Detailed specification for procurement of

High Performance Liquid Chromatography (HPLC) System

1) Solvent System (Binary):
   1. No. of Channels : 2
   2. Flow range : 0.001 to 10 ml/min in 0.001/min increments or Better.
   3. Flow Precision : <0.07% RSTD or better
   4. Flow Accuracy : ± 1% or better
   5. Pressure operating range : 8000psi or better
   6. Gradient Composition Precision: <0.2 % SD or better
   7. Online degasser with max flow rate 10 ml/min should be quoted with the system
   8. The Pump should have a solvent selection Valve to allow switching between 4 mobile phases.

2) UV Detector:
   1. Wavelength : 190-600nm or better
   2. Detection Type : Double beam
   3. Light Source : D2 Lamp
   4. Short term Noise : ±0.35 X 10^-5 AU at 230 nm or better
   5. Drift : 3.0 X 10^-4 AU/h at 254 nm or better
   6. Linearity : >2 AU upper limits or better
   7. Safe leak handling must be provided together with the leak sensor

3) Auto sampler:
   1. Sample capacity : 100 X 2 ml and/or above
   2. Injection Volume : 0.1 – 100 μl injection range in 0.1 μl
   3. Precision : <0.5 % RSD from 5-100 μl, < 1% RSD from 1-5 μl
   4. Carryover : < 0.05%
   5. Replicate injections : 1 – 99 from one vial

4) Column Heater/Cooler:
   1. 10°C above ambient to 60°C or better in 1°C increment or better
   2. Column capacity: Should accommodate 2 column of 25 cm length or more
5) **Operational Software:**

   1. Original software with Single point control; of whole HPLC module
   2. Early maintenance feedback (EMF), electronic records of maintenance and errors should be available

6) **Computer and printer:**

   1. Intel Pentium Core 2 Duo E 7400 processor, 4 GB Ram, 160 GB HDD, DVD Writer, 17” Monitor, Window XP Professional, SP2 OEM.
   2. HP Laser Jet Printer

7) 1 C-18 Column should be quoted with system.

8) The HPLC should have capacity to be used as an inlet for LC/MS-MS system of any make. The system should have the option to upgrade with any detector.

9) **Warranty:** Minimum warranty of 12 Months should be quoted with the system. Addition AMC prices for next 5 years should be also quoted separately.