Dated, the 22nd July, 2019

RFP No. 09/2019-20 PROCUREMENT OF INSTRUMENTS, CONSUMABLES AND CHEMICALS FOR ITCFSAN: CORRIGENDUM -01

Further to this office Tender Enquiry No. 09/2019-20 dated 02nd July 2019 and pre-Bid on 11th July 2019.

2. The following amendment are made in the ibid tender:

PART I – GENERAL INFORMATION AND INSTRUCTIONS

1. <u>Last date and time for depositing the Bids:</u> **05** August 2019 by 1500 Hrs. The sealed quotations under two bid system (i.e. Technical Bid & Commercial Bid) in sealed covers should be deposited/reached by the due date and time. The responsibility to ensure this lies with the Bidder.

4. <u>Time and date for opening of Bids:</u> The tender box will be opened on **05 August 2019 at 1530 hrs**. (If due to any exigency, the due date for opening of the Technical-Bid is declared a closed holiday, then it will be opened on the next working day at the same time or on any other day/time, as intimated by this office).

PART II – ESSENTIAL DETAILS OF ITEMS/SERVICES REQUIRED

3. <u>Delivery Period</u> – Delivery period for supply of items would be <u>45 days for domestic</u> <u>items and 60 days for imported items</u> from the date of issue of Supply Order. Please note that Supply Order can be cancelled unilaterally by the Buyer in case items are not received within the Supply Ordered delivery period. Extension of Supply Ordered delivery period will be at the sole discretion of the Buyer, with applicability of Liquidated Damages(LD) clause.

10. Bid Form

TECHNICAL BID FORM (B)

The bids of only the technically qualified bidders will be eligible for consideration for opening of financial bid. The technical bid of the bidders will be evaluated on the basis of specification of the offered model visà-vis the prescribed specification given below :

A – Instruments

SI.No	Specifications	Please Specify whether the quoted model meets the specification (Yes/No)	Name of the Model and its Specificatio n
01. Nit	rogen Generator for sample concentration		
1.	General : The Nitrogen generator with a suitable light weight compressor should be of modular design, compact in size, automatic operation, minimum noise level. Should have flexibility to continually increase Nitrogen production capacity at a later date. Nitrogen should be generated from the atmospheric air. The whole system should be compact and properly assembled without any leakage. The purifier should remove oxygen & all other unwanted impurities.		
2.	Compatibility : The unit is completely compatible with the solvent evaporator for sample concentration, which is having at least 25 nozzles for sample concentration for the parameters of pesticides, antibiotics, PAH etc., for which solvents using of acetonitrile, ethyl acetate, n-hexane, methanol, dichloromethane, acetone and other organic solvents etc., for extraction purpose.		
3.	Delivery Capacity: 150 L/min or better.		
4.	Maximum outlet gas pressure: 6.9 bar/100 psi or better		
5.	Nitrogen Purity: Above 95 %		
6.	Pre-filtration system : Should supply with a high efficiency pre- filtration system pretreats the compressed air to remove all contaminants down to 0.01µm along with all other necessary filters for purified nitrogen supply. Also should supply necessary tubings and pressure regulator.		
7.	Phthalates: None		
8.	Suspended liquids: None		
9.	Input pressure : Non condensing and Air cooled in-built Oil free Air Compressor with Auto cut Off and Auto start.		
10.	Temperature range: Should work in temperature range of 10 to 35°C in humidity range of 50-89%		
11.	Noise level : The nitrogen generator should be supplied with a suitable light weight compressor less than 54dB noise level, so that it can be kept inside the laboratory with minimal very low noise.		
12.	Moisture trap: It should be supplied with timer based high efficiency moisture trap and separator.		
13.	User interface: Touch screen/ LCD/LED graphic display.		
14.	Mobility : The generator should be supplied with caster wheels for easy mobility		

	Cofety It should have acfety support with acfe alarma		
15.	Safety: It should have safety system with safe alarms		
16.	Power requirements: Operating voltage 230 V/50 Hz		
17.	Warranty: Comprehensive warranty for minimum 05 years includes PM kits, all filters, necessary accessories, spare parts with unlimited breakdown visits on request to be provided.		
18.	Instrument Performance Verification/IPV(IQ,OQ & PQ):		
	• IQ, OQ should be done with document to be provide, with necessary PM kits during installation and at every maintenance visits during warranty period.		
	 OQ/IPV should be done free of cost with supply of PM kits with all necessary accessories/spare parts with two preventive maintenance per year along with PM visits during warranty period. 		
19.	Certificate: The system should have CE certification/ ISO product certification		
20.	Delivery : The instrument supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, octroi or any taxes should be borne by the supplier. If any documents required for the above purpose, the office may consider to provide on request prior intimation.		
	Defrime note d. Constrikture		
02. F	Refrigerated Centrifuge		
02. F	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space).		
	Bench top Compact size cooling centrifuge (length & depth approx		
1.	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space). Temperature operation range: -5 to +40°C and ability to maintain		
1. 2.	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space). Temperature operation range: -5 to +40°C and ability to maintain 4°C at max speed		
1. 2. 3.	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space). Temperature operation range: -5 to +40°C and ability to maintain 4°C at max speed Temperature accuracy ± 2 °C or better Maximum speed: 14000 rpm or better with 2.0 ml micro-centrifuge		
1. 2. 3. 4.	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space). Temperature operation range: -5 to +40°C and ability to maintain 4°C at max speed Temperature accuracy ± 2 °C or better Maximum speed: 14000 rpm or better with 2.0 ml micro-centrifuge tubes		
1. 2. 3. 4. 5.	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space). Temperature operation range: -5 to +40°C and ability to maintain 4°C at max speed Temperature accuracy ± 2 °C or better Maximum speed: 14000 rpm or better with 2.0 ml micro-centrifuge tubes Should have LCD display		
1. 2. 3. 4. 5. 6.	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space). Temperature operation range: -5 to +40°C and ability to maintain 4°C at max speed Temperature accuracy ± 2 °C or better Maximum speed: 14000 rpm or better with 2.0 ml micro-centrifuge tubes Should have LCD display Should have low access height		
1. 2. 3. 4. 5. 6. 7.	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space). Temperature operation range: -5 to +40°C and ability to maintain 4°C at max speed Temperature accuracy ± 2 °C or better Maximum speed: 14000 rpm or better with 2.0 ml micro-centrifuge tubes Should have LCD display Should have low access height CFC free refrigerant		
1. 2. 3. 4. 5. 6. 7. 8.	Bench top Compact size cooling centrifuge (length & depth approx 2 feet preferred to reduce the bench space). Temperature operation range: -5 to +40°C and ability to maintain 4°C at max speed Temperature accuracy ± 2 °C or better Maximum speed: 14000 rpm or better with 2.0 ml micro-centrifuge tubes Should have LCD display Should have low access height CFC free refrigerant Should have maintenance free brushless drive motor		

12.	Rotors:	
	a) Fixed angle Rotor for 24 x 1.5/2ml capacity 14,000 rpm or better	
	 b) Fixed Rotor for 6 x 50ml capacity (compatible for V bottom tubes) with 12,000 rpm or better 	
	Sufficient and suitable adaptor for lower capacities (15 ml and 2 ml tubes) to be used in 50 ml capacity rotor should be provided.	
13.	Rotor should be made of anodized aluminum for high chemical resistance and aerosol tight lid for safe centrifugation.	
14.	Other items (rotors/adapters) required for improving the applicability/system performance should be quoted as optional.	
15.	Optimum safety according to national and international regulations (IEC 61010) and CE certified.	
16.	Instrument Performance Verification/IPV (IQ, OQ, PQ) should be done free of cost by the supplier with necessary documents and traceability to the satisfaction of EIA-Kochi.	
17.	1.5/2.0 ml, 15ml, 50 ml Centrifuge tubes (V-bottom) 1000 Nos. each should be supplied.	
18.	Warranty:	
	 Minimum 05 years comprehensive onsite warranty including necessary calibrations from the date of installation and commissioning 	
	 Should be provided with calibration/validation certificate for critical parameters from a third party accredited/competent agency 	
19.	Training of personnel	
	a) Demonstration and preliminary training on operation and maintenance of the equipment at our site at the time of installation and troubleshooting training as and when required, free of cost.	
03. Ni	trogen evaporator (Bench-top Turbo Evaporator)	
1.	Bench top Compact size Nitrogen Evaporator to evaporate/concentrate solvent for food, agrochemical application, etc.	
2.	Technology: Gas vortex shearing evaporation design which makes evaporation faster compared to other techniques smoothening	

3.	Controller: Microprocessor based monitoring system to regulate timed operation, water bath temperature, automatic gas shutoff & operational diagnostics	
4.	No. of samples : 48-50 positions with user selectable racks for greater flexibility	
5.	Should be able to evaporate up to 16 mL of sample volume with the suitable sample tube rack. If needed rack should available for handling sample tube with volume as low as 4 ml	
6.	Should have separate gas control for the 5 independent manifolds, each manifold consisting of 8-10 tube positions	
7.	Gas control: Gas can be turned on to each of five independent manifolds when working with fewer than 50 samples.	
8.	Water bath capacity should be about 6L or better and the water bath temperature range should be from ambient to 90° C.	
9.	The gas supply requirements should be with the minimum inlet pressure of 4.1 bar (or 60psi) and the maximum inlet pressure of 6.9 bar (or 100 psi).	
10.	Should have the timer range of 1 to 99 min. or 0.1 to 9.9 hrs.	
11.	Should be equipped with a suitable exhaust tube for exhausting the vapor.	
12.	Should have a 2 inch venting exhaust for exhausting the vapors, with a suitable tube.	
13.	Dimensions of the system should be approx. 53.8cm x 30.2cm x 30.2cm or less	
14.	 The system should be provided with the test tube rack with following dimensions Test tube rack to hold 16 x 125 mm dimension test tubes, volume up to 16 ml 	
	Test tube rack to hold 12 x 75 mm dimension test tubes, volume up to 4 ml	
15.	The system should be provided with the test tubes with following dimensions	
	 Test tube 16 x 125 mm - 1000/case Test tube 12 x 75 mm - 1000/case 	
16.	The bidder shall have at least 10 similar type of installations in India and have to produce credentials (at least last two years) from the institution / testing laboratories where the systems are installed.	

17.	 Should have the following certifications to prove that the instrument has higher efficiency. 2006/95/EC Low Voltage Directive 2004/108/EC EMC Directive 93/68/EEC CE Marking Directive 	
18.	Should be supplied with all other necessary accessories required to put the system functional/perform the applications	
19.	IQ, OQ, PQ , Basic/ Trouble shooting training should be provided	
20.	Performance/Calibration Certificate to be provided with Traceability for Temperature	
21.	Power supply: 220-240 V with 50/60 Hz	
22.	Warranty:	
	• Minimum 05 years comprehensive onsite with all PM kits from the date of installation and commissioning.	
23.	Delivery: The instrument supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, octroi or any taxes should be borne by the supplier. If any documents required for the above purpose, the office may consider to provide on request prior intimation.	
L		
04. De	eep Freezer(-20 deg C)	
	Vertical double door Deep freezer 500-600 L capacity approx with a minimum temperature - 20°C to - 30°C at 30 to 35°C ambient	
	Vertical double door Deep freezer 500-600 L capacity approx with a	
1.	Vertical double door Deep freezer 500-600 L capacity approx with a minimum temperature - 20°C to - 30°C at 30 to 35°C ambient Lockable full height doors, heavy duty Castor wheels for easy	
1. 2.	Vertical double door Deep freezer 500-600 L capacity approx with a minimum temperature - 20°C to - 30°C at 30 to 35°C ambient Lockable full height doors, heavy duty Castor wheels for easy movement Microprocessor controlled with LED Display for controlling and	
1. 2. 3.	Vertical double door Deep freezer 500-600 L capacity approx with a minimum temperature - 20°C to - 30°C at 30 to 35°C ambient Lockable full height doors, heavy duty Castor wheels for easy movement Microprocessor controlled with LED Display for controlling and monitoring.	
1. 2. 3. 4.	Vertical double door Deep freezer 500-600 L capacity approx with a minimum temperature - 20°C to - 30°C at 30 to 35°C ambient Lockable full height doors, heavy duty Castor wheels for easy movement Microprocessor controlled with LED Display for controlling and monitoring. Resolution: 0.1 deg C or better	
1. 2. 3. 4. 5.	Vertical double door Deep freezer 500-600 L capacity approx with a minimum temperature - 20°C to - 30°C at 30 to 35°C ambient Lockable full height doors, heavy duty Castor wheels for easy movement Microprocessor controlled with LED Display for controlling and monitoring. Resolution: 0.1 deg C or better 100% HCFC/CFC free refrigerant, frost free.	
1. 2. 3. 4. 5. 6.	Vertical double door Deep freezer 500-600 L capacity approx with a minimum temperature - 20°C to - 30°C at 30 to 35°C ambient Lockable full height doors, heavy duty Castor wheels for easy movement Microprocessor controlled with LED Display for controlling and monitoring. Resolution: 0.1 deg C or better 100% HCFC/CFC free refrigerant, frost free. Insulation of non CFC material Inner liner material should be made of stainless steel and cabinet	
1. 2. 3. 4. 5. 6. 7.	Vertical double door Deep freezer 500-600 L capacity approx with a minimum temperature - 20°C to - 30°C at 30 to 35°C ambient Lockable full height doors, heavy duty Castor wheels for easy movement Microprocessor controlled with LED Display for controlling and monitoring. Resolution: 0.1 deg C or better 100% HCFC/CFC free refrigerant, frost free. Insulation of non CFC material Inner liner material should be made of stainless steel and cabinet material should be varnish steel	

11.	Advanced Battery bac in event of power cut	kup d	igital displa	ay for alarms and temperature	
12.	Supplied with appropr	iate vo	oltage stab	ilizer.	
13.	13. Safety: Visual and acoustic alarm, Powe failure alarm, High/low temperature alarm, probe failure Instrument failure alarm				
14.	Certificate of calibratic	on of te	emperature	e with NABL traceability.	
15.	5. Validation protocol with IQ, OQ, PQ Documentation.				
16.	CE certified is prefera	ble			
17.	Warranty:				
	-		•	ive onsite warranty including le date of installation and	
05. M	icropipettes-Electro	onic			
	Electronic Micropipe	ettes			
	companion for daily, repetitive liqui where accuracy of the results and er the fully electronic operations guarante the light, ergonomic design takes care their multiple pipetting modes and electronic pipettes perform faster that can cove the volume range of two med			ee user-independent results, e of the users comfort. With d wide column range the an mechanical pipettes and	
	Description/Specific ation	50-10	000 µl	10-100 μl	
	Quantity required	3No.:	S	3No.s	
	Increments	1 µl		0.1 μl	
	Accuracy %	3.0 to	0.6	3.0 to 0.8	
	Precision %	0.6 to	0.2	1.0 to 0.2	
	onsite		n 05 years comprehensive warranty from the date of ation and commissioning.		
	Compatibility		Must be co	ompatible with universal tips	
	Accessories		stands – 2	ould supply suitable pipette No.s. Minimum 5000 of each volume tips shall be	

06.	Micropipett	tes-Mechan	ical				
	Volume adjustable pipette should be autoclavable. Pipette body shall be tolerant to solvents and drop impact. Plunger shall not be non-greased. No heavy spring action for pipette force. Stroke shall be smooth. Nossle tip shall be abrasion resistant.						
	Description /Specificati on	50-1000 μl	10- 100 μl	1-5 ml	1-10 ml		
	Quantity required	10 No's	8 No's	2 No's	1 No's		
	Increments	1 µl	0.1 µl	50 µl	100 µl		
	Accuracy %	3.0 to 0.8 ±	3.0 to 0.8 ±	3.0 to 0.8 ±	3.0 to 0.8 ±		
	Precision %	0.6 to 0.3	1.0 to 0.3	0.6 to 0.3	1.0 to 0.3		
	Calibration		Certifi tracea	cate to be pro bility	ovided with		
	Warranty		 Minimum 05 years comprehensive onsite warranty from the date of installation and commissioning. 				
	Compatibility	,			e with universal tips		
	Accessories	stands		ply suitable pipette linimum 5000 tips of be provided.			
	Delivery: The pipettes supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, or any taxes should be borne by the supplier. If any documents required for the above purpose, the office may consider to provide on request prior intimation.						
07.	Orbital Sha	Orbital Shaking Incubator					
1.		mpact, powe ling, large loa ng incubator					
2.	stops for safe When a prog	Automatic stop function: When the cover is opened automatically stops for safety and convenience. When a program is set for certain hours automatic cut off should be there after the run.					
3.	Shaker : Orb						
4.	Cover: Aml experiment.	ber acyclic	cover	for visual	observation during		
5.	Motor: Brush	less DC moto	or for lov	/ noise & no	vibration		

6.	Drive system: Beltless Indu	iction drive	
7.	Accessories: Must be eas rack) .Platforms can be p pads.		
8.	During power failure: Feat power failure function shou	tures with unexpected stop occurred by Id be present.	
9.	Temperature range: Am of ±0.5°C at 37°C & temper	bient ±5°C to 80 °C with accuracy rature increment of 0.1°C.	
10.	RPM range: 30 to 300 RPM	A at accuracy of ±1 rpm	
11.	Time range & increment: U	p to 48 hr (two days) & 1min.	
12.	Control: Microprocessor Di	gital PID Control	
	propylene tubes, 50 ml, 10		
14.	Display & operating panel :	LED touch button	
15.	Compressor: 1/8 hp (CFC t	ree refrigerant gas) or better	
16.	Volume: Not more than 84	Litre	
17.	Thermostat: Overheating s	afety thermostat	
18.	Overall dimension: Maximu	ım 550 (W) x 790 (D) x 555 (H) mm	
19.	Accessories: Holder Platfo	orm: 100 ml x 36 or better	
20.	Power :110-220V, 50/60Hz	:	
21.	Compliance with Validation Validation Documentation as per ICH	ation protocol with IQ, OQ, PQ guidelines	
22.	Safety: High temperature temperature, Electrical circ	safety cut off & alarms for high/low set cuit breaker	
23.	Electrical parts: All electric certification	al parts should have CE conformity and	
24.	Warranty: Minimum 05 year the date of installation and	ars comprehensive onsite warranty from commissioning.	
25.	Delivery: The instrument so any permit such as road any taxes should be bor required for the above pur on request prior intimation.		
08.	Ultrasonicator		
1.	General	Reputed branded very high quality stainless steel Ultrasonic Bath with SMPS Power Supply Single unit of Tank & Power Supply. Supplied with Beaker stand, Drain Valve, lid and Digital Temperature controller.	

2.	Features		
3.	Capacity	5 Ltrs	
4.	Tank Dimensions	8" x 8" x 5" H	
5.	Power Output	150 watts.	
6.	Frequency	33±3 KHz	
7.	Ultra Sonic Frequency	33 KHz	
8.	мос	SS 304	
9.	Enclosure & Lid	SS 304 (Rust free)	
10.	Ultrasonic Generator	frequency Build in MOSFET based SMPS	
11.	U/s Transducer	Imported PZT Sandwich type, bonded at the bottom of the tank	
12.	Input Supply	230 VAC, single phase	
13.	Control Panel consisting of : Timer	0-99 minutes digital count down with display	
14.	Auto degassing	Preset 5 minutes	
15.	PSP	Pulse Sweep Power for Uniform distribution of Ultrasonic energy	
16.	Heater	Temperature cut off maximum 60°C	
17.	Warranty	Minimum for a period of 05 years from the date of installation and commissioning including all associated accessories. IQ/OQ/PQ document should provide. During warranty period, if there is any repair to be carried out at the supplier's works, transportation cost of equipment/component besides repair / replacement charges, if any, should be borne by the supplier. Minimum spares must be provided for trouble free operation during warranty period.	
18.	Delivery	The instrument supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, octroi or any taxes should be borne by the supplier. If any documents required for the above purpose, the office may consider to provide on request prior intimation.	

09.	Solid Phase Extraction	System (SPE) with Vacuum Pump	
1.	VACUUM MANIFOLD FOR SPE CATRIDGES	VAC ELUT 20 MANIFOLD WITH THE GLASS BASIN AND COLLECTION RACK FOR 16x150mm (20ml capacity) Tank constructed of chemically resistant , vacuum-safe glass, Ultra high molecular weight polyethylene lid that ensures excellent solvent resistance, vacuum gauge with coarse and fine control valves for monitoring and adjustment and vacuum levels, plus a safety release valve. Standard height adjustable rack for 16 mm test tubes. It should be rugged and reliable and should have multiple rack options Oil Free Vacuum Pump Max. Flow : 17 LPM Max. Vacuum : 24" Hg (600mm) Max. Pressure : 12 psig Motor : 1/8" HP Supplied with Vacuum Gauge &	
2.	Accessories	ControllerNeedle retainer – 10 No.sPort seal plugs – 10 No.sIndividually controlled PTFE top –cock– 10 No.sSpares for extraction unit:Large sample loading kit for 10 portsVacuum ManifoldGlass tubes 16mmX100 mm – 1000No.sTrap kit - 4X500 mlSPE elution test tube rack10X10 mm adjustable height rack20X10 mm adjustable height rack20X12 mm adjustable height rack20X12 mm adjustable height rack500 no.s of RP18/C18 500mg-1g, 6 CCODS SPE cartridges to be suppliesalong with the system.	
3.	User list	Should have proven certified installations of at least 5 No's in all over India. Please submit reference list of installations. Warranty for the Vacuum pump should be minimum two years.	
4.	Warranty	Minimum 05 years comprehensive warranty including vacuum pump and all accessories connected to SPE vacuum manifold.	

5.	Delivery	The instrument supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, octroi or any taxes should be borne by the supplier. If any documents required for the above purpose, the office may consider providing on request prior intimation.	
10.	pH and Conductivity M	eter (dual)	
1.	General: Should be Ber Conductivity in single meter	ch top Multi-parameter measuring pH, er	
2.	Touch screen :Should be touchpad screen	easily switch between pH, conductivity by	
3.	pH range: 0 to 14 Ph		
4.	Conductivity range : 0 to 1	9.99, 0 to 199.9 mS	
5.	pH resolution : 0.01pH		
6.	Conductivity resolution : 0	.01, 0.1 mS	
7.	pH Accuracy : ±0.002 pH		
8.	Conductivity accuracy : ±	1% full-scale + 1 digit	
9.	Should have separate prol	ve Dual LCD shows measurement bes to suit a variety of applications. hization for more accurate measurements	
10.	pH/Conductivity) for unpre	sh-Button Calibration (up to 5 points for cedented full-range accuracy ecognition during calibration	
11.	Power supply: Should be 50hz	able to work with supply voltage of 230v,	
12.	Temperature: Should have	e automatic Temperature Compensation	
13.	Adaptor: Should be supplie	ed with a universal power adaptor.	
14.	Stability indicator: Should reading stabilizes	have stability indicator prompts whenever	
15.		sion for easy Interchangeability of probes	
16.	1	Ild be provided with NIST traceable pH flexibility in calibration.	
17.	Approval : Should be CE &		
18.	Data: Should have provisi 232 interface	on to transfer data through USB and RS	
19.		ories: Should be provide with necessary es for continuous running for 2 year.	

20.	Documentation: Supplier should be capable to provide IQ/OQ/PO documents as per GMP/GLP	
21.	Consumables and spares: Should be provide with necessary consumables and spares for continuous running for one year.	
22.	Warranty: Minimum 05 years comprehensive onsite warranty from the date of installation and commissioning.	
23.	Training of personnel: Basic training for a period of not less than two weeks after installation & commissioning of the equipment to technical personnel and further for method development whenever required, free of cost. Trouble shooting training as and when required free of cost. Demonstration and preliminary training on operation and maintenance of the equipment at our site at the time of installation, free of cost.	
11.	Digital Electronic balance dual range -precision)	
1.	Readability of 0.00001 g. (0.01 mg).	
2.	Range: 0.1 mg-220 gm	
3.	Compact design with sturdy chemical resistant body.	
4.	Weighing pan 0 at least 90 mm or equivalent.	
5.	Calibration of a frequently used weighing range using external weights.	
6.	Digital panel with back lit display.	
7.	Overload protection feature.	
8.	Calibration certificate with FI / E2 class calibration weights traceable to NPL should be provided with the balance.	
9.	The supplier should have the capability to provide calibration of the balance once in six months with NPL certified weights during warranty period. Full details of this service should be provided.	
10.	One spare power adapter should be provided	
11.	Full operation manual should be provided.	
12.	User list for the quoted model in India with full contact information should be provided.	
13.	Full warranty information should be provided.	
14.	A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.	
15.	Internal adjustment weight for precise result.	
16.	Capability of displaying weighing result in different units.	
17.	Features like Taring and % weighing feature should be available.	

18.	Repeatability at least 0.03 mg.	
19.	High grade, chemical resistant housing.	
20.	Back lit display.	
21.	Standard RS232c interface to connect to external PC.	
22.	Hook for weighing below the balance.	
23.	Glass draft shield with sliding doors, with free access from right, left and above	
24.	Warranty: Comprehensive onsite warranty including instrument parts and labour for 05 years including magnetron and all associated accessories. The date of warranty period will start after successful completion of IQ/OQ/PQ of the system. Any part of the balance and its any accessories goes out of order during the warranty period, the same may repaired or replaced immediately within 24 hours and make the system functioning.	
25.	The supplier should quote all essential spares and consumable kit and peripherals, which are not covered under comprehensive warranty for basic instrument and in the opinion of the bidder, is essential for ensuring trouble free performance for the quoted system and supporting units for three years.	
26.	Delivery: The instrument supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, octroi or any taxes should be borne by the supplier. If any documents required for the above purpose, the office may consider to provide on request prior intimation.	
12.	Digital Electronic balance – Pan	
	Digital Electronic balance – Pan Readability and repeatability is 0.01g	
1.	Readability and repeatability is 0.01g	
1. 2.	Readability and repeatability is 0.01g Range: 2g-1500g	
1. 2. 3.	Readability and repeatability is 0.01g Range: 2g-1500g Compact design with sturdy chemical resistant body. Calibration of a frequently used weighing range using external	
1. 2. 3. 4.	Readability and repeatability is 0.01g Range: 2g-1500g Compact design with sturdy chemical resistant body. Calibration of a frequently used weighing range using external weights.	
1. 2. 3. 4. 5.	Readability and repeatability is 0.01g Range: 2g-1500g Compact design with sturdy chemical resistant body. Calibration of a frequently used weighing range using external weights. Digital panel with back lit display.	
1. 2. 3. 4. 5. 6.	Readability and repeatability is 0.01g Range: 2g-1500g Compact design with sturdy chemical resistant body. Calibration of a frequently used weighing range using external weights. Digital panel with back lit display. Overload protection feature. Calibration certificate with FI / E2 class calibration weights	
1. 2. 3. 4. 5. 6. 7.	Readability and repeatability is 0.01g Range: 2g-1500g Compact design with sturdy chemical resistant body. Calibration of a frequently used weighing range using external weights. Digital panel with back lit display. Overload protection feature. Calibration certificate with FI / E2 class calibration weights traceable to NPL should be provided with the balance. The supplier should have the capability to provide calibration of the balance once in six months with NPL certified weights during warranty period. Full details of this service should be	

11.	User list for the quoted model in India with full contact information should be provided.	
12.	A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.	
13.	Internal adjustment weight for precise result.	
14.	Capability of displaying weighing result in different units.	
15.	Features like Taring and % weighing feature should be available.	
16.	High grade, chemical resistant housing.	
17.	Back lit display.	
18.	Standard RS232c interface to connect to external PC.	
19.	Hook for weighing below the balance.	
20.	Warranty: Comprehensive onsite warranty including instrument parts and labour for 05 years including magnetron and all associated accessories. The date of warranty period will start after successful completion of IQ/OQ/PQ of the system. Any part of the balance and its any accessories goes out of order during the warranty period, the same may repaired or replaced immediately within 24 hours and make the system functioning.	
21.	The supplier should quote all essential spares and consumable kit and peripherals, which are not covered under comprehensive warranty for basic instrument and in the opinion of the bidder, is essential for ensuring trouble free performance for the quoted system and supporting units for three years.	
22.	Delivery: The instrument supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, octroi or any taxes should be borne by the supplier. If any documents required for the above purpose, the office may consider to provide on request prior intimation.	
13.	Automated Liquid dispensing unit with pump	
1.	General: Automated liquid dispensing unit is a programmable tool for serial & fast dispensing of culture media, agar or any liquid diluent used for microbiological analysis	
2.	Automated Media dispensing unit with Flow rate up to 1,25L/min or better with digital display (LED/LCD)	
3.	Precision 9 mL: 1.8 % - 18 mL: 1 % - 225 mL: 0.5% or better	
4.	Dispenses liquid from 50 µL to 99 L	
5.	Contamination free: entire dispensing assembly shall be autoclavable	
6.	In compliance with ISO 6887-1 and ISO 7218 standards	
7.	Distribution modes – Continuous, Single Dose (Predetermined volume) & Multi-dose	

8.	Shall be user friendly & ergonomic	
9.	Power consumption - 100-240 V 50-60 Hz	
10.	Dispensing system with the handy unit and electronic start button	
11.	Traceability option preferable	
12.	Provision for Auto calibration	
13.	Warranty: Minimum 05 years comprehensive onsite warranty with one Preventive maintenance from the date of installation and commissioning.	
14.	Pulsating Multi Tube Vortex Shaker	
1.	Type of material used for body: Non corrosive Heavy Duty Vortex Mixer	
2.	Speed (rpm): 300 to 2500rpm or better (for 50ml & 15ml Polypropylene round bottom tubes)	
3.	Accuracy (rpm): ±30 rpm or below.	
4.	 Tube adaptors / Racks / Holders for Mixer: Tube rack : 15 (or more) x 50ml vertically positioned conception of Polypropylene centrifuge tubes (minimum 2 pieces) and Tube rack : 45 (or more) x 15ml vertically positioned conception of Polypropylene centrifuge tubes (minimum 2 pieces) and Tube rack : 9 (or more) x 50ml horizontally positioned conception of Polypropylene centrifuge tubes (minimum 1 piece) 	
5.	Display: LED/LCD Speed Control Programing (rpm)	
6.	Control: Digitally Variable Speed, Programmable time and speed	
7.	Timer Mode: 30 seconds to 59 mins	
8.	Orbit: 3.6mm(0.14") or better	
9.	Weight: 13 kg or above	
10.	Platform Dimensions: 12x7 in. / 30x17.8cm or suitable to hold the above tube racks	
11.	Exterior Dimension: $38.5 \times 23.5 \times 42 \text{ cm}$ (w x d x h) or suitable to hold the above tube racks	
12.	Warranty:Minimum 05 years comprehensive onsite warranty from the date of installation and commissioning every year.	

15.	Homogenizer	
1.	General:	
	 Homogenizer must be suitable for homogenizing of a variety of high moisture, high-fat, wet and dry food products like meat, fish, fruit, vegetables, cereals, spices, frozen products etc. The homogenizer allows frozen food samples to be homogenized in a short period of time, providing uniform particle size/fineness. 	
	 A reproducible degree of homogenization is achieved by the mixing action obtained by the angled knives. Homogenization is accomplished through the high speed combined with a powerful cutting action. Easy to clean 	
2.	Size: Compact and Table top homogenizer	
3.	Motor: At least 1000KW or better, single phase motor	
4.	Sample capacity/size: 0.2 – 1.5 Kg	
5.	 Bowl/grinding container: It should have 4 liter or better Should have provision to reduce the size of grinding chamber volume Should provide 2 numbers stainless steel container and 2 numbers Polypropylene (PP) container 	
6.	LED/Digital Display: Should have digital display for speed and timer and provision to store settings or methods	
7.	Speed: Adjustable speed up to 4000 rpm or better	
8.	Timer:	
	 Adjustable timer up to 3 minutes or better Should have provision for adjustable interval time and interval operation 	
9.	Blade:	
	 Made up of Stainless steel and Heavy metal free steel. Additionally should provide 2 stainless steel blades and 2 heavy metal free steel blades 	

10.	Accessories:	
	 One number Grinding container, plastic (transparent and scratch-resistant), incl. knife holder 	
	 One number Grinding container, stainless steel, incl. knife holder 	
	 Grinding chamber volume reduction lid (stainless steel and Polypropylene) one number each Scraper 4 Numbers, gaskets for lids – 10 numbers. 	
11.	Power supply: 230V/50Hz, single phase with inbuilt/ external protection for high/low voltage	
12.	Safety:	
	• A magnetic/electromechanical safety switch/mechanism should be available from being operated without the cover/lid in the locked position.	
	 Comply with safety standards (e.g. DIN EN ISO 12100, DIN EN 12852) 	
13.	Documentation: Should provide IQ/OQ/PQ documents as per GMP/GLP along with operator manual	
14.	Warranty: Minimum 05 years comprehensive onsite warranty from the date of installation and commissioning.	
15.	Training of personnel:	
	 Demonstration and preliminary training on operation and maintenance of the equipment at our site at the time of installation, free of cost. 	
	 Basic training for a period of not less than one week after installation & commissioning of the equipment to technical personnel and further whenever required, free of cost. Trouble shooting training as and when required free of cost. 	
16.	Delivery: The instrument supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, or	
	any taxes should be borne by the supplier. If any documents	
	required for the above purpose, the office may consider to provide on request prior intimation.	
16.	High Speed Laboratory Blenders & Grinders	

18.	xerrig	erator	
10 1			
10.	Con	nprehensive Warranty should be of 05 years.	
9.	Sho	ould by 0.5 HP motor for vacuum generation.	
alum	inum c	clamp, stopper and filtration flask.	
8.	Aco	cessories should be Funnel top, funnel stem/membrane support,	
7.	Sho	ould be Filtration base with silicon stopper.	
6.	Sho	ould be glass support, NS 40/35 joints.	
1L o	r bettei	r	
5.	Sho	ould be minimum Funnel volume is 300 mL and Flask capacity	
4.	Sho	ould be filter size- 47 mm	
3.	Sho	ould be Anodized Aluminum spring clamp.	
Base	e desig	n has integral vacuum connection .	
2.	Sho	ould be 100% Bolosilicate glass with fritted glass filter base and	
anal	vtical c	olumns and instrument response etc.	
UPL	C instr	ument to reduce instrument down time, prolongs the life of the	
1.	Mot	bile phase and solvent filtration assembly to use in LC-MS/MS,	
17.	IVIO	bile Phase filtration assembly with vacuum	
		ould be Non slip base and easy to clean. nprehensive Warranty should be for minimum 05 year.	
		ctrical requirements should be For 120V, 60Hz, 3A	
1		atures should be stainless steel blades and self lubrication rings.	
		signed should be for shredding, mixing, stirring, blending, or nogenizing.	
	time		
	nos	build be Supply with capacity 2-3L or 500gm solid containers (02)) can be grind/homogenize with two-piece vinyl and styrene lids.	
	clea	aning.	
		or capacity should be minimum 2HP or better. for housing should be chrome and green epoxy for easy	
		ter blade should be stainless steel or better	
	elec	ctronic controller.	
3		eeds should be adjusted from 0 to 20,000rpm (free spin) and pre- usted to allow for accurate reproductions and three speed	
		M should not be less then 20,000rpm or better	

1.	Refrigerator of capacity 500 Ltr to 550 Ltr,	
2.	Frost Free Double Door: Auto defrost to stop ice – build up	
3.	Double Door, Energy Saving Compressor.	
4.	Star rating 3-5 with temperature controller.	
5.	Super Chill, Capable of running without stabilizer.	
6.	It should have smart inverter compressor and refrigerant	
shou	Id be R- 600A or equivalent.	
7.	Inverter Compressor: Energy efficient, less noise & more durable	
8.	The refrigerator should have preferably locking arrangement.	
9. shel ^ı	Material used for shelves-Toughened glass/Tempered glass/wire	
	Inside Self should be adjustable	
	Warranty: Minimum 05 years comprehensive onsite warranty	
	the date of installation and commissioning.	
	Also include in the box user manual, warranty card	
9.	Water Purification System	
Type /lodu	apable to produce both Pure Water [Type-2] and Ultrapure water 1] in a single system with the help of pretreatment module, RO Ile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing Ile and final membrane filter 0.22 m. The system should contain	
Type Aodu nodu nbuil	1] in a single system with the help of pretreatment module, RO ile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications:	
Type Aodu nodu nbuil	1] in a single system with the help of pretreatment module, RO lle, EDI Module, Storage tank, UV Oxidation Chamber, Polishing le and final membrane filter 0.22um. The system should contain	
Type Aodu nodu nbuil	1] in a single system with the help of pretreatment module, RO ile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists:	
Type Aodu nodu nbuil	1] in a single system with the help of pretreatment module, RO ile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications:	
Type Aodu nodu nbuil	 1] in a single system with the help of pretreatment module, RO ile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter 	
Type Aodu nodu nbuil	 1] in a single system with the help of pretreatment module, RO lle, EDI Module, Storage tank, UV Oxidation Chamber, Polishing lle and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) 	
Type Aodu nodu nbuil	 1] in a single system with the help of pretreatment module, RO lle, EDI Module, Storage tank, UV Oxidation Chamber, Polishing lle and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and 	
Type Modu nodu nbuil Stag	 1] in a single system with the help of pretreatment module, RO lle, EDI Module, Storage tank, UV Oxidation Chamber, Polishing lle and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) 	
Type Modu nodu nbuil Stag	 1] in a single system with the help of pretreatment module, RO lle, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge – Reverse Osmosis with Electro Deionization Stage: 	
Type Modu nodu nbuil Stag • • • • • • •	 1] in a single system with the help of pretreatment module, RO lle, EDI Module, Storage tank, UV Oxidation Chamber, Polishing lle and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge – Reverse Osmosis with Electro Deionization Stage: Pretreatment Module with activated carbon / Prefilter combination to protect the RO Membranes 	
Type Modu nodu nbuil Stag	 1] in a single system with the help of pretreatment module, RO lle, EDI Module, Storage tank, UV Oxidation Chamber, Polishing lle and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge – Reverse Osmosis with Electro Deionization Stage: Pretreatment Module with activated carbon / Prefilter combination to protect the RO Membranes RO Module with high performance thin film composite 	
Type Modu nodu nbuil Stag • • • • • • •	 1] in a single system with the help of pretreatment module, RO ile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron, 1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge –Reverse Osmosis with Electro Deionization Stage: Pretreatment Module with activated carbon / Prefilter combination to protect the RO Membranes RO Module with high performance thin film composite membrane with salt retention rate up to 98%. The retention rate for dissolved organic compounds, particles & colloids & bacteria 	
Type Modu nodu nbuil Stag • • • • • • •	 1] in a single system with the help of pretreatment module, RO ile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron, 1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge –Reverse Osmosis with Electro Deionization Stage: Pretreatment Module with activated carbon / Prefilter combination to protect the RO Membranes RO Module with high performance thin film composite membrane with salt retention rate up to 98%. The retention rate for dissolved organic compounds, particles & colloids & bacteria exceeds99% 	
Type Modu nodu nbuil Stag • • • • • • •	 1] in a single system with the help of pretreatment module, RO lie, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron, 1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge –Reverse Osmosis with Electro Deionization Stage: Pretreatment Module with activated carbon / Prefilter combination to protect the RO Membranes RO Module with high performance thin film composite membrane with salt retention rate up to 98%. The retention rate for dissolved organic compounds, particles & colloids & bacteria exceeds 99% Electro-deionization module with resin chambers in a single bed 	
Type Modu nodu nbuil Stag • • • • • • •	 1] in a single system with the help of pretreatment module, RO lile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing lile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge –Reverse Osmosis with Electro Deionization Stage: Pretreatment Module with activated carbon / Prefilter combination to protect the RO Membranes RO Module with high performance thin film composite membrane with salt retention rate up to 98%. The retention rate for dissolved organic compounds, particles & colloids & bacteria exceeds 99% Electro-deionization module with resin chambers in a single bed configuration. The resin should be low power consumption & 	
Type Modu nodu nbuil Stag • • • • • • •	 1] in a single system with the help of pretreatment module, RO lie, EDI Module, Storage tank, UV Oxidation Chamber, Polishing ile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron, 1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge –Reverse Osmosis with Electro Deionization Stage: Pretreatment Module with activated carbon / Prefilter combination to protect the RO Membranes RO Module with high performance thin film composite membrane with salt retention rate up to 98%. The retention rate for dissolved organic compounds, particles & colloids & bacteria exceeds 99% Electro-deionization module with resin chambers in a single bed 	
Type Modu nodu nbuil Stag • • • • • • •	 1] in a single system with the help of pretreatment module, RO lile, EDI Module, Storage tank, UV Oxidation Chamber, Polishing lile and final membrane filter 0.22um. The system should contain t TOC Monitor with following features and specifications: e - Pretreatment System should consists: 5 micron,1 micron and Activated Carbon wrapped type depth filter Pressure gauge with regulator Provision for pumping PDW 50L external suitable PP tank (resistant to microbial growth) should be supplied with provision for connecting to Type1 and Type-2 water when feed water is not available from tap. ge –Reverse Osmosis with Electro Deionization Stage: Pretreatment Module with activated carbon / Prefilter combination to protect the RO Membranes RO Module with high performance thin film composite membrane with salt retention rate up to 98%. The retention rate for dissolved organic compounds, particles & colloids & bacteria exceeds 99% Electro-deionization module with resin chambers in a single bed configuration. The resin should be low power consumption & continually regenerated without use of any chemicals. 	

-	Storage Tank:
•	50 L Storage Tank with UV Lamp, Air filter, CO ₂ Trap & Level Sensor.
•	The tank should made of pure water resistant Poly Ethylene material with an outlet to drain the tank totally and a pressure sensor for the tank level control. The storage tank should be100%drainable.
ge:	
• •	Online UV oxidation chamber: UV Light Energy at 185 nm& 254 nm wavelengths. TOC Measurement: Online continuous TOC measurement with Live Display. Sterile Filter with 0.22µm or betterwith Autoclavable option for re-use
Ñ Ñ	System should meet reagent water quality standards including ASTM Type 1, CLSI and ISO 3696 Type System should have flexible remote dispenser to dispense water whenever needed
Ñ Ñ	System should have built-in automatic self-cleaning mechanism to extend the life of cartridge System should have the special features such as volume control dispensing, a 24 hour circulation mode with extreme low sound level <40 dba & integrated RS 232 interface for data recording Automatic flushing and recirculation in standbymode.
Ñ	User can collect RO Quality water from the Storage tank & ultrapure water from flexible dispenser
Wate • •	er (Type-2) Specification: Production Rate : 15 LPH or better Conductivity : < 0.2μs/cm or better
of • • • • • • • • • • • • • • • • • • •	trapureProduct theWater following specifications:Flow Rate : 1.5 L/min orbetterShould have conductivity @ 25 Deg C : 0.055 µs/cm orbetterShould have resistivity @ 25 Deg C : 18.2 M -cm orbetterTOCTOCSacteriaParticles >0.1µmbSupplied with all other accessories required to put the systemIQ, OQ, PQ should be provided free of costoply: 220V with 50 Hz.All electrical parts should have CEand certificationMinimum 05 years Comprehensive onsite warranty from the tallation and commissioning and three years CMC.

B – Consumables and Chemicals

SI. No	Items	Please Specify whether the quoted model meets the specification (Yes/No)	the Model
Antibiot	ic Residue Analysis Requirement		
Consum	ables		
1.	PP-Tubes-15ml		
2.	PP-Tubes-50ml		
3.	Micro Tips-100µl-1000µl		
4.	Micro Tips-5µl-100µl		
5.	Glass Beaker-1000ml		
6.	Glass Beaker-500ml		
7.	Glass Beaker-250ml		
8.	Glass Beaker-100ml		
9.	Pipette Stand		
10.	Tips Box		
11.	Gloves		
12.	Solvent Dispenser		
13.	Reagent Bottle		
14.	Wash bottle		
15.	Vials (GC/LC)		
16.	Test tubes		
17.	Dropper Syringe		
18.	PP-Tube Rack		
19.	Eppendorf tube		
20.	Vial Tray		

		i	
21.	Storage Plastic bags		
22.	Syringe Filter (0.45 micron)		
23.	PP tube 2ml(centrifuge) –		
24.	HLB Cartigae 60mg,200mg		
	J		
1.	Methanol – 2.5 lit		
2.	Acetonitrile – 2.5 lit		
3.	Ethyl Acetate - 2.5 lit		
4.	Hexane – 1 lit		
5.	CCl4 - 1 lit		
6.	Water-milli-Q – 1 lit		
7.	Ammonium Formate – 500mg		
8.	Ammonium Acettate - 500mg		
9.	Formic acid – 500ml		
10.	2-Nitro Benzaldehyde - 500mg		
11.	Tri Sodium Phosphate - 500mg		
12.	Sodium Hydroxide - 500mg		
13.	Hydrochloric acid -500ml		
14.	Iso propanol - 500mg		
Mycoto	kins Analysis Requirement		
Consun			
1.	Syringe Filter (0.45 mu)		
2.	Syringe (5 ml)		
3.	Pipette Stand		
4.	Tips Box		
5.	Wash bottle		
6.	Vials-Amber colour (GC/LC)		

7.	Filter Paper-Fluted		
8.	Filter Paper- Glass Micro fibre		
9.	Immuno affinity columns		
10.	PP-Tubes-50ml		
11.	PP-Tubes-15ml		
12.	Funnels		
13.	Glass Beaker-1000ml		
14.	Glass Beaker-500ml		
15.	Glass Beaker-250ml		
16.	Glass Beaker-100ml		
17.	Volumetric Flask		
]	<u></u>	
1.	Methanol – 2.5 lit		
2.	Water-milli-Q – 1 lit		
3.	Sodium Chloride-AR- 500mg		
4.	Acetonitrile – 2.5 lit		
Pesticid	es Residue Analysis Requirement		
Consum	nables		
1.	PP-Tubes-15ml		
2.	PP-Tubes-50ml		
3.	Micro Tips-100µl-1000µl		
4.	Micro Tips-5µl-100µl		
5.	Glass Beaker-1000ml		
6.	Glass Beaker-500ml		
7.	Glass Beaker-250ml		
8.	Glass Beaker-100ml		
9.	Pipette Stand		

-		
10.	Tips Box	
11.	Gloves	
12.	Bottle Dispenser	
13.	Reagent Bottle	
14.	Wash bottle	
15.	Vials	
16.	Test tubes	
17.	Dropper Syringe	
18.	PP-Tube Rack	
19.	Eppendorf tube	
20.	Vial Tray	
21.	Storage Plastic bags	
Chemic	als (AR /HPLC Grade)	
1.	Ethyl Acetate - 2.5 lit	
2.	Hexane – 1 lit	
3.	CCl4 - 1 lit	
4.	MgSo4 – 500 mg	
5.	C18 – 100 g	
6.	Carbon Black -25 g	
7.	PSA - 100 g	
8.	Sodium Chloride -500 mg	

C – Other Accessories/Work Requirements

SI.	Items	Please Specify	Name of
No		whether the	the Model
		quoted model	and its
		meets the	Specificatio
		specification	n
		(Yes/No)	

1.	Online UPS (20 KVA) with 02 hrs backup	
2.	Argon cylinder with Gas (UHP grade) with SS regulator	
3.	Nitrogen cylinder with Gas (UHP grade) with SS regulator	
4.	Helium cylinder with Gas (UHP grade) with SS regulator	
5.	Gas purification Panel for Argon, Nitrogen, Helium with control valve and pressure display.	
6.	Gas pipe line fittings approx minimum 100 meters.	
7.	PC, Printer for the UPLC/QDa/PDA.FLR	
	 Branded PC with latest processor (I series) 8 GB minimum RAM or better 2 TB Hard Disc or better DVD RW drive 32" LED Monitor Laser printer with automatic duplex printing option Operating system compatible with instrument software 	

Note : List of Installations of the quoted Model or a comparable model of equivalent sensitivity preferably in food analysis sector in India (Attach Performance certificate from the organizations where the quoted model or a comparable model of equivalent sensitivity has already been installed)

PART V- EVALUATION CRITERIA & PRICE BID ISSUE

- 2. <u>Price Bid Format</u>: The Price Bid Format is given below and Bidders are required to fill this up correctly with full details, as required under Part-II of RFP :-
 - (a) <u>Basic cost of the item/items</u>:

Cost Details

SI.No	Specifications	Qty	Cost in INR
A- Inst	ruments	I	
1.	Nitrogen Generator for sample concentration	01	
2.	Refrigerated Centrifuge	01	
3.	Nitrogen evaporator (Bench-top Turbo Evaporator)	02	
4.	Deep Freezer(-20 deg C)	01	
5.	Micropipettes-Electronic	03	
6.	Micropipettes-Mechanical	03	
7.	Orbital Shaking Incubator	01	
8.	Ultrasonicator	01	
9.	Solid Phase Extraction System (SPE) with Vacuum Pump	01	
10.	pH and Conductivity Meter (dual)	01	
11.	Digital Electronic balance dual range -precision)	01	
12.	Digital Electronic balance – Pan	01	
13.	Automated Liquid dispensing unit with pump	02	
14.	Pulsating Multi Tube Vortex Shaker	02	
15.	Homogenizer	01	
16.	High Speed Laboratory Blenders & Grinders	02	
17.	Mobile Phase filtration assembly with vacuum	01	
18.	Refrigerator	01	
19.	Water Purification System	01	
	Total of A		

B- Consumables and Chemicals Antibiotic Residue Analysis Requirement		
1.	PP-Tubes-15ml	10000 nos, Make- Abdos or reputed brand
2.	PP-Tubes-50ml	10000 nos, Make- Abdos or reputed brand
3.	Micro Tips-100µl-1000µl	15 boxes, each boxes of 1000 nos tips, Make- Abdos or reputed brand
4.	Micro Tips-5µl-100µl	15 boxes, each boxes of 1000 nos tips, Make- Abdos or reputed brand
5.	Glass Beaker-1000ml	05 nos, Borosilicate
6.	Glass Beaker-500ml	05 nos, Borosilicate
7.	Glass Beaker-250ml	10 nos, Borosilicate
8.	Glass Beaker-100ml	10 nos, Borosilicate
9.	Pipette Stand	10 nos, Abdos or reputed brand
10.	Tips Box	10 nos for 100 ul tips and 05 nos for 1000ul tips, Abdos or reputed brand
	Gloves	Blue Nitrile gloves, 30 boxes, each boxes minimum 100nos
	Solvent Dispenser	05 nos for solvents
13.	Reagent Bottle	20 bottles, 500 ml capacity

14.	Wash bottle	10 nos
15.	Vials (GC/LC)	10000 nos, amber color & 5000 nos, amber colorless with cap
16.	Test tubes	10000 nos, 15 ml borosil glass
17.	Dropper Syringe	15 boxes, each boxes contains 100 nos), Abdos or reputed brand
18.	PP-Tube Rack	15 nos for 50 ml and 10 nos for 15 ml tubes), Abdos or reputed brand
19.	Eppendorf tube	10000 nos), Make - Epperndrof
20.	Vial Tray	15 nos, each tray minimum contains 120 vials
21.	Storage Plastic bags	2000 nos, zip lock transparent plastic bag of 500 gm capacity
22.	Syringe Filter (0.45 micron)	2000 nos, 0.45um, Nylon-6,6 width-25mm
23.	PP tube 2ml(centrifuge) –	10000 nos, Abdos or reputed brand
	HLB Cartigae 60mg,200mg	10000 nos, Waters make or reputed brand
Chemi	cals (AR/HPLC/MS Grade)	
1.	Methanol – 2.5 lit	20 bottle (HPLC grade)
2.	Acetonitrile – 2.5 lit	25 bottle (HPLC grade)
3.	Ethyl Acetate - 2.5 lit	25 bottle (HPLC grade)

4.	Hexane – 1 lit	5 bottle (HPLC
5.	CCl4 - 1 lit	grade) 5 bottle (HPLC
э.		grade)
6.	Water-milli-Q – 1 lit	20 bottle
		(HPLC grade)
7.	Ammonium Formate – 500mg	2 bottle (AR
		grade)
8.	Ammonium Acettate - 500mg	2 bottle (AR
		grade)
9.	Formic acid – 500ml	2 bottle (AR
0.		grade, 98%
		purity)
10.	2-Nitro Benzaldehyde - 500mg	2 bottle (AR
		grade)
11.	Tri Sodium Phosphate - 500mg	2 bottle (AR
		grade)
12	Sodium Hydroxide - 500mg	2 bottle (AR
12.		grade)
		g
13.	Hydrochloric acid -500ml	2 bottle (AR
		grade)
14.	lso propanol - 500mg	2 bottle (AR
		grade)
ycot	oxins Analysis Requirement	
onsu	mables	
1.	Syringe Filter (0.45 mu)	2000 nos,
		0.45um,
		Nylon-6,6 width-25mm
2.	Syringe (5 ml)	10000 nos, 5
۷.		ml dospovan,
۷.		ml dospovan, without niddle
3.	Pipette Stand	without niddle 10 nos, Abdos
	Pipette Stand	without niddle 10 nos, Abdos or reputed
3.		without niddle 10 nos, Abdos or reputed brand
	Pipette Stand Tips Box	without niddle 10 nos, Abdos or reputed brand 10 nos for 100
3.		without niddle 10 nos, Abdos or reputed brand 10 nos for 100 ul tips and 05
3.		without niddle 10 nos, Abdos or reputed brand 10 nos for 100
3.		without niddle 10 nos, Abdos or reputed brand 10 nos for 100 ul tips and 05 nos for 1000ul

4	Mathanal 2.5 lit	20 ho#lo
1.	Methanol – 2.5 lit	20 bottle (HPLC grade)
2.	Water-milli-Q – 1 lit	20 bottle (HPLC grade)
3.	Sodium Chloride-AR- 500mg	2 boxes (AR grade)
4.	Acetonitrile – 2.5 lit	25 bottle (HPLC grade)
Pestic	ides Residue Analysis Requirement	
Consi	umables	
1.	PP-Tubes-15ml	10000 nos, Make- Abdos or reputed brand
2.	PP-Tubes-50ml	10000 nos, Make- Abdos or reputed brand
3.	Micro Tips-100µI-1000µI	15 boxes, each boxes of 1000 nos tips, Make- Abdos or reputed brand
4.	Micro Tips-5µl-100µl	15 boxes, each boxes of 1000 nos tips, Make- Abdos or reputed brand
5.	Glass Beaker-1000ml	05 nos, Borosilicate
6.	Glass Beaker-500ml	05 nos, Borosilicate
7.	Glass Beaker-250ml	10 nos, Borosilicate
8.	Glass Beaker-100ml	10 nos, Borosilicate
9.	Pipette Stand	10 nos, Abdos or reputed brand
10	. Tips Box	10 nos for 100 ul tips and 05 nos for 1000ul tips, Abdos or reputed brand

11.	Gloves	Blue Nitrile
		gloves, 30
		boxes, each
		boxes
		minimum
		100nos
12.	Bottle Dispenser	10 nos
13.	Reagent Bottle	20 bottles, 500
		ml capacity
14	Wash bottle	10 nos
15	Vials	10000 nos,
10.		amber color &
		5000 nos,
		amber
		colorless with
		сар
16.	Test tubes	10000 nos, 15
		ml borosil
		glass
47		
17.	Dropper Syringe	15 boxes,
		each boxes
		contains 100
		nos), Abdos or
		reputed brand
18	PP-Tube Rack	15 nos for 50
10.		ml and 10 nos
		for 15 ml
		tubes), Abdos
		or reputed
		brand
19.	Eppendorf tube	10000 nos),
		Make -
		Epperndrof
20	Vial Tray	15 nos, each
20.		
		tray minimum
		contains 120
		vials
21.	Storage Plastic bags	2000 nos, zip
		lock
		transparent
		plastic bag of
		500 gm
		capacity
Cham'		σαρασιτγ
Cnemi	icals (AR/HPLC Grade)	
1.	Ethyl Acetate - 2.5 lit	25 bottle (HPLC grade)
2.	Hexane – 1 lit	5 bottle (HPLC
		grade)
-		5 bottle (HPLC
3.	CCI4 - 1 lit	
3.		grade)
	MgSo4 – 500 mg	

5.	C18 – 100 g	10 nos
6.	Carbon Black -25 g	10 nos
7.	PSA - 100 g	10 nos
8.	Sodium Chloride -500 mg	2 boxes (AR grade)
	Total of B	
C- Oth	ner Accessories/Work Requirements	<u> </u>
1.	Online UPS (20 KVA) with 02 hrs backup	03 Nos
2.	Argon cylinder with Gas (UHP grade) with SS regulator	02 Nos
3.	Nitrogen cylinder with Gas (UHP grade) with SS regulator	02 Nos
4.	Helium cylinder with Gas (UHP grade) with SS regulator	02 Nos
5.	Gas purification Panel for Argon, Nitrogen, Helium with control valve and pressure display.	Dual mode system
6.	Gas pipe line fittings approx minimum 100 meters.	Compatible
7.	Branded PC, Printer for the UPLC/QDa/PDA.FLR	01 nos
	 Branded PC with latest processor (I series) 8 GB minimum RAM or better 2 TB Hard Disc or better DVD RW drive 32" LED Monitor Laser printer with automatic duplex printing option Operating system compatible with instrument software 	
	Grand Total (A+B+C)	

Note1:

(a) The financial bid has to be filled necessarily in the format given above and has to be signed by the authorized representative of the bidder with full name designation and seal on each page. **The price of each item has to be quoted separately**. The above quote should include Clearing and Transportation charges.

(b) Price quoted should be valid for minimum 06 months from the last date of submission of the bids.

(c) Explanatory notes, if so desired, can be separately submitted along with the financial bid but financial bid in the above format is required to be submitted.

(d) Equipment delivery time will be <u>45 days for domestic items and 60 days for</u> <u>imported items</u> from the date of issue of Supply order.

- (e) Please indicate separately any duties, taxes.
- (f) All above items shall be procured from reputed brand/make only.

Note 2 : The rate may be quoted in foreign currency and/or in Indian currency, however, for comparison/evaluation purpose the bills selling market rate of exchange established by RBI for similar transaction as on date of opening of price bid shall be used to convert foreign currencies to the Indian rupees.

Note 3: Determination of L-1 will be done based on Net amount (not including levies, taxes and duties levied by Central/State/Local governments such as excise duty, GST, Octroi/entry tax, etc. on final product) of all items/requirements as mentioned above.

Signature of tenderer_____ Name in Block letter _____ Date ____

Capacity in which Signed_____

Sd/-(Nilesh Kumar Ojha) Assistant Director(QA)