

# UNIVERSITY OF KERALA

(Established as University of Travancore by the Travancore University Act in 1937 and reconstituted as University of Kerala by the Kerala University Act of 1957 and presently governed by the Kerala University Act of 1974 passed by the Kerala Legislative Assembly.

Accredited by NAAC with A grade)

## DEPARTMENT OF BOTANY



KARIAVATTOM  
THIRUVANANTHAPURAM 695 581  
KERALA, INDIA  
Phone +91-471-2308301  
Tele-fax: +91-471-230 8301  
Web site: [www.keralauniversity.ac.in](http://www.keralauniversity.ac.in)  
e mail: [unikerbot@rediffmail.com](mailto:unikerbot@rediffmail.com)

14/Bot/Equi/16

29/12/2016

### QUOTATION NOTICE

Quotations are inviting for the following items in the department of Botany, University of Kerala, Kariavattom, Thiruvananthapuram

Sl. No.	Name of Equipment	No. of Units	Specifications
1.	Hot air Oven	1	Features: Capacity 200 Ltrs, Interior Dimension: Width in mm 600, Depth in mm 400, Height in mm 850, Exterior Dimension, Width in mm 700, Depth in mm, 880, Height in mm: 1365, Trays: No of Trays: 2, Type: Wire mesh Type: Trays Spacing: Every ½' Adjustable. Power Supply: Single Phase, 230V 50Hz, Power Rating: 3KW: Warranty: 12 Months
2.	Refrigerator	2	255 L capacity Double door, Frost free technology Shiny steel body
3.	Moisture balance	1	Mid-wave infrared quartz heater for drying, internal precision weighing balance, Digital control facilitating selection of measurement modes, combinations of drying and halting modes, Weight loss rate in the previous thirty seconds- record- display facility, Larger sample pan contributes to accurate measurements, auto-taring mechanism, Large backlit LCD
4.	Laboratory Centrifuge	1	Rotor Capacity (ml) 24x15 ml, Type of Head: Angle Rotor Head, No. of Tubes 24, Max. Speed (RPM): 6000, Max. RCF: 5070, Digital Timer Range: 0-59 minutes, Supply 220- 240, Single Phase. Warranty 12 Months
5.	Double distillation unit	1	Make: Quartz glass, Capacity: 2 Litres per hour, Power 3.5 KW, cooling water consumption approx. 65 ltr, distillate quality: Specific Conductivity:0.1 - 0.5 µS/cm, Total Solids: 0.1 mg /ltr
			Stainless steel body, Equipped with

6.	Water bath	1	microprocessor based PID controller, digital display
7.	Electrophoresis unit	1	<p>Horizontal Electrophoresis Unit: Main Unit buffer tank with single moulding casted, Gel tray Should be UV Transparent, gel tray with an integrated fluorescent ruler &amp; safety lid, Gel Size UV Transparent Gel tray size 7 X 10 cm or 7 x 7 cm 3.4 Gel Caster, Should be having universal gel caster and casting gates also, Hand casting Multiple options for hand casting gels of different sizes, Combs to fit virtually every need-multichannel pipette compatible combs, fixed height combs, adjustable height combs, and preparative combs; 8 well and 15 well combs, other sizes of combs can be quote, Electrical safety certification, Sample capacity run up to 30 samples.</p> <p>Vertical Electrophoresis Unit: Gel Capacity No of gels 2. Gel Ready Gel pre cast gels, Gel Casting Hand cast gels Cast using the spacer plates, Glass plate size (W x L) Short plate 10 X 7 (<math>\pm 0.5</math>) cm , Spacer plate 10 X 8 (<math>\pm 0.5</math>) cm 4.6 Size (W x L) Hand cast 8 X 7 (<math>\pm 0.5</math>) cm 4.7 Precast 8.5 X 6.5 (<math>\pm 0.5</math>) cm 4.8 Buffer volumes (Approximately) Upper buffer volume : 160 ml for 2 gels or 320 ml for 4 gels• Lower buffer volume :550 ml for 2 gels, Run Times for SDSPAGE Approximately 45 min (at 200 V constant)</p> <p>Specifications for Power Pack: Volts 0-300 V, Current 0- 400mA, Power 75 W or more Type of output Constant current, Voltage , Timer 1-99 hrs, Volt hour control 99000 v-Hr, Power settings Programmable, No of output Compatible with both electrophoresis</p>
8.	Storage cabinet	2	Non corrosive metal body, 4 adjustable shelves, 6 lever lock for safety, Available in welded and knock-down construction
9.	Electronic balance	2	Max. Weighing capacity: 220 g Accuracy: 1mg Digital display
10.	Rotary evaporator	1	Main Machine-Rotary evaporator disc, Motorized lift (0-150mm), Rotating Speed: 20-200rpm motor power: 40w, Heating Bath: 1.4Kw Ceramic coated, Temperature Range, Digital control Max: 90 degree, Total Power: 1.5KW Voltage : ~220V50Hz, Condenser: Vertical, Charging Pipe, Valve Charging pipe connects with PTFE pipe, Sealing Ring, PTFE Sealing Ring.
11.	Vacuum filtration unit	1	47MM Vacuum Filter Unit (Glass) manufactured in Borosil glass It includes the following: Sintered and even glass support for membrane filter, A graduated

			glass funnel with 300ml to 1000ml capacity, An anodized metal clamp, A silicon funnel cover with a central hole and a filtering flask of 300ml-2 litre capacity. Oil free vacuum pump
12.	Colorimeter	2	Microprocessor Photo Colorimeter, Wavelength Range (nm) : 400 -700 nm, Resolution : %T: 1, Abs: 0.01, Conc.: 0.01, K Factor: 0.01, % Transmission : 0-100%T, Photo Detector Silicon Photodiode / Photo Cell, Display 16 x 2 line alphanumeric backlit LCD display, Keyboard Soft Touch membrane Keys, Data Storage Up to 100 Samples (0 - 99) Light Source 6.8 V, 0.3 Amp Tungsten Lamp Sample System 10 mm path length matched glass test tube, Filters 400, 450, 490, 520, 540, 570, 620, 680 nm
13.	Water bath shaker	1	Capacity : 100ml x 12 flask, Shaking speed range : 40-180 strokes per min Heating: Up to 95°C, double walled with exterior body and inner chamber of stainless steel. Stainless steel bath dimension 355 mm (W) x 300 mm (D) x 165 mm (H) with pyramid type cover Inner Chamber and Outer Body of SS 304, Precise Accuracy : $\pm 1^{\circ}\text{C}$

Quotes should be inclusive of the cost, freight, taxes, etc. The quotations should reach “**The Professor and Head, Department of Botany, University of Kerala, Kariavattom, Thiruvananthapuram, Pin- 695 581, Kerala**” on or before 7.01.2017 4 PM.

Associate Professor and Head  
Department of Botany  
University of Kerala, Kariavattom