

KERALA UNIVERSITY OF FISHERIES AND OCEAN STUDIES

DoR/9767/17

Panangad, Dated: 22/11/2017

TENDER NOTICE

Sealed Competitive tenders are invited for the supply and installation of **Lab Instruments for the Centre of Excellence-“Food Processing Technology** as per the specifications attached.

1. pH Meter
2. Autoclave
3. Incubator

The rates quoted should be for delivery and installation of the above items at the KUFOS Head Quarters.

The envelope containing the tender should bear the superscription **“Tender for the supply and Installation of Lab Instruments for the Centre of Excellence-“Food Processing Technology :- DoR/9767/2017”** and should be sent to the Director of Research, Kerala University of Fisheries and Ocean Studies, Panangad, Kochi – 682 506, Ernakulam District. Intending firms/individuals can submit their bids in the tender form which can be downloaded from the official website of KUFOS www.kufos.ac.in More details can be obtained from the office of Director of Research on all working hours. An amount of Rs.800/- as tender fee and an amount of Rs.4000.00 as EMD should be submitted along with Tender as DD drawn in Favour of Finance Officer KUFOS payable at SBI Vyttila.

The rate quoted should be firm and inclusive of all taxes and supply and installation at the Head Quarters, KUFOS at Panangad. Period of firmness during which the rates would be firm is 60 days from the date of supply orders

Late quotations will not be accepted under any circumstances. The Quotations will be opened in the presence of the bidders or their authorized representative who may be present at the venue.

Last date & time for receipt of quotation	12.12.17	Upto 11 a.m
Date & time of opening of quotation	12.12.17	at 11.30 a.m.

All the terms and conditions applicable to University/Government quotation are admissible to the quotation also. Right to accept the quotation in full or in part or to reject without assigning any reason whatsoever is reserved with the undersigned.

**Sd/
REGISTRAR**

Specifications

1. pH Meter

pH/mV Bench meter with Electrode stand, 9615S-10D glass-body refillable pH electrode, 502-S (pH 4.01, 7.00, 10.01, 3.33M KCl - 250ml each)

Optional

Micro Tough electrode

Features:

- Automatic pH calibration up to 5 points using USA or NIST buffers
- Switchable pH resolutions - 0.1, 0.01 pH
- Offset and slope display
- Automatic / Manual temperature compensation and temperature calibration function
- Auto-Hold / Auto-Stable measurement
- Built-in memory can store up to 500 data
- Custom black and white static LCD
- RS232 output for connecting to a GLP/GMP compatible printer or computer
- Security (password setting)
- 2 years meter warranty

pH Range 0.00 to 14 pH

Resolution 0.1, 0.01 pH

Accuracy ± 0.01 pH

Calibration Points Up to 5

Buffer Options USA, NIST

ORP Range ± 1999.9 mV

Resolution 0.1 mV

Accuracy ± 0.2 mV

Temperature Range -30.0 to 130.0°C

Resolution 0.1°C

Accuracy ± 0.4 °C

Calibration Option -Yes

Memory Data -500

Auto-Hold / Auto-Stable Yes

Offset / Slope Display -Yes (Independent acid and alkaline slopes depending on calibration)

Electrode Status -On screen display

Diagnostic Messages -Yes

Display Custom black and white static LCD

Inputs BNC, phono, DC sockets

Output RS232

Power Requirement -AC adaptor, 100-240V, 50/60Hz

Weight 500g

OPTIONAL

Micro Tough electrode with built in ATC for 50 microliter samples

This pH electrode with temperature compensation sensor can take measurements from samples as small as 50 μ L.

- Compatible with extremely small containers such as micro tubes etc.
- The temperature sensor is placed next to the response section for high-speed temperature response.
- Waterproof

2. FULLY AUTOMATIC TOP LOADING AUTOCLAVE

Fully Automatic Top Loading Autoclave with capacity 50-60 Lit

Single lever lock for lid with single hand opening.

Working chamber dimension:350x550mm

Carrier dimensions: 400 x 500 (1)

Heater Power: 2.25 kW

Temperature Range: 122°C

Operating Pressure: 16 Psi/110.3 kPA

Automatic purging and exhaust.

Safe and sturdy chamber manufactured to ASME standards in SS304

Epoxy coating on steel exterior

Low water detection.

Microprocessor Based Control ensures repeatability & a high accuracy.

Spring loaded safety valve for over pressure.

Independent safty for Over temperature.

Pressure interlock on door.

CE Certified

3. INCUBATOR (2 No.s)

- Bacteriological incubator bottom headed (thermostatic)
- Double walled chambers inner made of SS steel and outer made of mild steel sheet duly powder coated with thick glass wool insulation
- Temperature controlled by thermostat
- Working temperature =+5°C to +80°C with an accuracy of $\pm 1^\circ\text{C}$
- No of trays 3
- Power 250W
- Capacity 125 litres
- Microprocessor based digital temperature controller
- With an air circulating fan