

**SCHOOL OF ENVIRONMENTAL SCIENCES  
MAHATMA GANDHI UNIVERSITY  
P.D HILLS P.O, KOTTAYAM - 686 560  
(VERC PROJECT)**

**QUOTATION NOTICE**

No.SES/MGU/VERC/E/2016-17

Dated : 22<sup>nd</sup> May 2017

Sealed quotations in original in Indian Currency/foreign currency including all taxes are invited for the supply of following items for Vembanad Environmental Research Centre (VERC), School of Environmental Sciences, Mahatma Gandhi University, Kottayam under the Project “Environmental Monitoring and Sustainable Utilisation of Vembanad Wetland Ecosystem”. The cover containing the quotations should be superscribed with **Quotation for the supply of Equipment for VERC project** and the same should be reached to the Director, School of Environmental Sciences, Mahatma Gandhi University, P.D.Hills, Kottayam – 686 560 on or before **06.06.2017 at 3 pm**.

Sl. No.	Equipment	Specification
1	Standard Water Sampler acc. to Ruttner	Sampling tube- Plexiglass Metal parts: Nickel-plated brass Capacity - 2L Messenger for ropes up to 6mm. Built-in thermometer - range -2 to +30°C Dimension - 10 cm x 75 cm Sample Retrieving Method - Tap Cock Lids with metal Optional : messenger for ropes up to 6mm
2	Water sampler for Trace level contaminants	Material - Holder device: Stainless steel Headpiece: PTFE Hoses: Silicone Sampling bottles: 500ml Glass Bottle Plastic Covered Messenger  Operational Depth - Max 100M Sterilizable / autoclavable sampler Required Spares like Glass Bottles 500 ml  - Plastic Covered Messenger for ropes up to 6mm  Optional : Plastic Covered Messenger for ropes up to 6mm

3	Biological bottom dredge	<p>Rectangular stainless steel frame - Size of 50 x 20 cm</p> <p>Proper protection for Net bag</p> <p>Net Bag Size – minimum 50 cm long and 6mm Mesh Size</p> <p>Design Type: Foldable</p> <p>Weight – Not more than 10Kg</p>
4	Centrifuge	<p>Changeable head</p> <p>(50, 15, 2.5 ml)</p>
5	Plankton Net for qualitative collection,	<p>100 cm length, standard mesh size 55 microns</p> <p>Diameter of aperture: 40 cm</p> <p>Optional : Spare net bag; spare net bucket; spare messenger</p>
6	Set of Macrozoobenthos Sieves	<p>Light weight plastic material Mesh size 2000µm, 1000µm, 780µm, 500µm</p> <p>including drain vessel</p> <p>opening of the bowls diameter - approx. 38 cm</p>
7	Mechanical Flow Meter with back-run stop	<p>0.3 m per revolution of Hydraulic pitch;</p> <p>Range of counter - 99999 revolutions;</p> <p>Impeller diameter &gt; 70 mm;</p> <p>Material - Plastics, titanium;</p> <p>Calibrated</p> <p>Design - Free-flushing design</p>
8	Counting Chamber for zooplankton	<p>Dimensions - 40 x 70 (mm), 9 ml</p> <p>Material - Plexiglas</p> <p>Break-resistant&amp;Optimal transparency</p>
9	Combined Plate Chamber	<p>Base Plates and 1 Handling Support, complete set with one Cylinder 10 ml, 50 ml and 100 ml each, three Cover Plates, 50</p> <p>Material - Plexiglas, glass, chrome-plated brass;</p> <p>Dimensions of Plexiglas plate - 43 x 120 mm</p> <p>Diameter of Plexiglas plate alignment - 39 mm and 42 mm</p> <p>Inner diameter of sedimentation cylinder - 26 mm;</p> <p>Height of sedimentation cylinders - approx. 15 mm for the 10 ml version,</p> <p>approx. 92 mm for the 50 ml version,</p> <p>approx. 185 mm for the 100 ml version</p> <p>Must be Leakage Free and corrosion resistant</p> <p>Optional : accessories</p>

10	Oven	<ul style="list-style-type: none"> <li>Capacity 130 – 150 Litre</li> <li>Temp range: +5°C to 250°C.</li> <li>Control accuracy: <math>\pm 0.5^\circ\text{C}</math>.</li> <li>Minimum 2 No. of Shelves</li> <li>Digital PID temperature controller with timer, alarms and auto tuning.</li> <li>Outer body made of G.I Epoxy Coated</li> <li>Inner body made of Stainless steel with clear bottom</li> </ul>
11	Incubator	Capacity : 100 -250 L. Temperature: 02 - 70°C $\pm 0.2$ Light : Fluorescent with separate control unit Digital display
12	Sediment Trap	single bottle type, accessories as optional Opening area - 0.015 m <sup>2</sup> Cylinder diameter & length - 140 mm & 560 mm Total length - 900 mm Diameter to length ratio - 1 : 4 Cone angle - 40 Grid dimensions - 20 x 20 x 40 mm Material - PVC, PE Weight in air/ water - 3 kg /1 kg Cylindrical trap design should avoid re-suspension of sample Easy mounting to mooring line Spares Required ( quote as Optional) - Spare Collecting Bottles 250 ml with screw cap (1 set of 24 pcs.)
13	Visibility Disc acc. to Secchi,	with 10 m tape measure Material - White lacquered brass disk Diameter - 200mm Rope Length – not less than 3m Weight – Not More than 2Kg
14	Electronic Balance	Capacity : 200g Readability : 0.001g Automatic calibration and LCD or higher display
15	Sieve set- stainless steel	stainless steel ASTM sieves with varying pore size
16	Adjustable micropipettes	100-1000µL and 20-200 µL, tips
17	Ultrasonic bath	Small capacity ultrasonic cleaner with 70W/40KHz ultrasound transducers, heating up to 80°C and digital controls. And reinforced tank that is 1 mm thick and 30 minutes timer.
18	Peristaltic pump	Peristaltic Pumps with for channels, adjustable flow rate ranging from 0ml/hr to 1500ml/hr with digital flow rate control and auto stop with audible alarm
19	Distillation unit	Distillation Unit with 5 L capacity with automatic cut off device, Panel mounted with quartz boiler and boro-silicate condenser, Vertical design, Output capacity approx. 5 L per hours, Pyrogen free

### **Terms and Conditions**

1. Only those firms who are capable of supplying the goods and after sales service promptly need to quote.
2. The cost of items should include all taxes, freight charges entry tax payable etc. Brochures of quoted models may be enclosed with the quotation.
3. The University will not be responsible for postal delay or loss in transit.
4. The undersigned reserves every right to reject or accept any or all quotations without assigning any reason, thereof.
5. The quotation should reach the office of School of Environmental Sciences with all details before **3 pm on 6.6.2017** and will be opened at **3.30 p.m. on 08.06.2017**.
6. The quotation may be sent to the **Director, School of Environmental Sciences, Mahatma Gandhi University, Priyadarshini Hills P.O., Kottayam – 686 560**
7. The quotations without observing the above specifications, terms and conditions will be rejected.

Sd/-

**Director**