

AMENDMENT -I**Dated: 29th January 2010****Amendment in the Bid document after Pre Bid meeting held on 21.01.2010 at HSCC with prospective bidders****BID REFERENCE: IFB No. HSCC/PUR/CDSCO/2009 -10 dated 12.01.2010****Commercial amendment:**

- Bid ITB Clause 24.1:-Time for submission of Performance Security/ Security Deposit from the date of notification under ITB clause 23.1 will be 15 days instead of 10 days.
- Consumables are not covered under warranty/CMC, however the supplier shall mention the list of consumables in their bid.

Technical amendment:

Line Item No. 1 HPLC (Software based, with temperature control bath) Gradient with PDA,RI Amperometric & Fluorescence Detector with Auto sampler

1. PUMP

	Revised specification
Flow	0.001 to 10 ml/min
Solvent Setting Range	4 solvents setting range: 0-100% with 0.1% step

2. DETECTORS**(a) PDA**

	Revised specification
Wave length Range	190-600 nm
Temperature Operating Range (for cell)	ambient temp to 50°C
Noise	1.5×10^{-5} AU at 254nm as per ASTM @1 ml/min with 100% Methanol
Drift	1×10^{-3} AU/hour at 254nm as per ASTM @1 ml/min with 100% Methanol

(c) **FLUORESCENCE DETECTOR**

	Revised specification
Sensitivity	500:1 (tangent method) 700:1 (Baseline method)

(d) **DIGITAL PULSED AMPEROMETRIC DETECTOR**

Additional requirement

Electrode	Dual Glassy Carbon Electrode
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3. THERMOSTATED COLUMN COMPARTMENT WITH COOLING FACILITY

	Revised specification
WORKABLE TEMPERATURE RANGE	ambient to 100 Degree C

4. AUTOSAMPLER

	Revised specification
Replicate Injection	per vial 1-50
Cross contamination	<0.1% with & without automated needle wash by both internal and external
Tray Temperature Operating Range	4° C to 40 ° C

Line Item No. 2

HPLC (Software based, with temperature control bath) Gradient with UV-VIS Detector with Autosampler

1. PUMP

	Revised specification
Flow	0.001 to 10 ml/min
Solvent Setting Range	4 solvents setting range: 0-100% with 0.1% step

2. DETECTORS

	Revised specification
MULTI WAVELENGTH UV-VIS	Simultaneous Multi wavelength measurement at four points
Light Source	Appropriate lamp to cover wave length range 190-700nm
Lamp Hour/ life	2000 hr or more

3. THERMOSTATED COLUMN COMPARTMENT WITH COOLING FACILITY

	Revised specification
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WORKABLE TEMPERATURE RANGE	ambient to 100 Degree C
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4. AUTOSAMPLER

	Revised specification
Replicate Injection	per vial 1-50
Cross contamination	<0.1% with & without automated needle wash by both internal and external
Tray Temperature Operating Range	4° C to 40 ° C

5. Manual Injector

	Revised specification
	Rheodyne Injector with Auto detecting injection system with mounting brackets Should have 10 µl, 20µl, 50µl, 100µl loop injector
	Syringe: - 100 µl.

Line item No. 3

HPLC (Software based, with PDA Detector and Autosampler) Gradient

1. PUMP

	Revised specification
Flow	0.001 to 10 ml/min
Solvent Setting Range	4 solvents setting range: 0-100% with 0.1% step

2. DETECTOR PDA

	Revised specification
Wave length Range	190-600 nm
Temperature Operating Range (for cell)	ambient temp to 50°C
Noise	1.5 x 10 ⁻⁵ AU at 254nm as per ASTM @1 ml/min with 100% Methanol
Drift	1 x 10 ⁻³ AU/h at 254nm as per ASTM @1 ml/min with 100% Methanol

3. THERMOSTATED COLUMN COMPARTMENT WITH COOLING FACILITY

	Revised specification
WORKABLE TEMPERATURE RANGE	ambient to 100 Degree C

4. AUTOSAMPLER

	Revised specification
Replicate Injection	per vial 1-50
Cross contamination	<0.1% with & without automated needle wash by both internal and external
Tray Temperature Operating Range	4° C to 40 ° C

5. MANUAL INJECTOR

Revised specification
Rheodyne Injector with Auto detecting injection system with mounting brackets Should have 10 µl, 20µl, 50µl, 100µl loop injector
Syringe: - 100 µl.

Line Item No. 4 Fourier Transform Infra Red Spectrometer (FT-IR)

	Revised specification
Beam splitter: Coated with ZnSe	Beam splitter: Coated with ZnSe/KBR

Major Accessory:

Additional requirement

- Suitable Portable De Humidifier
- Temperature and RH Digital Indicator

Line Item No.8 Water Purification Unit

	Revised specification
"The System should have both RO purification and UV purification facility"	"Two stage System should have RO purification and UV/HPLC grade purification facility"
Flow rate	1.5 litre /min

Additional specification

Feed water Specification

Source of water: Municipal Tap water/ground water

1st Stage Purification: RO

RO output capacity: 3litre/hr

Reservoir Tank: Material should be of HDPE grade and anti leaching.
Capacity : 30 litre or more.

Line Item No. 9 Gas Chromatograph

A) Temperature Programmable Oven for column:

	Revised specification
6. Typical heat-up: from 50°C to 450°C in 420 seconds. Typical cool down: 450 °C to 50°C in 250 seconds.	6. Typical heat-up: from 50°C to 450°C in 250 seconds. Typical cool down: 450 °C to 50°C in 250 seconds.

	Revised specification
B) Two Nos. Split/Splitless Injector with independent heating:	B) Two Nos. Injector with independent heating: One PSS(Programmable split/splitless) injector and one packed column injector

C) Two No. Flame Ionization Detector (FID) (one for packed and one for capillary columns)

	Revised specification
2) Linear dynamic range: $\geq 10^7$	2) Linear dynamic range: $\geq 10^6$
3) Detectivity: 2×10^{-12} gC/sec	3) Detectivity: 2×10^{-12} gC/sec dodecane
5) Acquisition rate 300 Hz	5) Acquisition rate 50 Hz or more

HEAD SPACE & LIQUID AUTOSAMPLER:

Autosampler is a versatile automatic sampling system platform conceived on a 3-axis turret movement approach, designed. Should control through same GC software.

1. HEAD SPACE (AUTOSAMPLER)

Additional requirement

- Relative standard deviation 2% or less
- Must handle any Large Volume injection techniques. (PTV-LV, LV Split less, LV- On column)

2. LIQUID AUTOSAMPLER

	Revised specification
Must handle any Large Volume injection techniques. (PTV-LV, LV Split less, LV- On column)	This is required under the Heading 'HEAD SPACE (AUTOSAMPLER)' as indicated above

Line Item No. 11 Atomic Absorption Spectrometer (AAS)

	Revised specification
BACKGROUND CORRECTION	Suitable background correction facility e.g. D ₂ /Zeeman technique or no polarisation

Other terms and conditions of the bid document will remain unchanged.

Executive Director (Proc. & PG-I)