



**DEPARTMENT OF BIOTECHNOLOGY**  
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Dr. D. KARUNAGARAN

Professor and Head

Date: 07.12.2016

Ref: BT/HOD/2016/029/SPL

Dt. 07.12.16

Due Dt.22.12.16

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

## **Specification for Microvolume / Cuvette Spectrophotometer**

1. Full-spectrum, Dual mode UV-VIS spectrophotometer (190-900 nm) with micro volume (1 $\mu$ L) pedestal and cuvette measurements.

### **Microvolume Mode**

2. Full-spectrum UV-Visible absorbance analyses (190-900 nm) using micro volume sample.
3. It should be capable of measuring very low Sample Volume – 0.5  $\mu$ l .Must not use microcell, capillaries , should be able to give reliable results for proteins, DNA and RNA and regular assays.
4. Minimum Sample Size: 0.5  $\mu$ L, Pathlength: 0.5 mm
5. Light Source: Pulsed Xenon flash lamp, Detector Type: CCD
6. Spectral Resolution: 1.5 nm . Detection limit: 0.04 mg/ml BSA; 0.75 ng/ $\mu$ l dsDNA .preferred
7. System should not require any adaptors or any other accessories while taking readings.

### **Cuvette Mode**

8. Should have heating option for kinetics from 37-45 degree c with increments of 0.5 degree resolution; Beam height: 8.5 mm , Pathlength: 10, 5, 2, 1 mm
9. Detection Limit: 1 microgm/ml BSA; 0.04 ng/ $\mu$ l dsDNA (1cm) - preferred
10. Upgradable Lifetime free software should be available.

### **General**

11. standalone unit; no PC is required for running the experiments.
12. User Input: Touch screen with swipe and pinch motion; preferred. USB memory device.

**Warranty and AMC** : one year warranty plus 4 years free AMC after the warranty period.

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**HEAD OF THE DEPARTMENT**