



**Nagaland University**  
(A Central University Estd. By the Act of Parliament No. 35 of 1989)  
Lumami 798 627, Nagaland, India

Dr. Talijungla  
Head,  
Department of Botany

**No. NU/Bot/Acad/13**

**Dated: March 9, 2018**

**Limited Tender Notice**

Short Tender is being invited from the eligible suppliers for procurement of Laboratory Equipments as mentioned below. Interested suppliers may send their lowest Rate quotations with detailed specification and terms and conditions in sealed envelope to the Head, Department of Botany, Nagaland University, Lumami 798627, Nagaland on or before March 15, 2018. Rate quotations received after March 15, 2018, will not be considered. Department reserve the right not to select the lowest rate if the models and specifications are not found suitable.

(Talijungla)  
Head  
Department of Botany

Copy to:

1. The Registrar, NU, Lumami for information.
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Details of Equipment to be procured for the Department of Botany under Teaching Aids Additional Grant 2017-18.

Sl.No	Description of Equipments	Quantity
1	<p><b><u>HOT AIR OVEN</u></b></p> <p><b><u>Model No : TI – 125 A</u></b>  <b>Make : TEMPO</b>  <b>Capacity Ltrs : 43</b>  <b>Internal size (H x W x D cm) : 35 x 35 x 35</b>  <b>Trays : 2</b>  <b>Construction :</b>            Double walled construction.  <b>Insulation :</b>            3" High grade glass wool insulation.  <b>Heating System :</b>            Heating elements made from the best quality Kanthal DSD wire are used on refractory supports.  <b>Safety :</b>            Safety cum stand by thermostat to cut off the Heater supply in case of overshoot of temperature.  <b>Door :</b>            Single door with asbestos gasket, fitted on heavy cast and chromium plated brass hinges with spring and roller type latch.  <b>Trays :</b>            Adjustable Stainless steel Rod trays.  <b>Supply :</b>            230V AC, Single Phase, 50Hz</p> <p><b><u>SPECIFICATIONS :</u></b></p> <p><b>Standard Model :</b>            Inside S.S. 304 mirror finish &amp; Outer Mild steel (CRCA) sheet with powder coated.  <b>Temperature Range:</b> 5 0C above ambient to 250 0C    <b>Temperature Accuracy :</b> ± 2 0C    <b>Supply : 230V, AC, 50Hz</b></p> <p><b>Control System :</b>            Imported microprocessor based auto tuned PID controller with CE mark &amp; dual display of set value &amp; process value for precise control of temperature.</p>	01
2	Field pH meter (Portable)	02

3	<p><b><u>Field Refractometer</u></b>  <b>Make : WensarLabman</b>  <b>Model : LMAR-1317</b></p> <p><b><u>ABBE REFRACTROMETER – DIGITAL</u></b></p> <p>Measuring range 1.3000 - 1.7000.</p> <p>Measure the oBrix of sugar solution.</p> <p>LCD display.</p> <p>Sample temperature can be controlled by using thermostatic water bath (Optional)</p> <p>Measurement of Refractive index nD of transparent of translucent liquid and solid substances.</p> <p>RS232 printer interface for direct data output</p> <p><b>Specification :</b>  Measurement range Refractive index nD : 1.3000-1.7000  Measurement range dissolved solids Brix : 0 -100%  Accuracy refractive index nD : <math>\leq \pm 0.0002</math>,  Accuracy Dissolved Solids Brix : <math>\pm \leq 0.1\%</math>  Temperature Resolution : 0.1°C  Temperature Range (Min 0.1°C) : 0.-50°C  Correcting Range of Brix Versus Temperature : 15-45°C  Usage Temperature Range : Ambient to 35°C  Interface : RS232  Dimensions (mm) WxDxH : 370x240x470  Power Supply : 220V / 50Hz  Gross Weight : 12 Kg</p>	01
4	<p><b><u>Turbidity Meter</u></b>  <b>Make : Electronics India</b>  <b>Model : Digital turbidity Meter – 331</b>  <b>Features :</b></p> <ul style="list-style-type: none"> <li>• Reliable &amp; Accurate Results</li> <li>• Measurements upto 1000 NTU</li> <li>• 3½ Digit 7-Segment LED Display</li> <li>• Sewage and Drinking Water Testing</li> </ul> <p><b><u>Specifications :</u></b></p> <p><b>Range :</b> 0 – 1000 NTU  (in 2 Ranges)  0 – 200, 1000 NTU</p> <p><b>Resolution :</b> 1NTU</p> <p><b>Accuracy :</b> <math>\pm 3\%</math> FS, <math>\pm 1</math>Digit</p> <p><b>Display :</b> 3½ Digit 7-Segment LED</p> <p><b>Light Source :</b> IR LED</p>	01

	<p><b>Detector</b> : Photodiode</p> <p><b>Sample System</b> : 60 x 25mm Clear Glass Test Tubes</p> <p><b>Power</b> : 230 V ± 10% AC, 50 Hz</p> <p><b>Dimensions</b> : 245 x 260 x 125 mm (L x B x H) (Approx.)</p> <p><b>Accessories</b> : Test tube Set of 5, Operation Manual, Dust Cover</p>	
5	<p><b>Microscope</b>  <b>Make : Weswox</b>  <b>Model : HL-4</b></p> <p><b>Features</b> :Designed for routine enhanced bright field applications in the Professional Laboratory as well as in Colleges and Further Educational establishments.</p> <p><b>PREMIUM</b> quality <b>KEOWA</b> optics provides clear and bright images and 40% larger field of view as compared to <b>ISI</b> marked microscopes.</p> <p><b>Black stoving finish</b> and hard instrumental <b>chromium plating</b> will accent any classroom environment.</p> <p><b>Specifications :</b>  <b>Body</b> :MONOCULAR body with horse shoe shaped base hinged type, versatile designed inclinable to 90o assembled from DIE-CAST parts.  <b>Viewing Tube</b> :MECHANICAL tube of length 160±1mm.  <b>Eyepiece</b> :KEOWA 10x (WF), H15x or H5x.  <b>Nosepiece</b> :TRIPLE or QUADRUPLE revolving nosepiece with positive centering and click stop.  <b>Objectives</b> :KEOWA 10x, 40x (SL) &amp; 100x Oil Imm. (SL).  <b>Stage</b> : FIXED square stage of size 120mm X 120mm fitted with Phosphorus stage clips and detachable graduated mechanical stage for X and Y movement upto 40mm to 75mm.  <b>Focusing</b> :RACK AND PINION knob provided for sensitive focusing.  <b>Knobs</b> :SEPARATE coarse and fine motion knobs with very precise &amp; accurate graduated fine motion reading to 0.002mm, for fine adjustment and a stopper to prevent damage to glass microslides and objective lenses.  <b>Condenser</b> :TWO LENS ABBE condenser NA 1.25 with continuously variable iris diaphragm and swing-out filter holder.  <b>Illumination</b> :STANDARD plano concave mirror 50 mm dia. in fork for natural light, replaceable by a substage microscope lamp.  <b>Magnification</b> : 50x-1500x  <b>Packaging contents</b> :Packed in shockproof Styrofoam moulded box or in a plywood cabinet having provision for placing eyepieces and objectives and dust cover.  <b>Accessories (optional)</b> :Substage illuminator ML-1. Workable on 220 volts direct  <b>Warranty Information</b> :2 Years parts.</p> <ul style="list-style-type: none"> <li>• 3 years <b>KEOWA</b> optics.</li> </ul>	06

6	<p><b>Symmetry C18 Column, 100Å, 5 µm, 3 mm X 150 mm, 1/pkg [WAT054200]</b></p> <p><b>Make : Waters</b></p> <p><b>Model :WAT054200</b></p> <p>Symmetry C18 columns feature monofunctionally bonded C18 ligands on a high purity base-deactivated silica. Symmetry columns have the tightest column specifications in the industry giving resulting highly reproducible chromatographic results.</p>	01
7	<p><b>Refrigerator</b></p> <p>Make: LG</p> <p>Single Door Refrigerator (B191KRLV)</p> <p>Capacity 180 Litre</p> <p>Refrigerator Type Single Door Refrigerator</p> <p>Stabilizer Free operation</p>	01

**Note: The University has valid DSIR certificate**

**Dr.Talijungla**

Head

Department of Botany.