

Name of the High end Equipment - ICPMS		
Name of the Supplier - Agilent Technologies India		
Agilent 7800 ICPMS System		
S.No.	Main Heads/ Components	Remarks, if any
1	System Application	
2	Sample Introduction system	
3	Plasma	
4	Ion Extraction Interface	
5	Ion Focusing System	
6	Quadrupole Assembly	
7	Ion Detector Assembly	
8	Vacuum System	
9	Performance Specifications	
10	Water Chiller	
11	<p>Auto Sampler / Diluter</p> <ul style="list-style-type: none"> Highly effective auto sampler/ diluter compatible with operation along with ICP- MS without user intervention. Auto sampler with minimum 200 vials holding capacity with 500 nos. of 15 ml capacity tubes (as consumable). Programmable complete with inert PTFE coated probe with PTFE inner tubing. Spare extension tube complete with 20 ml syringe for programmed auto dilution All accessories, racks, bottles, tubing assembly, waste container, dust cover etc. 	
12	System Controller and Operating System	
13	<p>Computer B&W Laser Printer</p> <p>Optionally : Colour Laser Duplex Printer</p>	PC included in S.No.12
14	<p>Multi vessel Microwave digestion system</p> <p>The system should be provided with a suitable microwave digestion system of 20- 25 samples processing capacity in one batch along with proper fume hood system. The specification along with the model should be provided at the time of tendering.</p>	
15	Exhaust unit	
16	<p>Standards with minimum expiry of two years</p> <ul style="list-style-type: none"> Specially pure Analytical NIST traceable single element standard solutions(Minimum pack or 100ml each whichever is lower) for Sn, Ni, Cu, Zn, Ba, Sb, Ni, B, Ag, Mg, Ca, Na, As, Cd, Cr, Hg, Pb, Se, Fe should be supplied Multi element Calibration NIST traceable standards for ICP-MS - one set 	7 yrs

17	<p>Power Supply UPS (The system should have UPS (minimum 20 KVA) of suitable rating with voltage regulation, spike protection and minimum 60 minutes back up for the supplied equipment.)</p>	
18	<p>Accessories The following items, but not limited to, has to be supplied along with the equipment: -Perisaltic pump tubing-sample intake -100 No's -Perisaltic pump tubing-DraIN - 100 No's -Tubing-Auto Sampler Perisaltic pump - 25 No's -Micro mist nebulizer - 5 No's -Plasma Torch - 5 No's -Ni Sampling Cone - 4 No's and Pt Sampling Cone - 2 No's -Ni Skimmer Cone - 4 No's and Pt Skimmer Cone - 2 No's - Hyper Skimmer cones/extraction system for HF digested sample -Vacuum pump oils - 5 Litres -Argon Gas Cylinders-6 -Gas Cylinder for Colliston cell gases-Helium-1 -Gas Cylinder for Reaction cell gases-Oxygen, Hydrogen & Ammonia(>99.99% mixed or pure as per system requirement), whichever is applicable for individual system for elimination of interference species along with 3 stage Gas pressure regulators for each Cylinder. -Gas purification panel for Argon, Oxygen, Helium & Hydrogen with appropriate plumbing. -Optional: Any other accessory as felt required for the proper functioning of the equipment.</p>	<p>Ammonia & Oxygen Cylinder not required in our case</p>

19	<p>Additional items</p> <ul style="list-style-type: none"> • Consumables for Five years operation of the system for main ICP unit, spare torches, nebulizer, tunings, and moisture trap are required to be quoted. • Bidders should quote a startup package for 100 samples. In addition, the bidders should give a list of recommended consumables along with their source and budgetary prices. • Operation kit comprising all required items pump tubings, transfer tubings, work coils etc. for startup/regular operation of instrument. • Firm should also quote all essential pre-installation requirements and utility requirement for ICP-MS. • Give the Detection limits (DL) chart for Sn, Ni, Cu, Zn, Ba, Sb, Ni, B, Ag, Mg, Ca, Na, As, Cd, Cr, Hg, Pb, Se, Fe (but not limited to these elements. Provide for as many elements as vendor can) and give the conditions at which the DLs are measured. • Operation and maintenance manual for each unit in both hard copy and soft copy. • Service manual with set of required tools for each system/unit. • The system should have Server connectivity and should be capable of 21 CFR Part 11 and food safety compliance. The necessary validations will have to be carried out by the equipment suppliers. • Methods library for all food matrixes, related software's and user manuals to be provided. 	
20	Operation and maintenance & Training Component	
21	IQ/QQ/PQ	
22	Warranty	