) Power supply: 230 V AC / 3Amp

Error indication: LED indication with Buzzer

Certifications: ISO 9001: 2008 & CE Certified Gas stations: 5 Nos. with LED indication, gas can be turn on each of independent manifolds when working with samples

Heater: Internal heaters, adjustable from ambient to 99°C

Specially Designed Silicon Self-Adhesive Heater fitted at the bottom side of the water tank. Pneumatic Fitting Janatics & Parker Make are using Water tank, Test tube Rack & Nozzle Manifold Make SS 316Well efficient & adjustable ventilation.

Gas Path Transparent Non-Breakable Tubing.

Nitrogen Evaporator: A sample concentrator is a fast and convenient way of concentrating multiple samples at once.

Utilizing a simple gas delivery system, the sample concentrator passes an inert/ N2 gas over the surface to samples via stainless steel needles.

This in combination with the heat from the N2 gas puring below produces ideal conditions for fast, efficient evaporation.

S.S. 316 Rack of 10ml test tube and 5 ml test tube.

Supply of 10 ml test tubes (100 pcs) and 5 ml test tube (100 pcs)

Standard fittings like Exhaust Pipe, Nozzle Caps, PU connector, PU Tube, Remover, Power Cord etc.

Supply of Nitrogen gas cylinder (2 No.) with SS regulator (1 No.)

2 Years Warranty

F. FAT ANALYSER TECHNICAL SPECIFICATION

Technical specification and standards

- Six individual operating positions
- 7" touch screen display with auto calculation, user friendly menu interface
- Microprocessor controlled automatic boiling, rinsing and recovery process
- Hassle-free loading of beakers provided with smooth lifting mechanism
- Beaker solvent capacity of 150 ml
- Different energy operating mode available from the range of 1 to 10
- Solvent recovery tubings and connectors of PTFE
- Manual and Automatic Vacuum for recovery of solvent in recovery bottle
- Vacuum pump for recovery of solvent with the flow rate of 380 L/hr
- Sealing made up of fluorinated, carbon-based synthetic rubber
- Provided with NRV to eliminate pressure within the condense
- Multiport cap for the easy removal of recovery bottle
- Easy cleaning of condenser provided with easy removal clamp
- LOD of 0.1%
- Solvent recovery of ~ 90 % with bottle has capacity of 2 liters
- Two solenoids provided for equal distribution of cooling water for efficient rinsing
- Flow sensor detects inadequate flow to the condenser for auto shutdown
- Cooling water flow rate of 1.4 L/min at 15°C
- Unit power input of 1200 W at 230 V

G. TECHNICAL SPECIFICATIONS FOR DOUBLE BEAM UV VIS SPECTROPHOTOMETER

Microprocessor based UV-VIS Spectrophotometer with high resolution touchscreen display, for operation on 220V / 50Hz.

- Stand-alone operation as well as complete control through PC with PC software supplied as standard
- True double beam optics with aberration corrected concave blazed holographic grating in Czerny Turner mounting for high energy throughput and high quality monochromatic light
- Wide wavelength range of 1,100 nm to 190 nm
- High resolution 1 nm spectral bandwidth over entire wavelength range
- Wavelength setting and display in steps of 0.1nm
- Wavelength accuracy of ± 0.1 nm for D_2 spectral line
- Wavelength repeatability of + 0.1nm
- Wavelength Slew rate: approx. 29,000 nm/min
- Variable wavelength scanning speed: ≥ 3,000 nm/min to 2 nm/min

29,000 nm/min when survey scanning

- Ultra low stray light of <0.02%T at 220nm with NaI filter
- Wide Photometric range of -4 to +4 Abs and 0 to 400 %T
- High Photometric Accuracy of + 0.002 Abs at 0.5 Abs
- High Photometric Repeatability of Less than ± 0.0002 Abs at 0.5 Abs
- Baseline stability: < 0.0003 Abs/Hr (700 nm, one hour after light source turned ON)
- Baseline flatness: $< \pm 0.0006$ Abs (1100 to 190 nm, one hour after light source turned ON)
- Ultra low Photometric noise of < 0.00005 Abs (700 nm)
- Dual source high intensity Tungsten-Halogen and Deuterium lamp with automatic changeover
- High sensitivity matched pair Silicon Photodiode detector
- 4 USB ports or more for high speed PC and printer connectivity, data storage and transfer through USB pen drive
- Guaranteed compliance with all Pharmacopoeia requirements
- Built in validation program, diagnostic and security functions
- The instrument should provide network access via wireless connectivity. Data can be transferred to a PC via a network
- The instrument should have provision for Bar code reader and key board entry function: sample names and numerical values can be entered by a bar-code reader or from the keyboard
- The instrument should have Sleep mode and wake up function: Analysis can start the instant the user arrives at the laboratory. The instrument should require no time to warm up.
- All operational modes as standard Photometric; Spectrum; Quantitation; Kinetics, Time Scan, DNA and Protein Quantitation in stand alone and PC mode. Additionally Multi-Component measurement available in stand-alone mode.
- Large sample compartment compatible with wide range of accessories.
- Must supply one pair of 10mm path length Quartz Cuvettes of 3.5 ml volume as a standard supply
- 12 months warranty from the date of installation.

ANNEXYRE-II

Sl	Description	Bidder's Remarks
No.		
1.	Name of the Supplier/Firm/Company	
	Name of contact person with details and mobile number	
2.	Full address	
3	E-Mail address	
4	Telephone/Fax Number	
5	EMD@2% of quoted value (Details of DD no) and Date	
6	Self-Attested photocopy of GST Registration certificate	
7	Self-Attested photocopy of Registration/ Distributorship/	
	Dealership certificate	
8	Letter of authorization for representing the manufacturer to sign the	
	bid documents if any.	
9	Undertaking (in Letter head) for replacement of defective	
	materials/parts.	
10	Self-declaration (in Letter head) about the Guarantee/Warrantee/	
	AMC period to be s to be offered by the Manufacturer Company.	

(Note: The bidder has to submit the documentation evidence as proof of above for qualifying of technical criteria')

Certified that:

- 1. I/We have read the terms and conditions governing this work of the university and hereby agree to abide by them.
- 2. The agency (or any of its members) has neither been black listed by any central or state government organisations in the last five years or any litigations pending with any of this departments or courts of law.
- 3. The information provided by us as above regarding details of firms is correct and nothing has been concealed. In case any of the information is found to be incorrect at later stage, our bids may be summarily rejected.

Name and Signature of Bidder with seal of the firm/company

ANNEXURE-III

Name of the Work: Supply, Installation, Testing & Commissioning of Lab Equipment's & Accessories for the, Department of Food Science Technology and Nutrition, Sambalpur University.

Sl. No.	Item Description	Quantity (In No's)	Unit Price (In Rs.)	GST Applicable	Total Price (In Rs.)		
				(In Rs.)			
(1)	(2)	(3)	(4)	(5)	(6) = (4) + (5)		
A. TEXTU	JRE ANALYZER						
B. AUTO	MATIC DIETARY FIBRE	ESTIMATION	ON SYSTEM				
C. TABLE	E TOP LABORATORY M	INI SPRAY I	ORIER				
D. ACCES	SORIES FOR HUNTER L	AB COLOR	FLEX				
E. NITRO	E. NITROGEN EVAPORATOR						
F. FAT ANALYZER							
G. DOUBLE BEAM UV-VIS SPECTROPHOTOMETER							

(Note: The rate quoted in the above financial bid must be inclusive of GST and all other taxes if any, delivery charges to Sambalpur University)

Name and Signature of Bidder With seal of the firm/company

Coordinator, P.G Department of Food Science Technology and Nutrition Sambalpur University