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Food Safety and Standards Authority of India
(A statutory Authority established under the Food Safety and Standards Act, 2006)
(QA Division)
FDA Bhawan, Kotla Road, New Delhi – 110002

Dated, the 06 May, 2022

CORRIGENDUM

The Competent Authority has extended the deadline for submission of bids in r/o **RFP for Procurement of Equipment for NFL, Raxaul (Group-III)** issued vide GeM Bid No. GEM/2022/B/2115366 dated 19.04.2022**,** through GeM, **upto 17th May, 2022.** Some changes in the Specifications of Equipment the tender documents have also been incorporated as per details given herein :-

1. AUTOMATIC FAT ANALYSER	
Requirement	Specification
Function	The system must be capable of quantitative separation of total fats from food, feed etc.
Sample Positions	≥ 6
Measuring Range	0.1– 100%fat
Sample Volume (Size)	0.5to 15 gm or more
Accuracy	± 1%
Solvent Recovery	≥75%
Temperature	100°C–280°C or better
Other Features	• Shall be completely microprocessor based, fully automatic boiling, rinsing, drying, recovery, lifting of thimbles to cooling position and shut-down • User interface for up gradation of software • Shall be based on official 'RANDALL' method • System must have capability to perform-unattended operation and must be programmable; • Should be provided with suitable solvent recovery system.
Safety Features and alarms	• Manual door lock and sealing during extraction. • Automatic over-temp. Control/protection facility. • Equivalent or ATEX classified components for internal exposed valves, IP65 for other internal electronics, IP55forLiquid and Dust protection, Pressurized electronics cabinet.
Material	All material in contact with solvents should be PTFE or suitable high-grade material The material of construction of equipment should be Epoxy painted stainless-steel structure to prevent corrosion or other corrosion free material
Accessories to be supplied	The system should be supplied with at least 12 glass/aluminum extraction cups (preferably ≥ 150 ml.), 24 dozen of suitable cellulose thimbles or Filter Bags, at least 6 viton seals,1 sample tray,1 boiling stones, 1 cup stand and 1 recovery flask

UPS	Suitable UPS (5 KVA) with 60 mins backup power
Operating manuals, service manuals, other manuals	Should provide:- User, technical and maintenance manuals in English language List of procedures required for local calibration and routine maintenance service and operation manuals to be provided Advanced maintenance tasks documentation, if any.
Supplier/ Manufacturer	• Should be FDA/CE/BIS/ISO approved product. • Electrical safety conforms to the standards for electrical safety IEC 60601-General requirements (or equivalent IS/ International Standard)
	Suppliers must submit a copy of catalogue showing technical specifications.
Warranty	Minimum three years comprehensive onsite warranty with one Preventive Maintenance and equipment calibration from the date of installation and commissioning every year. Warranty to be provided by OEM/Manufacturer.
IQ/PQ/OQ	On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument

2. AUTOMATIC FIBRE ANALYZER	
Requirement	**Specification**
Description of function	• The system must be closed and microprocessor controlled, capable of performing all operations, extraction, rinsing & filtration of samples for analysis of crude fiber, acid detergent fiber, neutral detergent fiber, etc. • Should have agitate/heat Switch & temperature/timer/clock controller for process parameter input and results read out. • System should be based on either crucibles or filter bag technology
Analysis of sample	Should have possibility of analyzing 6 samples at a time
Sample size	≤ 1 gm
Measuring range	0.1 to 100%
Reproducibility	±1 % relative at 5%-30 %fiber level or better
Accessories to be supplied	• In case of crucible-based system, the following accessories must be essentially quoted or a. Cold extractor b. 24 Crucibles of P2 porosity c. Crucible stand for 6/12 crucibles d. 2 crucible holders e. 2 nos.each of acid tank, alkali tank, NDS tank, ADS tank
UPS	Suitable UPS (5 KVA) with 60 mins backup power
Operating manuals, service manuals, other manuals	Should provide:- User, technical and maintenance manuals in English language List of procedures required for local calibration and routine maintenance service and operation manuals to be provided Advanced maintenance tasks documentation, if any.
Supplier/ Manufacturer	• Should be FDA/CE/BIS/ISO approved product. • Electrical safety conforms to the standards for electrical safety IEC 60601-

	General requirements (or equivalent IS / International Standard)
	• All suppliers must submit a copy of catalogue showing technical specifications.
Warranty	• Minimum three years comprehensive onsite warranty with one Preventive Maintenance and equipment calibration from the date of installation and commissioning every year. Warranty to be provided by OEM/Manufacturer.
IQ/PQ/OQ	• On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument

3. AUTOMATIC PROTEIN ANALYSER

Application: Kjeldhal method is used to determine organic nitrogen and protein contents in food samples. Automatic Kjeldhal protein analyzers are space saving and have distillation and digestion units combined together.

Specification	**Requirement**
Digestion and distillation unit	Should be combined unit with all units from the same manufacturer and consist of Digestion unit, Distillation unit, Scrubber and Auto titrator
Digester	• Tube holding capacity: ≥ 6 • Temperature: ambient to 450˚C • Temperature Stability: + 1°C • Digestion Time range: 1 - 999 minutes or more • Should have programmable time & temperature ramping and audible alarms.
Accessories for digester	• Exhaust unit, • Rack, stand, lid, • 40 nos. of digestion tubes ≥ 250 ml. • and all other required accessories for standalone operation of the digester
Scrubber system	i. The material of construction of the scrubber should be of high endurance materials like borosilicate glass or high-quality stainless steel. Auto Start from Digestion system ii. Cleaning shall include condensation, neutralization, adsorption and redox reactions to maintain efficiency of the equipment iii. Suction should be regulated/ adjustable to achieve efficient digestion. iv. All supplied reagent containers must be ≥ 2 L. capacities and must be made of high-quality borosilicate glass. v. Scrubber should not be affected by the water supply
Automated Distillation and Titration Unit	1. Should be completely programmable for all controls like cooling water, dilution water, sodium hydroxide, receiver solution automatic calculation, automatic emptying of tube, titration vessel, etc. 2. Should have built-in colorimetric /Potentiometric titration system and allow use of a wide range of indicators.

	3. Should have possibility for bypassing automatic titration system to allow manual titration 4. Should have ≥ 7" color touch screen LED/LCD/VFD display 5. Nitrogen measurement range: 0.1 - 200 mg or more 6. Recovery: ≥ 99.5%. 7. Should be provided with burette having ≥ 30 ml volume and must have possibility of automatic refilling during analysis Minimum dispensing volume: 2 - 3 µl 8. Reproducibility: 1% of RSD 9. Automatic waste removal via tube drainage after distillation 10. The system should be able to store the recorded data and must have facility for downloading the same using an USB port or through Wi-Fi or connectivity for LIMS 11. Additionally, it should be possible for transferring weights and retrieving data using suitable software which is compliant to traceability. 12. The system should have safety sensors and audible warning systems 13. Should be provided with exchangeable splash head to reduce carry-over effects 14. The system should be provided with suitable password protection to prevent tampering of programmes and data. 15. The system must be compliant to ISO 17025:2017 16. The system shall have the possibility to track performance of the system and warns if analysis results changes over time. It is desirable to have component traceability feature in the system for effective maintenance of the system. 17. The instrument shall be delivered with a Verification Test document that certifies that instrument has been performance tested in factory (confirming analysis performance). 18. The systems should be supplied with Kjeltabs (5000 nos.) or equivalent, 4 tanks of ≥ 20 L along with level sensors for each of them
Spares and Accessories	All chemicals and reagents for 200 runs
UPS	Suitable UPS (5 KVA) with 60 mins backup power
Reference standard	Certified Ammonium sulfate (100g)
Operating manuals, service manuals, other manuals	Should provide: - • User, technical and maintenance manuals in English language • List of equipment and procedures required for local calibration and routine maintenance • Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.
Supplier/ Manufacturer	• Should be FDA/CE/BIS/ISO approved product. • Electrical safety conforms to the standards for electrical safety IEC 60601-General requirements (or equivalent IS or International Standard)
	All suppliers must submit a copy of catalogue showing technical specifications.

Warranty	Minimum three years comprehensive onsite warranty with one Preventive Maintenance from the date of installation and commissioning every year. Warranty to be provided by OEM/Manufacturer.

2. All other terms and conditions of the RFP will remains the same.

Sd/-
(Ravinder Kumar Narula)
Assistant Director (QA)