Technical Specifications for Gas Chromatograph with Auto Injector & Head Space Sampler

GC system with Microprocessor based Advanced Flow Technology fitted with FID & TCD, capable of installing minimum 2 injectors and 2 detectors on single GC along with original software. The GC should supply with

- Oven capacity : **12 litres & above**
- **Must have 20 ramp or above** heating steps, with cooling program.
- Must have total column oven programming time of **9000 mins & above**
- With ultra fast column oven cooling from **450°C to 50°C in 2-5 minutes**
- With packed injector & split / splitless capillary injector with maximum attainable temperature up to 400°C
- Capability of connecting **micro-bore capillary column of 0.1mmID** for fast GC analysis
- Carrier gas pressure setting from **0 to 900 kPa & above**
- Carrier gas flow setting range from **0 to 1200 ml/min & above**
- Constant pressure / constant flow mode for carrier gas
- Programmable **split ratio setting from 1 to 7500 & above**
- Built in advanced self diagnostics function
- Large LCD display with graphic user interface for displaying all GC parameters
- High sensitivity **Flame Ionization Detector (FID)** with temp range up to **400°C** , dynamic range of **10^7**, sensitivity **1.5 pgC/s of dodecane or tridecane**
- Quartz/metal FID nozzle for inertness and high speed FID acquisition rate of **250 Hz or above**
- **Electronic control of all detector gases H2, Air and make-up through advanced pressure controller (APC)**
- Thermal Conductivity Detector (TCD) with temp range up to 400°C , dynamic range 0f 10^5 and sensitivity 20000mv/mg of dodecane or 400 pg/ml of tridecane
- Packed column- Porapak Q suitable for methane analysis with appropriate length to be supplied
- Must fitted with Auto injector for **minimum 12 vials** as well as manual injection port
- Must be supplied with original competing PC/laptop including compatible workstation software provision for dual channel real time chromatographic data acquisition and post-run analysis. Multifunction compatibility, GLP/GMP functions, Audit trail, Validation Assistant, system suitability, QA/QC functions. All-in-one configuration for easy data transfer, customized report generator, networking capability, data management etc. & GC system to be supplied with 30 meter Capillary Column 01 No.
- CE compliance
- 2 years or above onsite comprehensive Warranty