

AMENDMENT FOR TENDER REF.NO.1665/TAM/NA/2017

SECTION V - SCHEDULE OF REQUIREMENTS

SCHEDULE - A

II.EQUIPMENTS FOR ANALYTICAL LABORATORY:

Schedule Sl.No	Name of the Equipment	Existing Quantity	Amend to read as quantity
6.	De Freezer	1	2

SECTION VI - TECHNICAL SPECIFICATION

SCHEDULE - A

I.EQUIPMENTS FOR TOXICOLOGY LABORATORY:

Schedule Sl.No	Name of the Equipment	Existing	Amend to read as
2.	Incubator	Dimension is not mentioned in original tender.	Dimension is 14'' * 14'' * 14''
3.	Hot Air Oven	Dimension is not mentioned in original tender. Power Consumption: 220/230V AC & 177; & 10% 50 HZ	Dimension is 14'' * 14'' * 14'' Removed
5.	Semi - Micro Balance	i). Option for neutralized the static electricity	Removed
6.	pH meter	One year warranty on electrodes	Additional 2 electrodes should be provided
7.	Transferpette	Capacity details not given in original tender	2-20µl,10-100µl,100-1000µl and 500-5000µl capacity (each - 2)
8.	Centrifuge	Temperature range not given in original tender	Temperature range: 0° C to 40° C Fast Temp function for fast pre cooling
14.	HTL Pipette	<u>Title:</u> HTL Pipette <u>Specification:</u> Range of Pipette not given	<u>Title:</u> Multi Channel Pipette <u>Specification:</u> 20-200µl (Multichannel)

II.EQUIPMENTS FOR ANALYTICAL LABORATORY:

Schedule Sl.No	Name of the Equipment	Existing	Amend to read as
1.	High Pressure Liquid Chromotograph	<p>i).UV Detector:</p> <ul style="list-style-type: none"> • Detector resolution of 1.2 nm • Wavelength range 190 to 600 nm or better • Wavelength accuracy ± 1nm. • Flow cell : ≤ 10 mm path cell volume 10 μl or better • Drifts $\leq 0.5-1.0 \times 10^{-3}$ AU/hour • Linearity ≥ 2.0AU <p>ii).Accessories other conditions:</p> <p>Suitable UPS with built in isolation transformer with minimum $\frac{1}{2}$ hrs backup</p>	<p>i).PDA Detector:</p> <ul style="list-style-type: none"> • Light source: Deuterium (D2) lamp, tungsten (W) lamps. • Number of diode elements: not less than 512. • Wavelength range: 190 nm to 800 nm. • Bandwidth: Selectable (selectivity and sensitivity): 1.2 nm / 8 nm. • Wavelength accuracy: 1 nm. • Wavelength precision: 0.1 nm. • Noise: 0.6×10^{-5} AU. • Drift: 5×10^{-4} AU/h • Linearity 2.0 AU (ASTM standard). • Functions: Contour output, spectrum library, MX plotting. • Flow Cell: Optical wavelength; 10mm, Capacity: 10μL, Pressure: 12 MPa. • Flow Cell temperature-control range: 5°C above room temperature to 50°C. <p>ii).Accessories other conditions:</p> <p>5 KVA UPS with built in isolation transformer with minimum 1 hour</p>

		should be provided	backup should be provided.
3.	Fully Automated Gas Chromatography Single Quadrupole Mass Spectrometer	<p>A(4). One capillary split/split less and one PTV split/split less injection port.</p> <p>A(7). Auto sampler with capacity to hold 15 or more vials.</p> <p>A(10). Data acquisition speed up to 400Hz or better.</p> <p>A(11). The pressure set points should be adjustable by increments of 0.001 psi upto 100 psi.</p> <p>A(12).Head Space Sampler with minimum 12 vials capacity with Pneumatic control and should have option for priority vials.</p> <p>A(14). System should have capability of locking /adjusting the retention times so that same retention time can be reproduced from system to system and the method should be electronically transferred. NIST 2011 library along -with AMDIS/DRS software should be</p>	<p>A(4). One capillary split/split less injection port.</p> <p>A(7). Auto sampler with capacity to hold 12 or more vials.</p> <p>A(10). Data acquisition speed within 2ms or better.</p> <p>A(11). The pressure set points should be adjustable by increments of 0.01 psi up to 100 psi.</p> <p>A(12). Head Space Sampler with minimum 2 vials capacity with Pneumatic control and should have option for priority vials.</p> <p>A(14). System should have capability of locking /adjusting the retention times so that same retention time can be reproduced from system to system and the method should be electronically transferred original NIST 2014 or latest library along -with AMDIS/DRS software should be provided and also retention time locked databases with NIST</p>

		provided and also retention time locked databases with NIST Database.	Database.
		<p>B(5). A Quadruple Mass Analyzer with a mass range upto 1050 amu or better preferably monolithic quartz type.</p> <p>B(7). Scan speed up to 12,000u/sec or better.</p> <p>B(8). Provision for quadruple heating (150°C or above) to keep the source clean for a long period.</p> <p>B(13).El Sensitivity: Sub picogram sensitivity with full scan (S/N:I000:I or better) and femotogram sensitivity under SIM mode.</p> <p>C(11). The system should be supplied with fully compatible Fiehn GC-MS metabolomics RTL library.</p>	<p>B(5). A Quadruple Mass Analyzer with a mass range upto 1050 amu or better.</p> <p>B(7). Scan speed up to 10,000u/sec or better.</p> <p>Removed</p> <p>B(12). El Sensitivity: Sub picogram sensitivity with full scan (S/N:I000:1 or better) and femotogram sensitivity under SIM mode. Ideal 10 fg of 1 pg OFN for 1 micro litre injection for eight times.</p> <p>C(11). The system should be supplied with fully compatible GC-MS metabolomics library.</p>
4.	Atomic Absorption Spectrophotometer	6. Lamp Support: At least 8 mounted in fixed lamps in fixed positions with fast lamp selection using mirror and automated lamp selection.	6. Lamp Support: At least 6 mounted in fixed lamps in fixed positions with fast lamp selection using mirror and automated lamp selection.

		<p>11. COOED HOLLOW CATHODE LAMPS:</p> <p>Single element coded hollow cathode lamps should be quoted with the system for the elements namely, Lead, cadmium, zinc, arsenic, copper, tin, mercury and nickel.</p>	<p>11. HOLLOW CATHODE LAMPS:</p> <p>Single element coded hollow cathode lamps should be quoted with the system for the elements namely, Lead, cadmium, zinc, arsenic, copper, tin, mercury and nickel.</p>
9.	Polarimeter	<p>Specifications:</p> <p>Angular Degrees (°A)- Sugar - ISS (°Z)- User/Other</p> <p>0-360 (selectable) -225 to +225 Up to 500 incl.</p> <p>Specific Rotation, Purity, % Concentration, Invert Sugar, Inversion % etc</p> <p>Resolution Angular Degrees (°A)-0.01 / 0.001</p> <p>Sugar Resolution-ISS (°Z)- 0.01 / 0.001</p> <p>Angular Degrees (°A)-±0.01</p> <p>Sugar - ISS (°Z)-±0.03</p> <p>Reading Time (s)- 4 - 30 seconds (selectable)</p> <p>Interfaces-1 Parallel (printer), 2 x Serial (RS232)</p> <p>Sample Illumination-Light Emitting Diode 589nm</p> <p>Stored Results-700 Readings</p>	<p>Specifications:</p> <p>Measuring Range: +/- 89.9 degree</p> <p>Optical Rotation, Specific Optical Rotation & % concentration scales should be present as they pertain to pharma/drug polarimeter.</p> <p>Resolution Angular Degrees (°A) - should be at third decimal place (i.e.) 0.001</p> <p>Reading Time (s) - 4 - 30 seconds (selectable)</p> <p>Interfaces-1 Parallel (printer), 2 x Serial (RS232)</p> <p>Sample Illumination-Light Emitting Diode 589nm</p> <p>In-built memory for the storage of results.</p>

			<p>In-built temperature control by Peltier at 20 & 25 degrees C.</p> <p>A stainless steel sample cell of 100 mm to be supplied for faster temperature control.</p> <p>Password protection.</p>
10.	Refractometer	<p>Range: Refractive index: 1.32422 to 1.70000.</p> <p>Resolution: R.I: 0.00001(0.0001)</p>	<p>Range: Refractive index: 1.26601 to 1.70000.</p> <p>Resolution: R.I: 0.00001</p>
13.	pH Meter	Warranty: 3 years on instrument & 1 year on electrodes	Warranty: 3 years on Instruments. Electrodes 2nos should be provided.
14.	Shaking Water Bath	Working Temperature range: 20°C to 99°C	<p>Working Temperature range: Ambient +5°C to 100°C.</p> <p>Temperature Uniformity: $\pm 0.05^\circ\text{C}$</p>
15.	Constant Temperature Bath	<p>Temperature Range: -10°C to +60°C</p> <p>Temperature Accuracy: 10°C</p>	<p>Temperature Range: 5°C above ambient to 99°C.</p> <p>Temperature Accuracy: Indicator can controlled with an Accuracy of $\pm 0.5^\circ\text{C}$.</p>
17.	Analytical Balance(four digit)	<p>Sensitivity against temperature change Specific gravity measurement software.</p> <p>Printer not mentioned in original tender.</p>	<p>Sensitivity against temperature change Specific gravity measurement kits.</p> <p>Printer should be provided</p>
18.	Analytical Balance(five digit)	7. Calibration certificate with FI / E2 class calibration weights traceable to NPL should be provided	7. Calibration certificate with FI / E2 class calibration weights traceable to NABL should be provided.

		<p>with the balance.</p> <p>8. The supplier should have the capability to provide calibration of the balance once in six months with NPL certified weights. Full details of this service should be provided.</p> <p>15. Maximum Capacity at least 200g.</p>	<p>Removed</p> <p>14. Maximum Capacity at least 60/80 to 210/220g.</p>
19.	KARL FISCHER Titrator	Samples not mentioned in original tender.	Reagents for 10 experiments/ samples should be provided at the time of supply.
21.	Freeze Dryer	Wide range of accessories not given in original tender	Wide range of accessories used to flasks, vials, ampoules and bulk.