



DEPARTMENT OF BIOTECHNOLOGY
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MUKESH DOBLE
Professor and Head

Date: 26.11.2013

Ref: BT/GUHA/2013/59/SPL

Dt. 26.11.13

Due Dt.09.12.13

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.

Gas chromatography system Specifications

Inlet:

Number of inlets: 2

Mode: Split/Splitless, purge packed, packed

Maximum Temperature: 400 C; programmable heat ramping

Electronic flow control

Flow rate: 100 ml/min (PP); 200 ml/min (S/SL)

Pressure range: 0 to 60 psi

Automatic temperature and pressure compensation, gas saver mode,
leak check

Auto sample:

Capacity: 50 vials (2 ml)

Solvent vials: 2-4

Waste vials: 2-4

Sample volume: 0.5 μ l to 50 μ l

Standard and on-column injection

Programmable dispense rate, draw rate, injection rate (optional)

Pre-injection sample pumps, sample pre-washes, viscosity delay, pre-
and post-injection solvent rinse, sampling depth: programmable

Next sample overlap, Error indicators

Column Oven:

Number of columns: 2 – capillary and packed

Temperature range: 8 to 400 C

Maximum ramp rate: 75 C/min

Programmable

Detectors:

1. Thermal Conductivity Detector (TCD)

Maximum temperature: 400 C

MDL: 600 pg Ethane/ mL He

Linearity: 10^5

Electronic flow control

2. Flame Ionization Detector (FID)

Maximum temperature: 400 C

MDL: 3 pg C/sec

Linearity: 10^7

Electronic flow control

3. Electron Capillary Detector (ECD) (optional)

Maximum temperature: 400 C

MDL: 20 fg/ml lindane

Linearity: 10^4

Others:

Software for data analysis

Upgradable to Mass Spectrometer (MS)

Accessories: Syringes, septums, tool kit, gas purification panel with moisture traps, pressure gauges and regulators (optional)

Should have service in Chennai

Should have supplied to IIT Madras before or should be able to give a satisfactory demonstration or a reference letter from a reputed lab in Chennai.

Should have reliable performance backed by journal papers

Regulatory compliance: CE, EN

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