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Date: -

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Sealed quotations are invited from reputed manufactures/authorized dealers for the supply of Gas Chromatograph with accessories as per specification given in schedule of requirements appended herewith.

The quotation must be accompanied by the following:

1. Proprietary Certificate, if the item is a proprietary item.
2. Authorization letter from principals.
3. Company profile.
4. Details of support / service centers.
5. Complete technical specifications and deviations if any from the schedule of requirements.
6. Spares and accessories should be mentioned.
7. The quotation should be valid for 180 days from due date. Payment will be by DD or wire transfer upon installation.
8. The supplier has to mention the period of warranty in quotation. The supplier should also provide user list of at least 10 users in India for the item quoted in the bid. The manufacturer should have minimum tenure of 10 years in the market.
9. Tender should be quoted for FOR destination against CDEC.
10. Installation and **one week application training** should be given free for cost.
11. Two kinds of bids may be submitted, one **technical bid** consisting of all technical details along with commercial terms and conditions, and **financial bid** containing item price for the item mentioned in the technical quotation. **Both the bids (Technical & Financial) should be sealed by the supplier in separate envelopes duly super scribed and both these sealed covers are to be put in a bigger cover which should also be sealed and super scribed.** The supplier shall bear all costs associated with the preparation and submission of its quotation



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including samples, literatures etc. The item for which the quotation is being submitted should be indicated by name and number on the envelope.

12. Warranty conditions should be mentioned for each item quoted. Quotation should also mention time required to deliver and install (if require) the system. Clarifications may be sought on Technical/Commercial aspects, if felt necessary, before deciding to place order. Price negotiations will be done only with the lowest bidder. Institute reserves the right to order equipment with better quality over lower price and to accept or reject any or all the quotations without assigning reasons thereof.
13. The sealed quotation should be addressed to The Head, Department of Chemistry, University of Delhi, Delhi – 110 007 .
14. The Department of Chemistry reserves the right to cancel the order in the event of delay in supply beyond three weeks, serious discrepancy in the product noticed during the pre-dispatch inspection, if any, breach of any of the terms and conditions of the quotation.
15. The envelope containing the quotation should be superscribed “**Gas Chromatograph with Accessories**” along with reference number. The quotations should reach the undersigned within 22 days from the date of this advertisement on the university website.

TECHNICAL SPECIFICATIONS FOR GAS CHROMATOGRAPH WITH ACCESSORIES

Gas Chromatograph:

1. Fully automated dual channel system
2. Real-time graphical display of chromatogram
3. PPC/EPC/AFC for auto-sampler, injector & detector with all zones.
4. Carrier Gas Pneumatic program rates 0-100.0 psi/min; 0-100.0 mL/min; 0-200.0 cm/sec or ballistic.

GC Oven:

1. Temperature range 10°C above ambient to 450 °C
2. Maximum oven heating rate: 45 °C/min
3. Cool down time from 250 °C to 50 °C is less than 6 minutes.
4. Temperature program 3 ramps & 4 plateaus or better.
5. PPC/EPC/AFC control for injectors with single point control via software.

Programmable Split/Splitless Capillary injector/MMI: Qty- 2

1. Temperature-programmable inlet.
2. Pressure range: 10-100 psi.
3. Large-volume injection of up to 50 uL with autosampler, 120 uL manually.
4. Temperature: 50 °C to 400 °C in 1 °C increments.

5. Cools down from 250 °C to 50 °C in less than 5 minutes.
6. Heating rate of 1 °C/min to 200 °C/min or ballistic.

FID Detector: Qty-2

1. FID should have air flow designed to minimize contamination and residue buildup
2. Temperature range : up to 400 Deg C in 1 Deg C increments.
3. Min. detectable Quantity : 3×10^{-12} g C/sec or better
4. Sensitivity : > 0.015 coulombs/g C or better
5. Linearity : 10^6 or better.

Auto Sampler :Qty-1

1. 100 plus one priority vial capacity
2. Capable to inject in both the injector port without any manual configuration change. Design of instrument should be in such a way that system should be able to inject samples in both inlets through Auto-sampler without disturbing tower of auto-sampler and any hardware change.
3. Capable to inject sample volume from 0.1 µL to maximum 45.0 µL
4. Maximum solvent post washes 4
5. Maximum sample prewashes 14

GC Software:

System should be quoted with original licensed software needed to control the system. Single point control of all GC and its modules, customizable reports; GLP features should also have software for data acquisition, control, chromatographic data evaluation, reporting sequencing etc.

Columns:

Columns: suitable capillary columns for Organic compounds: **Qty-2**

Essential Accessories:

1. Hydrogen, Nitrogen and Zero-air Gas cylinders, double stage SS regulators with manifolds for each cylinders, Gas purification panel with ISI marked regulators. All Indian items should be ISI Marked.
2. 10 KVA On-line UPS with 30 minutes back up.
3. PC: Processor Intel Core i5-4670 Processor (3.4GHz, 6M Cache), HDD 1TB 7200RPM, Graphics: Intel HD Integrated Graphics, Memory 4GB X 2 DIMM 1600MHz, Optical DVD Recordable, Wireless WiFi Operating System Window 7 or above, cordless mouse and Keyboard.
4. Printer: LaserJet monochrome printer with a print capacity of 14 A-4 pages per minute and a resolution of 600 x 600 dpi.

Warranty: Warranty should be quoted for one year.

Consumables:-**Note: All Consumables should be quoted with standard Part numbers.**

Sr.no.	Description	Qty
1	Manual Liquid Syringe 10 uL	2
2	Manual Liquid Syringe 20 uL	2
3	Auto-sampler Syringe	3
4	Injector nut wrench	1
5	1/8" stainless steel plugs	5
6	1/8"x0.5 mm graphite ferrules	10
7	1/8"x1.0mm graphite ferrules	10
8	1/8" Stainless steel nuts	10
9	1/16" Stainless steel nuts	20
10	1/16"x0.53 mm graphite ferrules	20
11	1/16"x0.32 mm graphite ferrules	20
12	FID Detector Adapter 1/8 to 1/16" adapter	3
13	PTFE/Silicone injector Septa	200
14	Glass Wool- 25gms	4
15	1/16"x0.5 mm graphite ferrules	20
16	1/16"x0.8 mm graphite ferrules	20
17	O-Rings Pkg. of 10	1
18	Wafer-Ceramic Cutter Pkg. of 10	1
19	Nut-Union Male Extend 1/16" Tubing S/S	5
20	Quartz Liner, 2 mm Split Mode	2
21	Column cutter	1

Important Note:-

1. All the requirements laid down under the above specifications must carefully read and understood before claiming your instrument as "complied".
2. Please provide compliance statement sheet with technical bid and if there is any deviation in above mentioned specifications should be clearly highlighted in remarks.
3. User list should be attached along with literature.
4. Anything extra required for installation should be quoted along with instrument.
5. The vendor should have at least two to three installations in educational and research institutions in India. Please provide the details of the customers and their address.
6. The vendor should have office or agents in India. Qualified technical and service personnel should be available in India (preferably in Delhi).
7. The payment terms will be through confirmed irrevocable letter of Credit.
8. The lead time for the equipment should be not more than four months from the date of receipt of our purchase order.



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