1 Bidders should arrange for an onsite functional demonstration of the offered equipment on the notified date at facility at Kolkata, West Bengal or at **Swasthya Bhavan**. The evaluation of the spec indicator will be made based on the reports of the onsite functional demonstration of the equipments. The onsite functional demonstration of the equipment is purely at the discretion of the Technical Bid Evaluation Committee and its input shall be treated as only corroborative in nature and will not be a substitute for technical evaluation of the document submitted along with the bid. The decision of the Technical Committee in this regard will be final.

Bidder has to comply with all parameters of the technical specifications except deviation(s) which will be considered minor and acceptable by the team of Experts to be engaged by WBMSCL to take working / functional demonstration of the offered equipments.

2. **Experience Criteria:**

Bidder should submit following documents of same / similar type of laboratory equipment in support of supplies made to Govt. Hospitals/laboratories or reputed private hospitals/laboratories for the period of last three calendar years ending December 2024:

- Proof of installation (Installation certificate / Service report duly signed by the hospital / laboratory/healthcare facility) of the same / similar type of laboratory equipment

OR

- Proof of payment against supply and installation of the same / similar type of laboratory equipment.

3. Bidder should mention the bid reference number along with the quoted make and model of the equipment in the OEM Authorization certificate and the certificate should be issued to bidder from OEM after publishing of the bid.

4. Bidder should submit minimum average annual turnover in laboratory equipment for last 3(Three) financial years in letter head of chartered accountant with mentioning valid UDIN (Unique Document Identification Number). The data should be submitted in a table duly signed and stamped by chartered accountant.

5**. Exemption of EMD as per Memorandum bearing West Bengal Finance Department Memo No. 375-F(Y) Dated 30.01.2023** where has been clearly mentioned that, in order to get more participants and obtain better competition in procurement through GeM, it is decided to include following categories of sellers / service providers, in addition to our existing provisions, for exemption of EMD deposit in GeM:

i. All registered Micro and Small Enterprises being manufacturer of the Primary Product Category or Service Provider of the Primary Service Category, whose credentials are validated online through Udyam / NSIC

(National Small Industries Corporation) database/ DIC (District Industries Corporation) database.

ii. Sellers of Primary Products/Primary Services having their credentials verified through the Vendor Assessment process in GeM.

iii. Sellers/ Service Provider having annual turnover of Rs 500 Crore or above.

iv. Sellers/ Service Providers of Primary Product Categories having BIS (Bureau of Indian Standards) certification.

6. Availability of Service Centres: OEM / Bidder must have a Functional and operational Service Centre in **Kolkata, Siliguri and Durgapur** for next 3 (three) calendars years as to extend the warranty coverage seamless manner and have capability of providing service throughout West Bengal.

7. Successful bidder/OEM will have to ensure that adequate number of dedicated technical service personals / engineers are designated / deployed for attending to the Service Request in a time bound manner and for ensuring Timely Servicing / rectification of defects during warranty period.

8. As many as number required, end user training must be provided within the warranty period without any charges.

9. Under taking regarding sharing Land Border: In terms of GeM GTC Clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India as specified under Rule 144(xi) of the General Financial Rules (GFRs), 2017 and Office memorandum issued by the Ministry of Finance, Govt. of India vide DOE Order (Public Procurement No. 4) No. F.7/10/2021-PPD(1), Dated-23.02.2023 (as amended from time to time), where has been clearly mentioned that, "Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws". Self Declaration must be given in the below mentioned format (as applicable) in the letter head by the authorized signatory with stamp.

Annexure-IA

DECLARATION CERTIFICATE FOR PROCUREMENT OF GOODS & SERVICES

Tender Ref. No.: Date:

Description of work:

To,

Managing Director

West Bengal Medical Services Corporation Limited
Swasthya Sathi
GN-29, Salt Lake, Sector-V
Kolkata-700091

TYPE-I

Applicable for bidders falling under countries not sharing land border with India (or) sharing land border with India but currently lines of credit facility extended by Govt. of India to that country

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and accordingly does not call for any registration with Competent Authority and this bidder is eligible to be considered.

Date: Signature :

Place: Name of the Person :

Designation :

Firm Name :

TYPE-II

Applicable for bidders falling under countries sharing land border with India but currently lines of credit facility is not extended to that country

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is from such a country and currently lines of credit facility is not extended by Govt. of India to that country. Accordingly, for bidding in this particular tender, bidder need to be registered with DPIIT. In this regard, the required formalities have been completed and the bidder has registered with Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. Our registration details are indicated below.

Competent Authority Ref. No. :

Registration No. & Date :

Name of the Company :

Registration valid up to :

(Copy of the Registration certificate enclosed)

Date: Signature :

Place:

Name of the Person :
Designation :
Firm Name :

10. Bid Validity: 2(two) years from the date of Tender publication

11. **Price Validity:** 2(two) years from the date of Tender publication

12. **WBMSCL's right to vary quantities:**

WBMSCL reserves the right to increase the quantity in case of need / or to decrease the quantity of goods and related services initially specified in Bid Document and without any change in the unit prices or other terms and conditions of the Bid Documents.

Bidder must accept and agree to the fact that the bid and price will remain valid for a period of 2(two) years from the date of bid publication.

13. Bidders shall quote only those products in the bid which are not obsolete in the market and has at least 07 years residual market life i.e. the offered product shall not be declared end-of-life by the OEM before this period.

14. Pre-Bid Meeting : **22nd August (Friday); 2025: 12:00 Noon Onwards**
Physically presence of the bidders are mandatory at Conference Room of West Bengal Medical Services Corporation (WBMSC), at 2nd floor , Swasthya Sathi Building, Swasthya Bhawan , Kolkata – 700091

15. Please consider the ePBG 10% instead of 0.01% mentioned as previous in the bid document

The bidder has to submit EMD online through NEFT/RTGS internet banking only. EMD submitted in the form of bank guarantee will be rejected.

16. PENALTY FOR DEFAULT :

Nature of offence	Penalty to be imposed
Any wrong or misleading information or forged document provided by the Tenderer during submission of bids	a. Forfeiture of EMD b. May lead to blacklisting in FIRST PARTY for at least 5 years
Non execution of agreement within 14 days of issue of AOC	a. Forfeiture of EMD b. Blacklisting for 5 years in FIRST PARTY c. Blacklisting to be circulated to all procurement agencies throughout the country

Supplying refurbished goods instead of new / Low quality product in respect to the demonstrated one	a. Termination of Contract. b. Blacklisting for life. c. Blacklisting to be circulated to all procurement agencies throughout the country. d. Forfeiture of the Performance Bank Guarantee. Lodging FIR.
Breach of Agreement	a. Termination of Contract. b. Blacklisting for life c. Blacklisting to be circulated to all procurement agencies throughout the country. d. Forfeiture of the Performance Bank Guarantee e. Lodging FIR

17. EVALUATION OF SPEC INDICATOR

Bidder has to comply with technical specifications except deviation(s) which will be considered minor and acceptable by the Experts to be engaged by WBMSCL. Bidders may have to arrange for a functional demonstration of the offered equipment, if desired by the Tender Inviting Authority (TIA).

18. Comprehensive Maintenance Contract (CMC): The selected bidder shall enter into CMC after expiry of warranty and CMC should include the following:

- The equipment including all other accessories, ancillaries given in the specifications of the equipment including UPS, UPS Battery, AC machines and furniture etc.

- Bidders must enter in to the CMC with RFTL, Siliguri directly / third party as authorized by Food Safety Branch/ RFTL etc. Bidder must accept the same CMC rate, if the CMC is offered by the third party/RFTL then no escalation, no extra cost will be provided. If any bidder failed to execute the CMC with RFTL or third party (as authorized by RFTL or Food Safety Brach), RFTL may initiate legal action against the selected bidder. The selected bidder may be debarred to participate in the future tender
- The execution of CMC of any equipment will be at sole discretion of the RFTL management/Food Safety Branch.

- As per tender terms and condition third party items must be included within the CMC rate.

- Breakdown Calls: as many numbers as may be required to attend to resolve the complaint lodged by the end-users.

- Preventive Maintenance: The selected bidder should attend periodic planned preventive maintenances in the following manner

Equipments	**Mandatory preventive Maintenance Service (PMS) visit per year**		**Remarks**
	Warranty	**CMC**	
LCMSMS	3	3	1. Supplier/ authorised service provider must attend all breakdown calls during warranty / CMC period. 2. The supplier should provide Preventive Maintenance Services (PMS) yearly / bi - yearly / quarterly in equal interval to fulfill the minimum number of mandatory PMS as recommended in the previous column during warranty / CMC period. 3. The preventive maintenance includes testing & calibration as per technical / service / operational manual, spares, all software updates and labour.

- The cost for Year wise CMC charges after completion of 3(three) years warranty in percentage of the sum of quoted price of the equipment in the BOQ to be paid to the selected bidder(s) in the following manner:

ITEM	CMC charges in percentage(%) for Year4	CMC charges in percentage(%) for Year5	CMC charges in percentage(%) for Year6	CMC charges in percentage(%) for Year7	CMC charges in percentage(%) for Year8
LCMSMS	4.0	4.50	5.00	5.50	6.0

The bill of CMC of the selected bidder must be submitted and payment for the same will be done by the Laboratory on Half Yearly basis subject to availability of adequate fund.

Periodic Calibration: The selected bidder will also undertake periodic calibrations as would be required for quality certification desired by the end-user facilities.

A. Bidders shall quote only those products in the bid which are not obsolete in the market and has at least 07 years residual market life i.e. the offered product shall not be declared end-of life by the OEM before this period.

B. The bidder has to provide full support including turnkey work(if applicable) and 3 rd party items after the end-of-life of the equipment up to 3 years. If bidder cannot manage to provide the spare parts, then CMC value in monetary terms must be discontinued and CMC may be refund prodata basis.

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Participated bidders are requested to submit their Contact details, Email ID and Address in the additional documents section while submitting their bid documents in GeM portal. The details should be submitted in a letter head of the company with signature and stamp

Bidders are requested to ignore the Technical Specifications given under GeM Specification category and consider only the Technical Specification given below

Technical Specifications of LC MSMS

Sl. no.	Technical Specifications
	LC-MS/MS A compact High resolution LC-MS/MS equipment for qualitative and quantitative estimation of food contaminants (Pesticides, Mycotoxins, antibiotics etc) residues analysis with user friendly software to meet the global food regulations like EU/USFDA/Japan/FSSAI, etc.
1.1	**Mass Stability** 0.1 Da over 24 hours (please provide graphical data)
1.2	**Dynamic range** Should be 6 orders of magnitude or better
1.3	**Mass analyzer Quadruple Analyzer:** Instrument should be configured with a quadruple mass filter for the efficient transmission of ions in MS mode and selection of precursor ions for MS-MS analysis
	The Quadruple mass range 20 – 2000 m/z or better
	The Analyzer should have more than one aspect for the efficient ion separation with maximum resolution
1.4	**Sensitivity** Lower detection and highest sensitivity ESI + Ion Sensitivity: The signal to noise ratio for 1 pg of reserpine should be >50,0000:1 or better, in MRM mode of reserpine at the transition m/z 609 – m/z

Sl. no.	Technical Specifications
	195 (Proof document/application note to be enclosed along with technical tender document).
	ESI - Ion Sensitivity: The signal to noise ratio for 1 pg of chloramphenicol should be >50,0000:1 or better, in MRM mode of chloramphenicol at the transition m/z 321 – m/z 152 (Proof document/application note to be enclosed along with technical tender document).
1.5	**Scan speed** Should have the scan speed of 15,000 amu/dp per sec or Iboentitzeartion
1.6	**Ionization**
	Electrospray with Concentric Gas Flow for Nebulization to cover flow rates up to 2ml/min.
	Multimode Ionization: ESI / APCI combined source: A combined ESI/APCI source must be provided as standard with the instrument. ESI and APCI ionization must be achieved using a single probe. It should able to perform both ESI and APCI
1.7	**Source Interface** • Orthogonal off-axis spray (Electrospray) or any other equally efficient technology capable of avoiding interference from solvents and other extraneous matter. • Interface should maintain cleanliness of ion optics and capable of handling large batches of complex samples. • Capable of handling large batches of complex sample matrix like Animal feeds, Fish and fishery products, poultry and poultry products, Honey, Milk and Milk products, Agriculture products (Fruits & Vegetables),Tea,Coffee,Spices ,Water etc over a long period of time without performance degradation • Cleaning of source should be done without venting the system and facility to vacuum interlock. • Interface capable of ambient temperature operation and without complex apertures to maintain structural integrity of thermally labile and fragile molecules.
1.8	**Integrated Fluidic Device (to minimize space and tubing)** • An infusion device must be integral to the instrument or equivalent and must be controllable from the instrument software. At least 2 user-changeable sample vials should be built into the system to allow tuning and calibration solutions to be infused into the probe via the switching valve.
1.9	**Polarity switching time** • +ve / -ve polarity switching time between alternate MRM scans should be 25 msec or better with supporting documents

Sl. no.	Technical Specifications
1.1	**Vacuum System** • Robust high efficiency vacuum system with minimum maintenance and utility with low noise level. • Vacuum read backs must be digitally monitored and controlled through software to ensure fail-safe operation in the event of power failure. • All accessories required for the proper functioning of the vacuum system should be supplied. • Fore line pump: Oil free Scroll type pump with arrangements of AUTO-ON after Power auto age. • High vacuum pump must be Turbomolecular pump: 250 L/Sec or better
1.11	**Gas Control** • All gases must be controlled by the software.
1.12	**Operating modes** • Mass spectrometer should have the following scan options: • Full scan • Selected Ion monitoring/ recording (SIM/SIR) • Product ion scan • Precursor ion scan • Neutral loss scan • Multiple Reaction Monitoring (MRM) • MS and MS/MS in a single injection with matrix background monitoring or equivalent. (Proof document /application note to be enclosed along with technical tender document with onsite verification) • Simultaneous full scan and MRM or better (Optional)
1.13	**Detector** • A high sensitivity, high throughput detector with zero dead time, low noise and high accuracy at low level detections. • An off-axis dynolite photomultiplier/Electron Multiplier detector. Detector must operate in both positive and negative ion modes. • Capable of switching polarity. • Should have a better long life. (Life time shall be furnished and the better one will be given preference during technical evaluation).

Sl. no.	Technical Specifications
1.14	**Nitrogen Generator** • Should be supplied with the system along with the trouble free inbuilt compressor and appropriate capacity reservoir which should be sufficient enough to deliver the gases (purity > 99.999%) required to run the system. • Should be complete with all necessary accessories with unlimited breakdown visits and at least one Preventive maintenance along with PM kit each year during warranty period . If CMC is done, during CMC period all spares, accessories and consumables , at least one Preventive maintenance along with PM kit each year on yearly basis to be provided.
1.15	**Vacuum Manifold with compatible SPE Cartridges** • Minimum 10 cartridges extraction at one time. • Minimum 1000 cartridges for different analytes i.e. pesticide residues, antibiotic residues etc • Suitable pump is needed to be provided with vacuum manifold.
2	**High Performance Liquid Chromatography System** • List of column with Specification: a) C-18, 2.1x100 mm x 1.7 µm with suitable Guard column b) C-18, 2.1x150 mm x 1.7 µm with suitable Guard column c) C-18, 4.6 x 250 mm x 5 µm with suitable Guard column d) C-8, 4.6 x 250 mm x 5 µm with suitable Guard column e) Phenyl-Hexyl 2.1mmx 100x 3µm or equivalent HILIC column with Guard column • The complete system and the MS should be controlled by the single software • PUMP: Binary / Quarternery pump pressure handling capability. Operating flow range should be 0.010-2.0ml/min or better with 1µl increments • Autosampler: with 1 to 10 ul/min injection, minimum of 100 samples capacity. Capability to handle pressure range of 15000 psi or better • Column Oven: 30°C to 80°C, capability to accommodate a minimum of 1 or more columns of ≥ 15 cm. Temperature Stability: ±0.1°CTemp. Accuracy: ±0.5°C • DAD/PDA Detector: 190-700 nm, 80 Hz, Standard flow cell with flow cell of 1.0 ul or better

Sl. no.	Technical Specifications
3	**Spares and accessories** • LC-MS/MS startup kit should be supplied as standard. • All required traceable standards for Mass calibration and tuning, HPLC calibration should be provided • 5µl, 10µl, 20µl, 50µl, 100µl loops, Vacuum pump oil, etc. and any other material required to make the instrument functional should be provided. • Standard Tool kit should be provided for Instrument maintenance • Reputed highly branded solvent filtration unit with pump and required accessories 02 no.s • 4 Nos. Of 99.999% Argon Cylinder (47 Litre Capacity) with 2 regulators. • Any other suitable gas cylinders two (02) quantity each with regulator are necessary to run the instruments .
	System Controller and Operating system • Software must be Multitasking type. It must acquire and process the data simultaneously. • Application manager must be compatible with data of full scan, SIM/SIR or MRM • Data Acquisition, Peak Integration, Calibration, Quantification and QC. ➢
4	**calculations must be fully automated.** • The Quantification method editor must be viewable in page view or spreadsheet. • Application manager must allow to monitor the molecular ion and up to 04 (four) • Confirmatory ions or better. • Must be capable of performing the following functions and should be upgradable: • Workstation must be able to control the MS, acquire, store, process and reproduce the data by the same computer. • Workstation must be able to control LC, Detector and auto sampler. • It must be able to regulate the gas pressure and flow during the data acquisition and append to the relevant data file. • Software must have automated calibration and Quantitative optimization. • Automated MS to MS/MS switching during a single run with user selectable criteria • Perform alternating positive/negative scans in one run • Automated Quantization and reporting of acquired samples.

Sl. no.	Technical Specifications
	• Data may be processed as it is being acquired
5	➢ **Calibration Standards to be supplied for upcoming years:** • Two sets each NIST or other traceable standards for all the Pesticides, Mycotoxins, antibiotics, Vet. Drugs/Hormones as per Food Safety and Standards (Contaminants, Toxins, Residues) Regulation 2011,Latest Version of April 2025 and banned pesticides(At least 26 Nos. in number) as per latest FSSAI Directive with a minimum expiry period of two years to be supplied with the instrument for 8 years from the date of installation. The detail list of vet. Drugs/hormones with internal standard to be supplied for 8 years from the date of installation are given in Annexure A.The number of pesticides standards, selected from the above regulation, to be supplied every year from the date of installation is minimum fifty (50) as per requisition of the user/laboratory each year. Reference standard/Calibration standard (ISO 17034 certified) for performance check of the equipment has to be provided every year for the warranty and CMC Period.
6	**PC with Printer** • Minimum Intel core i5/i7 /Equivalent processor, 2.0 GHz or more, 24"or more LCD/TFT Monitor, 2 TB HDD, DVD Read/Write, 16 GB RAM, 4 USB Port or higher configuration for use with the above system to be provided. • Reputed Branded automatic back to back colour Laser jet printer should be provided
7	**Power Supply** • The system should have UPS (minimum 10 KVA) of suitable rating with voltage regulation, spike protection and minimum 60 minutes back up for the supplied equipment.

Sl. no.	Technical Specifications
8	**Additional items** • Bidders should supply 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 for startup/regular operation of instrument. • Firm should also quote all essential pre-installation requirements and utility requirement for LC-MS/MS. • 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. • Complete methods library with MRMs of Mycotoxins, Veterinary drugs, Pesticides, antibiotics with instrument method details and SOPs, related software's and user manuals to be provided. PLEASE PROVIDE MAINTENANCE CHART FOR ALL OF THE COMPONENTS IN LC-MS/MS SYSTEM.
9	**Operation and maintenance &Training Component** • The supplier will have to carry out successful installation at our laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for scientific personnel operating the system and support services till customer satisfaction with the system.
10	**IQ/OQ/PQ** IQ/OQ/PQ of the system is required

Sl. no.	Technical Specifications
11	**Warranty** • Standard Warranty of 3 Years starting from date of satisfactory and faultless functioning of the equipment for 60 days at the respective laboratory premises. • Annual calibration of the equipment shall be a part of the warranty. It shall also be mandatory to perform calibration after every major repair/breakdown. At least one Preventive maintenance along with PM kit each year during warranty period • The supplier or his authorized agent should have after sales and service centre near each of our laboratory location where the equipment is to be supplied at least 5 years prior to the date of this bid in Eastern India preferably in West Bengal • Current user's / performance list with contact details (Customer name, phone email id etc) and date of installation to be provided (Minimum 5 installations of the model quoted / Equivalent models for newly launched systems • Number and details of the service engineers has to be provided. • Performance evaluation of the equipment will be carried out for those who qualify in the technical bid. If CMC is done, during CMC period all spares, accessories and consumables , at least one Preventive maintenance along with PM kit each year on yearly basis to be provided.
12	**Pre-installation requirements** Provide all pre installation requirements
13	Details of the 5 Installations of the quoted model
14	Technical Compliance

Annex-A

Veterinary Drug residues/hormones	Reference standard	Internal Standard
Chloramphenicol	Chloramphenicol base	Deuterated Chloramphenicol d5
Nitrofurans	1) Semicarbazide, 3-amino 2 oxazolidinone (AOZ), 2) 1-aminohydantoin, 3) 3-amino- 5-morpho linomethyl 2-oxazolidinon (AMOZ)e	AMOZ-d5 & AOZd 4

Veterinary Drug residues/hormones	Reference standard	Internal Standard
Tetracycline	1.Tetracycline Hydrochloride (TC), 2) Oxytetracycline Hydrochloride (OTC) 3) Chlortetracycline Hydrochloride (CTC) and their epimers,	Nil
Sulphonamide	1. Sulfaquinoxaline (SQX) 2. Sulfathiazole (STZ) 3. Sulfacthoxypyridazine (SEP) 4. Sulfadiazine (SDZ) 5. Sulfadimethoxine (SDM) 6. Sulfachloropyridazine(SCP) 7. Sulfadoxine (SDX) 8. Sulfamethazine (SMZ) 9. Sulfamerazine (SMRZ) 10. Sulfamethoxazole (SMX) 11. Sulfisoxazole (SSXZ) 12.Sulfamethoxypyridazine(SMP) 13. Sulfamethizole (SMZL)	Sulfapyridine (SPY)
Quinolones	1. Flumequine (FLU), 2. oxolinic acid (OXO), 3. nalidixic acid (NAL), cinoxacin (CIN), piromidic acid (PIR) 6. nd pipemidic acid (PIP), marbofloxacin (MAR), norfloxacin (NOR), 9. ciprofloxacin (CIP), 10. lomefloxacin (LOM), 11. danofloxacin(DAN), 12. enrofloxacin (ENR), 13. sarfloxacin (SAR), 14. difloxacin (DIF), 15. ofloxacin (OFL), 16. . enoxacin (ENO) 17. orbifloxacin (ORB)	
Nitroimidazoles	1. Metronidazole (MNZ), 2. Dimetridazole (DMZ), 3. Ronidazole (RNZ), 4. Ipronidazole (IPZ) andt 5. hydroxyl metabolites MNZ OH, 6. HMMNI and IPZ-OH, 7. Canidazole (CRZ), 8. Ornidazole (ONZ), 9. Ternidazole (TRZ) 10. Tinidazole (TNZ)	1. DMZ-d3, 2. RNZ-d3, 3. IPZ-d3 4. IPZ-Ohd

Veterinary Drug residues/hormones	Reference standard	Internal Standard
Oxytocin		

CRC FOR LCMSMS

Annexure-B

	Product Name
C	2,4-D
C	Azoxystrobin
C	Benfuracarb
C	Bitertanol
C	C
C	C
C	Chlorantraniliprole
C	Chlorimuron-ethyl
C	Clodinafop-propargyl ester
C	Clothianidin
C	Difenoconazole
C	Epoxiconazole
C	Fenoxaprop-P-ethyl
C	Fenpropathrin
C	Flubendiamide
C	Flusilazole
C	Fluxapyroxad
C	GLYPHOSATE
C	Hexaconazole
C	Indoxacarb
C	Isoproturon
C	Kresoxim-methyl

C	Malathion
C	Mesosulfuron-methyl
C	Metalaxyl
C	Methabenzthiazuron
C	Metsulfuron-methyl
C	Oxyfluorfen
C	Paraquat dichloride
C	Pendimethalin
C	Phenthoate
C	Picoxystrobin
C	Pirimiphos-methyl
C	Proiconazole
C	Pyraclostrobin
C	Quinalphos
C	Spinosad
C	Tebuconazole
C	Thiacloprid
C	Thiamethoxam
C	Trichlorfon
C	Trifloxystrobin
C	Acetamiprid
C	Butachlor
C	Edifenphos
C	Flufenacet
C	Carfentrazone-ethyl

Amendment I

Revised Technical Specifications of LC MSMS

Sl. no.	Technical Specifications
	LC-MS/MS A compact High resolution LC-MS/MS equipment for qualitative and quantitative estimation of food contaminants (Pesticides, Mycotoxins, antibiotics etc) residues analysis with user friendly software to meet the global food regulations like EU/USFDA/Japan/FSSAI, etc.
1.1	Mass Stability 0.1 Da over 24 hours (please provide graphical data)
1.2	Dynamic range Should be 6 orders of magnitude or better
1.3	Mass analyzer Quadruple Analyzer: Instrument should be configured with a quadruple mass filter for the efficient transmission of ions in MS mode and selection of precursor ions for MS-MS analysis
	The Quadruple mass range 20 – 2000 m/z or better
	The Analyzer should have more than one aspect for the efficient ion separation with maximum resolution
1.4	Sensitivity Lower detection and highest sensitivity ESI + Ion Sensitivity: The signal to noise ratio for 1 pg of reserpine should be >50,0000:1 or better, in MRM mode of reserpine at the transition m/z 609 – m/z 195 (Proof document/application note to be enclosed along with technical tender document).
	ESI - Ion Sensitivity: The signal to noise ratio for 1 pg of chloramphenicol should be >50,0000:1 or better, in MRM mode of chloramphenicol at the transition m/z 321 – m/z 152 (Proof document/application note to be enclosed along with technical tender document). IDL < 4fg or better in both mode
1.5	Scan speed Should have the scan speed of 15,000 amu/dp per sec or Iboentitzeartion
1.6	Ionization
	Electrospray with Concentric Gas Flow for Nebulization to cover flow rates up to 2ml/min.

Sl. no.	Technical Specifications
	Multimode Ionization: ESI / APCI source: Dedicated ESI and APCI source with facility of easy interchanging by user through software controlled system. The ionisation should be in both positive and negative mode.
1.7	Source Interface • Orthogonal off-axis spray (Electrospray) or any other equally efficient technology capable of avoiding interference from solvents and other extraneous matter. • Interface should maintain cleanliness of ion optics and capable of handling large batches of complex samples. • Capable of handling large batches of complex sample matrix like Animal feeds, Fish and fishery products, poultry and poultry products, Honey, Milk and Milk products, Agriculture products (Fruits & Vegetables),Tea,Coffee,Spices ,Water etc over a long period of time without performance degradation • Cleaning of source should be done without venting the system and facility to vacuum interlock. • Interface capable of ambient temperature operation and without complex apertures to maintain structural integrity of thermally labile and fragile molecules.
1.8	Integrated Fluidic Device (to minimize space and tubing) • An infusion device must be integral to the instrument or equivalent and must be controllable from the instrument software. At least 2 user- changeable sample vials should be built into the system to allow tuning and calibration solutions to be infused into the probe via the switching valve.
1.9	Polarity switching time • +ve / -ve polarity switching time between alternate MRM scans should be 25 msec or better with supporting documents
1.1	Vacuum System • Robust high efficiency vacuum system with minimum maintenance and utility with low noise level. • Vacuum read backs must be digitally monitored and controlled through software to ensure fail-safe operation in the event of power failure. • All accessories required for the proper functioning of the vacuum system should be supplied. • Fore line pump: Oil pump or Oil free Scroll type pump with arrangements of AUTO- ON after Power auto age. • High vacuum pump must be Turbomolecular pump: 250 L/Sec or better
1.11	Gas Control • All gases must be controlled by the software.

Sl. no.	Technical Specifications
1.12	Operating modes • Mass spectrometer should have the following scan options: • Full scan • Selected Ion monitoring/ recording (SIM/SIR) • Product ion scan • Precursor ion scan • Neutral loss scan • Multiple Reaction Monitoring (MRM) • MS and MS/MS in a single injection with matrix background monitoring or equivalent. (Proof document /application note to be enclosed along with technical tender document with onsite verification) • Simultaneous full scan and MRM or better (Optional)
1.13	Detector • A high sensitivity, high throughput detector with zero dead time, low noise and high accuracy at low level detections. • An off-axis dynolite photomultiplier/Electron Multiplier detector. Detector must operate in both positive and negative ion modes. • Capable of switching polarity. • Should have a better long life. (Life time shall be furnished and the better one will be given preference during technical evaluation).
1.14	Nitrogen Generator • Should be supplied with the system along with the trouble free inbuilt compressor and appropriate capacity reservoir which should be sufficient enough to deliver the gases (purity > 99.5%) required to run the system. • Should be complete with all necessary accessories with unlimited breakdown visits and at least one Preventive maintenance along with PM kit each year during warranty period . If CMC is done, during CMC period all spares, accessories and consumables , at least one Preventive maintenance along with PM kit each year on yearly basis to be provided.
1.15	Vacuum Manifold with compatible SPE Cartridges • Minimum 10 cartridges extraction at one time. • Minimum 1000 cartridges for different analytes i.e. pesticide residues, antibiotic residues etc Suitable pump is needed to be provided with vacuum manifold.

Sl. no.	Technical Specifications
2	High Performance Liquid Chromatography System • List of column with Specification: a) C-18, 2.1x100 mm x 1.7 µm with suitable Guard column b) C-18, 2.1x150 mm x 1.7 µm with suitable Guard column c) C-18, 4.6 x 250 mm x 5 µm with suitable Guard column d) C-8, 4.6 x 250 mm x 5 µm with suitable Guard column e) Phenyl-Hexyl 2.1mmx 100x 3µm or equivalent HILIC column with Guard column • The complete system and the MS should be controlled by the single software • PUMP: Binary / Quarternery pump pressure handling capability. Operating flow range should be 0.010-2.0ml/min or better with 1µl increments • Autosampler: with 1 to 10 ul/min injection, minimum of 100 samples capacity. Capability to handle pressure range of 15000 psi or better • Column Oven: 20°C or lower to 80°C, capability to accommodate a minimum of 1 or more columns of ≥ 15 cm. Temperature Stability: ±0.1°CTemp. Accuracy: ±0.5°C • DAD/PDA Detector: 190-700 nm, 80 Hz, Standard flow cell with flow cell of 10 ul or better
3	Spares and accessories • LC-MS/MS startup kit should be supplied as standard. • All required traceable standards for Mass calibration and tuning, HPLC calibration should be provided • 5µl, 10µl, 20µl, 50µl, 100µl loops, Vacuum pump oil, etc. and any other material required to make the instrument functional should be provided. • Standard Tool kit should be provided for Instrument maintenance • Reputed highly branded solvent filtration unit with pump and required accessories 02 no.s 4 Nos. Of 99.999% Argon/Nitrogen Cylinder (47 Litre Capacity) with 2 regulators. Any other suitable gas cylinders two (02) quantity each with regulator are necessary to run the instruments .
	System Controller and Operating system • Software must be Multitasking type. It must acquire and process the data simultaneously. • Application manager must be compatible with data of full scan, SIM/SIR or MRM • Data Acquisition, Peak Integration, Calibration, Quantification and QC.

Sl. no.	Technical Specifications
4	calculations must be fully automated. • The Quantification method editor must be viewable in page view or spreadsheet. • Application manager must allow to monitor the molecular ion and up to 04 (four) • Confirmatory ions or better. • Must be capable of performing the following functions and should be upgradable: • Workstation must be able to control the MS, acquire, store, process and reproduce the data by the same computer. • Workstation must be able to control LC, Detector and auto sampler. • It must be able to regulate the gas pressure and flow during the data acquisition and append to the relevant data file. • Software must have automated calibration and Quantitative optimization. • Automated MS to MS/MS switching during a single run with user selectable criteria • Perform alternating positive/negative scans in one run • Automated Quantization and reporting of acquired samples. • Data may be processed as it is being acquired
5	Calibration Standards to be supplied for two years: • Two sets each NIST or other traceable standards for all the Pesticides, Mycotoxins, antibiotics, Vet. Drugs/Hormones as per Food Safety and Standards (Contaminants, Toxins, Residues) Regulation 2011,Latest Version of April 2025 and banned pesticides(At least 26 Nos. in number) as per latest FSSAI Directive with a minimum expiry period of one year to be supplied with the instrument for 8 years from the date of installation. The detail list of vet. Drugs/hormones with internal standard to be supplied for 8 years from the date of installation are given in Annexure A.The number of pesticides standards, selected from the above regulation, to be supplied every year from the date of installation is minimum fifty (50) as per requisition of the user/laboratory each year. Reference standard/Calibration standard (ISO 17034 certified) for performance check of the equipment has to be provided every year for the warranty and CMC Period.
6	PC with Printer • Minimum Intel core i5/i7 /Equivalent processor, 2.0 GHz or more, 24″or more LCD/TFT Monitor, 2 TB HDD, DVD Read/Write, 16 GB RAM, 4 USB Port or higher configuration for use with the above system to be provided. • Reputed Branded automatic back to back colour Laser jet printer should be provided

Sl. no.	Technical Specifications
7	Power Supply • The system should have UPS (minimum 15 KVA) of suitable rating with voltage regulation, spike protection and minimum 60 minutes back up for the supplied equipment.
8	Additional items • Bidders should supply 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 for startup/regular operation of instrument. • Firm should also quote all essential pre-installation requirements and utility requirement for LC-MS/MS. • 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. • Complete methods library with MRMs of Mycotoxins, Veterinary drugs, Pesticides, antibiotics with instrument method details and SOPs, related software's and user manuals to be provided. PLEASE PROVIDE MAINTENANCE CHART FOR ALL OF THE COMPONENTS IN LC-MS/MS SYSTEM.
9	Operation and maintenance &Training Component • The supplier will have to carry out successful installation at our laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for scientific personnel operating the system and support services till customer satisfaction with the system.
10	IQ/OQ/PQ IQ/OQ/PQ of the system is required

Sl. no.	Technical Specifications
11	Warranty • Comprehensive Warranty of 36 months starting from date of satisfactory and faultless functioning of the equipment for 60 days at the respective laboratory premises. • Annual calibration of the equipment shall be a part of the warranty. It shall also be mandatory to perform calibration after every major repair/breakdown. At least one Preventive maintenance along with PM kit each year during warranty period • The supplier or his authorized agent should have after sales and service centre near each of our laboratory location where the equipment is to be supplied at least 5 years prior to the date of this bid in Eastern India preferably in West Bengal • Current user's / performance list with contact details (Customer name, phone email id etc) and date of installation to be provided (Minimum 5 installations of the model quoted / Equivalent models for newly launched systems • Number and details of the service engineers has to be provided. • Onsite performance evaluation of the equipment will be carried out for those who qualify in the technical bid. If CMC is done, during CMC period all spares, accessories and consumables , at least one Preventive maintenance along with PM kit each year on yearly basis to be provided.
12	Pre-installation requirements Provide all pre installation requirements
13	Details of the 5 Installations of the quoted model
14	Technical Compliance

Annex-A

Veterinary Drug residues/hormones	Reference standard	Internal Standard
Chloramphenicol	Chloramphenicol base	Deuterated Chloramphenicol d5
Nitrofurans	1) Semicarbazide, 3-amino 2 oxazolidinone (AOZ), 2) 1-aminohydantoin, 3) 3-amino- 5-morpho linomethyl 2-oxazolidinon (AMOZ)e	AMOZ-d5 & AOZd 4
Tetracycline	1.Tetracycline Hydrochloride (TC), 2) Oxytetracycline Hydrochloride (OTC) 3) Chlortetracycline Hydrochloride (CTC) and their epimers,	Nil
Sulphonamide	1. Sulfaquinoxaline (SQX) 2. Sulfathiazole (STZ) 3. Sulfacthoxypyridazine (SEP) 4. Sulfadiazine (SDZ) 5. Sulfadimethoxine (SDM) 6. Sulfachloropyridazine(SCP) 7. Sulfadoxine (SDX) 8. Sulfamethazine (SMZ) 9. Sulfamerazine (SMRZ) 10. Sulfamethoxazole (SMX) 11. Sulfisoxazole (SSXZ) 12.Sulfamethoxypyridazine(SMP) 13. Sulfamethizole (SMZL)	Sulfapyridine (SPY)
Quinolones	1. Flumequine (FLU), 2. oxolinic acid (OXO), 3. nalidixic acid (NAL), cinoxacin (CIN), piromidic acid (PIR) 6. nd pipemidic acid (PIP), marbofloxacin (MAR), norfloxacin (NOR), 9. ciprofloxacin (CIP), 10. lomefloxacin (LOM), 11. danofloxacin(DAN), 12. enrofloxacin (ENR), 13. sarfloxacin (SAR), 14. difloxacin (DIF), 15. ofloxacin (OFL), 16. . enoxacin (ENO) 17. orbifloxacin (ORB)	

Veterinary Drug residues/hormones	Reference standard	Internal Standard
Nitroimidazoles	1. Metronidazole (MNZ), 2. Dimetridazole (DMZ), 3. Ronidazole (RNZ), 4. Ipronidazole (IPZ) andt 5. hydroxyl metabolites MNZ OH, 6. HMMNI and IPZ-OH, 7. Canidazole (CRZ), 8. Ornidazole (ONZ), 9. Ternidazole (TRZ) 10. Tinidazole (TNZ)	1. DMZ-d3, 2. RNZ-d3, 3. IPZ-d3 4. IPZ-Ohd
Oxytocin		

CRC FOR LCMSMS [ISO 17034 Certified]

Annexure-B

SL. NO.	NAME OF THE PESTICIDES	CAS NO.
1	Bitertanol	55179-31-2
2	Carbendazim	10605-21-7
3	Carfentrazone Ethyl	128639-02-1
4	Chlothianidin	210880-92-5
5	Emamectin Benzoate	155569-91-8
6	Formothion	2540-82-1
7	Flubendiamide	272451-65-7
8	Glufosinate Ammonium	77182-82-2
9	Glyphosate	1071-83-6
10	Hexythiazox	78587-05-0
11	Paraquat dichloride (Determined as Paraquatcations)	1910-42-5
12	Thiacloprid	111988-49-9
13	Thiamethoxam	153719-23-4
14	2,4-D Amine Salt	2008-39-1
15	Acephate	30560-19-1
16	Imidacloprid	138261-41-3
17	Acetamiprid	135410-20-7
18	Dinotefuran	165252-70-0
19	Aldicarb	116-06-3
20	Methomyl	16752-77-5
21	Monocrotophos	6923-22-4
22	2,4 Dichlorophenoxyacetic acid	94-75-7
23	Benomyl	17804-35-2
24	Carbaryl	63-25-2
25	Oxydemeton-Methyl	301-12-2
26	Phenthoate	2597-03-7
27	Phorate	298-02-2
28	Pirimiphos-methyl	29232-93-7
29	Ethephon	16672-87-0
30	Fluazifop-p-butyl	79241-46-6
31	Chlorpyrifos	2921-88-2
32	Propargite	2312-35-8
33	Propiconazole	60207-90-1
34	Quinalphos	13593-03-8
35	Spiromesifen	283594-90-1
36	Aflatoxin (mix standard)	Product Code: TCLS-AFMIX-2 ml (Trilogy)

37	Phosphamidon	13171-21-6
38	Simazine	122-34-9
39	Thiometon	640-15-3
40	Trichlorfon	52-68-6
41	Atrazine	1912-24-9
42	Isoproturon	34123-59-6
43	Malaxon	1634-78-2
44	Tebuconazole	107534-96-3
45	Phosalone	2310-17-0
46	Melamine	108-78-1
47	Pyraclostrobin	175013-18-0
48	Triazophos	24017-47-8
49	Aldicarb sulfoxide	1646-87-3
50	Aldicarb sulfone	1646-88-4

In Page Pg 5 of Buyer Added Bid Specific ATC

"The equipment including all other accessories, ancillaries given in the specifications of the equipment including UPS, UPS Battery, AC machines and furniture etc".

To be read as

The equipment including all other accessories, ancillaries given in the specifications of the equipment including UPS, UPS Battery, AC machines (1.5 Ton, five star rating Quantity 1 No.) and furniture (Vibration free suitable table to place the instrument with PC, Printer, etc)

Form-A: Consignee Receipt Certificate (CRC)

(To be issued by consignee's authorized representative)

[The consignee may issue an additional challan receipt if delivered by courier or transporter]

Date of supply by the Company Person or Courier:	
Name and Address of the Consignee:	
Name of the item supplied (with Make & Model & Model No.):	
Purchase Order /Contract No.:	
Name of the Supplier:	
No. of Units supplied :	
No. Of Box supplied :	
Place of destination (The dept. where the equipment will be actually installed):	
Invoice No. & Date:	
Details of Batch /Serial Numbers, if any of item supplied:	
…… (Signature & Office Seal of authorized representative of Consignees with date) [Name and designation of the signatory to be written capital letter]	

.....
…

(Signature & Office Seal of Head of the Institute/Hospital with date)

[Name and designation of the signatory to be written capital letter]

Form B: Satisfactory Installation Certificate (SIC)
(To be issued by the consignee after successful commissioning of equipment)

Bid Reference :

Award of Contract Reference :

Description of Equipment/Service :

Date of Commissioning :

Warranty up to :

This is to certify that the equipment(s) as detailed below has/have been received in good condition along with all the standard and special accessories, consumables, set of spares in accordance with the contract/technical specification of the equipment and site preparation including interiors as per bid document.

Details of equipment, accessories, consumables, spares, etc.

Sl	Description	Quantity	Serial No. / Part No.
1			
2			
3			
4			
5			

In case of space deficiency, another sheet with the same format can be annexed.

The supplier has also submitted the following,

1. Tools for maintenance
2. Detailed operation and maintenance manual both in hard and soft copy for each item of supply at each location

The proving test has been done to our entire satisfaction. The equipments, its accessories and ancillaries of the site preparation including interiors is functioning satisfactorily and faultlessly

Declaration by Unit Head (HOD/MO-IC/Others) :

Sticker designed by WBMSCL is fitted with the equipment Yes ☐ No ☐

Signature
with Stamp :

Name (in Block)

P.T.O.

The following operators/ end users have been trained to operate the equipment(s),

Sl	Name	Designation	Contact No	E-mail ID (In CAPS)	Signature
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

In case of space deficiency, another sheet with the same format can be annexed.

Countersigned by the head of the institute / hospital: Signature _____ Name_____ Designation with stamp _____ Date _____	Signature of Unit Head: (HOD/MO-IC/Others) Name (in Block): Designation with Stamp: