# 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

NAAC Accredited with AGrade)

## DEPARTMENT OF BOTANY



KARIAVATTOM THIRUVANANTHAPURAM 695 581 KERALA, INDIA Phone +91-471-2308301

Web site: <a href="mailto:www.keralauniversity.ac.in">www.keralauniversity.ac.in</a> e mail: <a href="mailto:botany@keralauniversity.ac.in">botany@keralauniversity.ac.in</a>

22/BOT/653/21 19-03-2021

#### TENDER NOTICE

Open tenders are inviting for **UV-VIS Spectrophotometer with accessories** in the Department of Botany, University of Kerala, Kariavattom, Thiruvananthapuram.

Name of Equipment	UV-VIS Spectrophotometer with D2 & WI Light source- 1 No.
Accessories	UV Probe Software for PC Control- 1 No.
	Quartz cell 10 mm path light- 2 Nos.

### **Specifications**

- 1. UV-VIS Spectrophotometer with D2 & WI Light source- 1 No.
- 2. Quartz cell 10 mm path light- 2 Nos.
- 3. Photometric system: double beam optics
- 4. Photometric range: Absorbance; -3 to 3.0 Abs, Transmittance; 0% to 300 %
- 5. Photometric accuracy:  $\pm 0.002$  Abs  $(0 \sim 0.5 A)$ ,  $\pm 0.004$  Abs  $(0.5 \sim 1 A)$ ,  $\pm 0.3$  %T
- 6. Photometric repeatability: 0.001 Abs (0~0.5A), 0.002 Abs (0.5~1A), 0.1 %T
- 7. Photometric mode: Transmittance or Absorbance
- 8. Spectrum mode: Transmittance, Absorbance, Energy
- 9. Baseline stability: ≤0.0004 Abs / 30 mins
- 10. Baseline flatness:  $\pm 0.001$ Abs
- 11. Noise level: 0.0008 Abs ( 500 nm)
- 12. Light source: 20 W Halogen lamp and Deuterium lamp, with auto position adjustment
- 13. Monochromatic light
- 14. Sample compartment: W110 x D 230 x H 105 nm, Distance between light beams 110 mm
- 15. Resolution 0.5nm
- 16. Wavelength range of 190 nm ~1100 nm
- 17. Spectral band width from 0.5 to 5 nm
- 18. Wavelength display 0.05 nm increments
- 19. Wavelength setting 0.05 nm increments
- 20. Wave length accuracy  $\pm 0.1$  nm at D2 656.1 nm,  $\pm 0.3$  nm for entire range

- 21. Wave length repeatability  $\pm 0.1$  nm
- 22. Wavelength scanning speed: 3000 nm/min
- 23. Lamp interchange wave length: automatic interchange linked to wavelength (freely set in the range of 295 to 364 nm with 0.1 nm increments)
- 24. Stray light  $\leq 0.05\%$  (220 nm NaI, 360 nm Na NO2)
- 25. PC Compatibility: UVProbe software, external control possible via USB

### **Terms and Conditions**

- The price quoted should be that applicable for the educational institutions.
- The items should have an onsite warranty for at least 1 year.
- The firm should be capable to extend immediate service, which in no way should not exceed 24 hours.
- Prices are to be quoted **FOR DESTINATION** (Department of Botany, University of Kerala, Kariavattom. The prices quoted should clearly indicate the 4 following charges: Price of the equipment including taxes; Price of optional accessories if any; Customs duty if any (after submission of custom and excise exemption certificate); Customs Clearance Charges, transportation charges and installation charges. If these details are not provided it will be considered that the price quoted is inclusive of all charges.
- Only one model can be quoted in a tender.
- If the tenderer wants to quote for more than one model separate tenders should be submitted. If more than one model is quoted in a single tender it will be summarily rejected.
- Performance Certificate of the specified model should be attached along with the quotations.
- The undersigned reserves have the right to reject any or all of the tenders received without assigning any reason thereof.
- If any of the components is found to be defective during the warranty period, the vendor has to replace the defective item immediately at their own cost.

The **technical and financial** bid submitted separately, complete in all respects may be submitted to Professor & Head, Department of Botany, University of Kerala, Kariavattom, Thiruvananthapuram 695 581, on or Before **03.04.2021 4.00 PM**.

Sd/-

Dr. Swapna T.S. Professor & Head