

## Bid Corrigendum

GEM/2024/B/4578723-C9

Following terms and conditions supersede all existing "Buyer added Bid Specific Terms and conditions" given in the document or any previous corrigendum. Prospective bidders are advised to bid as per following Terms and Conditions

### Buyer Added Bid Specific Additional Terms and Conditions

1. Actual delivery (and Installation & Commissioning (if covered in scope of supply)) is to be done at following address  
District of Murshidabad, Birbhum, Pururila, Jhargram,  
Kalimpong, Dakshin Dinajpur, Paschim Medinipur, Purba Bardhaman  
Bankura, Basirhat HD  
Diamond Harbour HD, Bishnupur HD  
Nandigram HD, Rampurhat HD  
.
2. Bidders shall quote only those products (Part of Service delivery) in the bid which are not obsolete in the market and has at least 7 years residual market life i.e. the offered product shall not be declared end-of-life by the OEM before this period.
3. Bidders can also submit the EMD with Payment online through RTGS / internet banking in Beneficiary name  
West Bengal Medical Services Corporation Ltd  
Account No.  
105605003391  
IFSC Code  
ICIC0001056  
Bank Name  
ICICI BANK  
Branch address  
BIDHANNAGAR, SALT LAKE, SECTOR-V  
.  
Bidder to indicate bid number and name of bidding entity in the transaction details field at the time of on-line transfer. Bidder has to upload scanned copy / proof of the Online Payment Transfer along with bid.
4. Buyer Added text based ATC clauses

1. Bidders should arrange for an onsite functional demonstration of the offered equipment on the stipulated date at facility at Kolkata, West Bengal or at **Swasthya Bhavan**. The evaluation of the specification 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 work in / functional demonstration of the offered equipments.

2. **Experience Criteria:** Bidder should submit following documents of same / similar type of equipment in support of supplies made to Govt. Hospitals or reputed private hospitals for the period of last three calendar years ending December 2022:

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

OR

- Proof of payment against supply and installation of the same / similar type of 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 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 Memorandum 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 deposited 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.** 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.

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

**8. Restrictions under Rule 144(xi) of the general Financial Rules(GFRs),2017:As per official memorandum from the Ministry of Finance, Govt. of India the following clause will be effective from dated- 08.02.2021** where has been clearly mentioned that, "in case a bidder has proposed to supply finished goods procured directly/indirectly from the vendors from the countries sharing land border with India, such vendor will be required to be registered with the competent Authority."

**9. Bid Validity:** 2(two) years from the last date of online bid submission (**Bid validity of 180 days written above may be ignored**)

**10. Price Validity:** 2(two) years from the last date of online bid submission

**11 . 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 both the bid and price will remain valid for period of 2(two) years from the last date of online bid submission of this tender..**

12. Bidders shall quote only those products in the bid which are not obsolete in the market and has a least 7(seven) years residual market life i.e. the offered product shall not be declared end-of-life by the OEM before this period.

13. The medical equipment should be USFDA / European CE (4 digit European notified body) / BIS/UKTI as applicable. The Quoted model name & make should be mentioned in the certificate

The organization those are issued CE certificate should be enlisted in this <https://ec.europa.eu/growth/toolsdatabases/nando/index.cfm?fuseaction=notifiedbody.main> link. If a certification required, the bidder should show us the document in the above link.

**14. Pre-Bid Meeting : 09th February(Friday); 2024 Time : 03:00 PM 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. Bidders are requested to ignore Performance Bank Guarantee of 5% written above and **consider performance Bank Guarantee as 10%.**

**N.B. Please ignore the GeM Technical Specification along with the Additional Specification Documents and follow only the Technical Specification given below:**

**Technical Specifications along with Terms and Conditions**

**A. Technical Specifications**

**Mobile Food Testing Laboratory (MICROBIOLOGY READY) - FSSAI**

**Major product category: Motor Vehicles**

<b>Parameters</b>	<b>Descriptions</b>	<b>Bid Requirement (Allowed Values)</b>
	Category of Vehicle	Medium
	Vehicle Engine capacity	2500 cc or above
	Minimum Engine Torque (Nm) at rated RPM	220.0 or higher
	Type of Fuel	Diesel
	Vehicle Emission Compliance	BS -VI,Stage-2
	Type of Steering	Power Operated

Vehicle parameters(Generic)	Ground Clearance (mm )	180 to 210
	Length of the Van body (Lab area) excluding driver cabin.	2900mm and above.
	Inside height of the Van body (Lab area).	1800 mm or above.
	Width of the Van body (Lab area)	1750mm or above.
	Pay load capacity of the vehicle	2600kgs or above.
	No of wheels	Rear -02/4, Front-2, Stepney-1
	Type of rear door	Two leaf divided rear door or flap type rear door at rear end with side-way s opening.
	Additional requirement	The alignment between the driver cabin and van body is a critical requirement for this project. It is imperative that no part of the van body projects or outlines beyond the dimensions of the driver cabin . The alignment should be such that the Driver Cabin and van body form a seamless and integrated structure, ensuring a cohesive and integrated appearance.
	Warranty:-	Comprehensive warranty for 3 (three) lakh Km / 3-year whichever is earlier.
	Van Body	<ul style="list-style-type: none"> <li>· The Insulated Van is fabricated as per the requirement of the conditions inside the unit.</li> <li>· The PUF Insulated Van Body is built and designed for transportation of perishable materials at Low Temperature and in Highly Clean and Hygiene Conditions.</li> </ul>

		<p>Features of the Panel Van</p>	<ul style="list-style-type: none"> <li>· Base frame made up of 100X 50mm channel.</li> <li>· Cross channel 75X40mm.</li> <li>· External Structure made up of 1.6 mm GI sheets</li> </ul>
	<p>Van Body</p>	<p>Others</p>	<ul style="list-style-type: none"> <li>· Plane sheet for the Van made out of 1.6 mm GI and inside 0.5 mm SS 304 grade/3mm FRP.</li> <li>· All sheets joints are continuously welded with MS welding rod to strengthen the Van. The internal strength is given by the internal framing by pipes/ MS strips.</li> <li>· The external paint colour shade and marking shall be as per specific customer requirements.</li> <li>· The PUF will have average density of 38 - 40 kg/m<sup>3</sup> and thermal conductivity value of 0.017 W/ m deg. K. All six sides of the Body shall be homogeneously insulated with PUF.</li> <li>· The average insulation thickness will be 50 mm.</li> <li>· Rear Door with Flush Toughened Glass Windows (02 Flaps)</li> <li>· Sliding windows x 2, Fixed Windows - 1 no.</li> <li>· The Van Body floor is 16 mm plywood laid over the insulation.</li> <li>· Insulated Body is double door fitted with inner and outer seals.</li> <li>· Electrical wiring: Electrical wiring to be done as per the requirement, fitment of sockets/ switches , Light (DC) and Fan (DC) x 4 nos.</li> <li>· Screws, Bolts and Rivets: Stainless Steel (SS-304) and placed at even spacing.</li> <li>· Chassis &amp; Body Integration: U Bolts</li> <li>· <b>Retractable/ pull out awning from side of vehicle of dimensions 2900 ( ± 300) mm x 1523( ± 100) mm</b></li> <li>· The interior paneling of the Lab compartment including sidewalls, 60 mm</li> <li>· <b>Toughened Glass partition</b> in between Microbiological and Chemical Work Flow Area</li> <li>· <b>Partition between procedure cabin and driver cabin</b> , roof, door panels and all other surfaces in the compartment should be made from long life superior quality materials</li> </ul>

		<ul style="list-style-type: none"> <li>uch as non-halogenated Flame Retardant Polymer of grade C-1196 HF.</li> <li>The interior material should have the following characteristics: Thickness - minimum 3.0 mm,</li> <li>Fire retardant as per IS - 6746 of 1988 or latest equivalent as applicable. No painting shall be allowed</li> <li>The insulating material should be heavy duty thermal PUF insulation to provide better temperature control.</li> <li>Sufficient reinforcement for holding the wall/floor mounted equipment securely while in transit should be present on the side walls</li> <li>The van interiors are suitable for easy cleaning, scientific fumigation &amp; treatment with disinfectants. Joints should be flushed, seamless, hermetically sealed, waterproof &amp; easy to disinfect. All interior materials shall comply with the fire safety requirements.</li> </ul>
Exterior	<b>Exterior</b>	<ul style="list-style-type: none"> <li>The vehicle has an additional Exhaust fan. The Body has a carrier and the Ladder.</li> <li>Ceiling of the body should have insulator material (as coating or a material) on the inside.</li> <li>Glass Window (size 50" X18" ) for complete Toughened Glass (6mm thickness) view Panel sized 54"X56" with MS Frame Structure (duly painted 2" in size) for provision for display of TV, Books (A4 size) and posters (A3 size)</li> <li>Electronic Scroller Display (Left Side)</li> <li>Outdoor Image Display Scroller with additional provision with Toughened Glass 5 mm with operable door and FRP cover from inside (48"X36")</li> <li>There is one set of a radio and an amplifier along with two movable loud speakers with fixtures on the roof.</li> <li>Foot step is at the back end of the vehicle for entering/climbing</li> </ul>
		<ul style="list-style-type: none"> <li>Workbenches on both sides with adequate moving space of a minimum two feet in the central area. Workbenches have storage below and above the working platforms. All the</li> </ul>

Interior  
 (All furniture-  
 SS 304 Grade)

work benches should be made of SS-304 {16 SWG (1.6 mm) for top of the bench and 18 SWG (1.2 mm) for the body of the bench). All the storage cabinet and drawers for storing minor instruments, accessories, basic glassware and chemicals must be made of SS-304 only.

- Space is provided for safely fixing the generator, refrigerator and also securing the gas cylinder(s).
- The interior have chemical resistant Vinyl / PVC flooring or any suitable material.
- Provision is made to safely secure the equipment under a vibration free, cushioned and fitting separations in order to prevent any damage during the vehicle is under movement.
- Sliding windows is provided on both the walls of the vehicle.
- Collapsible/retractable ledge of 9-inch depth x 30 inch {18 SWG (1.2 mm) of SS 304} outside one of the windows for acceptance of samples. This ledge is in such a way that it can be secured flat on the body of the vehicle when the MFTL is on the move.
- Stowing area/room for accommodating the stools after working.
- Tissue paper roll holder, hand wash holder, towel holder, spatula holder, tweet pipette holder, test tube stand holder, separating funnel holder etc. is placed inside the lab in such a way that it can be accessed by sitting on the stool itself. The bottle holder should be air tight and spillage free.
- The door have full length grab rail that is not projecting outside from the door front surface. The grab rails should be made of powder coated Aluminium.
- Dedicated space for keeping One 10 liters carboy to be provided.
- Appropriate space and easily accessible positioning for placing fire extinguisher.
- Fabrication : Warranty as per the bid criteria
- One Dual Mode Petrol driven Silent Generator with self star

Power Supply	<b>Power Supply</b>	<p>t of a minimum 7 KVA. One 5 KVA UPS to be provides as Backup for the Generator for minimum 45 min -1 HR Backup. All equipment/AC should be powered by gen-set when stationary OR external line available at location to the Genset.</p> <ul style="list-style-type: none"> <li>Minimum of 10 meter cable for direct connection of power from outside sources is required.</li> </ul>
Water Tank and Sink (Acid and Alkaline resistant)	<b>Capacity of fresh water tank (liter)</b>	100 (minimum)
	<b>Capacity of waste water collecting tank with outside drain (liter)</b>	100 (minimum)
	<b>Sink</b>	Sink of SS, moulded as one piece. The minimum dimension of the sink is 32x32x20 cms. The sink does not have any sharp corners inside
Air Conditioner including Compressor	<b>Type of Air Conditioner</b>	Split (having Copper coil)
	<b>Nominal cooling capacity in Ton</b>	1
	<b>BEE Star Rating</b>	3
	<b>Others</b>	In-door unit is installed appropriately for uniform cooling inside the lab area
Refrigerator	<b>Capacity</b>	80 - 100 Litres
	<b>Type of Door</b>	Single
	<b>Temperature</b>	0-4°C
Television	<b>Type</b>	LED (Smart)
	<b>Screen Size</b>	40 Inches
	<b>Screen Resolution</b>	1920 x 1080 (Full HD)
Electrical Fittings	<b>Minimum number of Power points on each side on two work benches</b>	6 nos. or higher
		<ul style="list-style-type: none"> <li>Minimum six power points on each side are given on two work benches to make equipment</li> </ul>

and Wiring	<b>Power Points</b>	<p>nt's operable. The power supply of these points is from the generator.</p> <ul style="list-style-type: none"> <li>Each of these power points has both 5A and 15A (12 nos of 5A &amp; 5nos of 15A)</li> </ul>
Lighting	<b>Lighting</b>	LED lights & Tube Lights in the lab for adequate illumination.
Eye wash pump	<b>Eye Wash Pump</b>	Suitable eye wash pump shall be provided near the wash basin.
Digital Balance	<b>Weighing Range (gm)</b>	300g / 0.01 g
	<b>Readability</b>	0.01 g
	<b>Repeatability</b>	± 0.03 g
	<b>Power Supply</b>	AC Adapter : 9V / 500 mA
Clean Air Biological Section Cabinet	<b>Approx. size of Body Outer Size</b>	Laminar Air Flow (WxDxH) in mm - 710 x 610 x 1040
	<b>Approx. size of Inner Chamber Size</b>	Laminar Air Flow working area (WxDxH) in mm - 625 x 515 x 450
	<b>Specification for Laminar Air Flow</b>	<ul style="list-style-type: none"> <li>Completely made of 304 grades S.S. workbench covered with 304 SS grade perforated sheet, microprocessor control digital display with filter alarm.</li> <li>Microprocessor based switch for blower and fluorescent light, UV light with LCD system.</li> <li>Pre Filter 99.00% down to 5 micron.</li> <li>HEPA Filter: ISO 14644 Class 5 (Class 100), 99.97%- 99.99% down to 0.3 micron, mesh guard for protection of HEPA filters.</li> <li>Air flow: Vertical.</li> <li>Noise Level: 60 decibel ±5%</li> <li>Velocity: 0.35-0.50m/sec.</li> <li>Work Table: 304 Grade S.S. &amp; Cock for gas on work table.</li> <li>Front Door: Acrylic.</li> <li>UV lamp: 15/30w Philips Holland.</li> <li>Illumination: 20/40w fluorescent tube with defogger. Power: 230V, 50Hz.</li> <li>Air Flow Type: Constant Air Volume type with automatic bypass.</li> <li>Interior Construction and Liners: Standard Model with thick Water/Heat/Fire Resistant Phenolic Resin Lamination</li> <li>Support Base with storage cabinet.</li> </ul>

		<ul style="list-style-type: none"> <li>· The storage cabinet at base to store chemical or apparatus and fitted with exhaust port connected internally to, work in tandem with the main exhaust system.</li> <li>· Electric Supply Socket: Two sockets to be located on the side panel for optimum convenience of using small electrical devices inside the cabinet</li> <li>· Front Counter balanced Sash/ Shutter: A vertical rising sash/ shutter consist of a thick toughened transparent glass/ Acrylic window for a clear inside view. The sash should be counter balanced for smooth and lightweight operation for easier access to work zone and enhanced user safety.</li> <li>· Sash (Window): Made of 6-8 mm thick toughened transparent glass/Acrylic</li> <li>· Apparatus Holding Grid: Apparatus holding grid for easy clamping/ holding to various laboratory glassware's and accessories.</li> </ul>
BOD Incubator (Portable Type)	<b>Capacity (Liter)</b>	28.0 - 30.0
	<b>Temp. Range</b>	5°C to 60°C (Resolution 0.1°C)
	<b>Temp. Accuracy</b>	±0.5°C at 37 °C Force Convention Type
	<b>MOC Outer</b>	Made of Stainless Steel (SS- 304)
	<b>MOC Inner</b>	Chamber and trays made of Stainless Steel (SS-304)
	<b>Body Outer Size (Approx. size)</b>	Fume Hood (WxDxH) in mm - 1110 x 610 X 1040
	<b>Inner Chamber Size (Approx. size)</b>	Fume Hood working area (WxDxH) in mm - 800 x 400 x 700
		<ul style="list-style-type: none"> <li>• Double wall construction made of Stainless Steel as per requirement. The construction materials of fume hoods are type 304 stainless steel</li> <li>• Fume hood generally equipped with vertical sashes but as required horizontal sashes can be fixed</li> <li>• Front Door: Acrylic.</li> <li>• UV lamp: 15/30w Philips Holland.</li> </ul>

Fume Hood  
 Chemical  
 Section with  
 Exhaust System  
 & Glove Ports &  
 Attached Lab  
 Blender in The  
 Work Station

**Specification of FUME HOOD Cabinet**

- Illumination: 20/40w florescent.
- Highly recommended for exhaust of toxic gases, acidic/alkaline fumes, chemical vapours, removal of odours etc. from the hood working area.
- These fume hoods are designed in both Ducted and ductless pattern.
- The front door moves vertically up and down with concealed counter balanced weight.
- Electric Supply Socket: Two sockets to be located on the side panel for optimum convenience of using small electrical devices inside the cabinet
- Front Counter balanced Sash/ Shutter: A vertical rising sash/ shutter consist of a thick toughened transparent glass/Acrylic window for a clear inside view. The sash should be counter balanced for smooth and light weight operation for easier access to work zone and enhanced user safety.

**Front facing panel**

To be fitted with 15/5 Amp socket with switched for exhaust system and fluorescent light

**Power Supply**

220 / 230 volts A.C. Supply.

- Raw Milk Quality and Adulteration Screening Analyzer should be a portable instrument, based on the Advanced FTIR Technology approved by global bodies like AOAC INTERNATIONAL (Association of Official Analytical Chemists), IDF (International Dairy Federation) 141:2013(E) and ISO (International Standards Organization). ISO 9622:2013(E), which recommends the application of FTIR Technology for Liquid Milk Analysis.
- Raw Milk Quality and Adulteration Screening Analyzer should use the recommended FTIR technology for Milk Parameter analysis like Fat, SNF and Protein.
- Raw Milk Quality and Adulteration Screening Analyzer should include an inbuilt calibration including a detailed "fingerprint" of the Milk Sample's chemical composition.
- Raw Milk Quality and Adulteration Screening Analyzer should include an inbuilt calibration including a detailed "fingerprint" of the Milk Sample's chemical composition.

Rapid Milk Screening Apparatus / Raw Milk Quality and Adulteration Screening Analyzer

**Display Rapid Milk Screening Apparatus / Raw Milk Quality and Adulteration Screening Analyzer**

ation Screening Analyzer should compare the spectrum of the Sample Raw Milk with the spectrum of Pure Raw Milk that is built-in the FTIR analyzer using statistical techniques called the PCA and SEP (commonly used techniques in spectroscopy).

- After comparison and differentiation, the Raw Milk Quality and Adulteration Screening Analyzer should display the abnormality in sample milk.
- The Raw Milk Quality and Adulteration Screening Analyzer should be able to give a DIRECT Measurement of FAT, SNF and PROTEIN and not a software calculated display
- Raw Milk Quality and Adulteration Screening Analyzer should be able to screen maximum number of common adulterants by the same FTIR technique at different concentration levels like Added Water, Urea, Ammonium Sulphate, Sucrose, Maltodextrin, Glucose, Sorbitol, Melamine, Sodium Chloride, Sodium Citrate, Starch, Hydrogen Peroxide, Formaldehyde, Detergents, Sodium Carbonate, Sodium bicarbonate, Vegetable Oil when mixed with Chemical Emulsifier; and Qualify the Milk as Abnormal Milk. It should display Milk Abnormality or name of the chemicals when such chemicals are present in Milk at various concentrations
- The Raw Milk Quality and Adulteration Screening Analyzer should also display the presence of primary adulterants like Added Water, Urea, Sucrose, Ammonium Sulphate and Maltodextrin.
- SNF and Protein calibrations should be de-sensitized towards the presence of common adulterants, therefore assuring the results of SNF and Protein are not affected by the presence of these adulterants.
- FTIR spectrophotometer should be able to analyze raw un-homogenized Milk sample for Fat, SNF & Protein in the range of minimum to maximum range of a. 0-12% Fat b. 0-8% Protein c. 0-14% SNF
- Accuracy of the FTIR spectro

		<p>photometer milk parameters to be submitted by the manufacturer.</p> <p>a. Fat <math>\leq</math> 0.14 SD  b. Protein <math>\leq</math> 0.10 SD  c. SNF <math>\leq</math> 0.14 SD</p> <ul style="list-style-type: none"> <li>· Repeatability of the FTIR spectrophotometer milk parameters to be submitted by the manufacturer. <p>a. Fat <math>\leq</math> 0.05 SD  b. Protein <math>\leq</math> 0.05 SD  c. SNF <math>\leq</math> 0.10 SD</p> </li> <li>· Analysis speed required 40-50 seconds</li> <li>· Instrument warm up time Maximum 20-30 minutes.</li> <li>· Sample Temperature Raw Milk should be able to be measured in a temperature range of 5-40 deg. C</li> <li>· Sample Volume should be less than 5 ml.</li> <li>· Display LCD, Graphical Display</li> <li>· Built-in Diagnostics: Optics Test, Cuvette test, Stability test, Cleaning Message display, Error Message display</li> <li>· Manuals: Instrument should be supplied with Quick Guide, User Manuals</li> <li>· Training and Installation: Training and Installation services should be offered along with the Instrument</li> </ul>
Digital Multi-Parameter Hand Held Meter (pH, Conductivity, TDS and Temperature)	<b>pH range</b>	0 to 14.00,
	<b>TDS</b>	0 to 1000 ppm or better
	<b>Conductivity</b>	0.00 - 20.00 mS/cm or better
	<b>mV</b>	-1000 to 1000 mV or better
	<b>Temperature</b>	0.0 to 60.0 °C, 32 to 140.0 °F
	<b>Power</b>	DC 1.5 V x 4 battery (UM-4/AAA) Auto power off after 10 minutes
Digital refractometer/ B	<b>Sugar Content / Temperature Range</b>	Brix -0 to 85% or better
	<b>Temperature Range</b>	0 to 40°C or better (32 to 104°F or better)
	<b>Refractive Index</b>	1.3330 to 1.5000 or better
	<b>Sugar Content Resolution/Accuracy</b>	0.1% Brix/ $\pm$ 0.5% Brix or better
	<b>Refractive index Res</b>	

Dipytro refractometer - Portable	<b>Resolution / Accuracy</b>	0.0001 / ± 0.0003 or better
	<b>Temperature Resolution/Accuracy</b>	0.1 °C (0.1°F)/ ±0.5 °C {± 1 °F} or better
	<b>Measurement Time</b>	Approximately 3 seconds or better
	<b>Display</b>	LCD
	<b>Battery Type / Life</b>	9V or AAA / approximately 5000 readings
Hot Plate	<b>Body</b>	M.S. Body with S.S. top
	<b>Size</b>	10" x 12" rectangular or 10" x 10" circular
	<b>Power Supply</b>	220/230 volts AC, Supply 50 Hz Single Phase 1.5KW
Portable Autoclave	<b>M.O.C</b>	Stainless Steel 304, Single wall Chamber
	<b>Capacity</b>	20 Ltrs 2.0 KW, 0-2.1 kgf/cm <sup>2</sup> {30 psi}
	<b>Exhaust of pressure</b>	Manually through exhaust valve
	<b>Power Supply</b>	220/230 volts AC, 50-60 Hz
Mixer Grinder	<b>No. of jars</b>	At least 2 jars
	<b>Power supply</b>	50Hz : 220-240V;
	<b>Power consumption</b>	500 Watt
	<b>Operation</b>	at 3 different speeds
	<b>Jar Material</b>	Stainless steel
Desktop Computer and other accessories with wi-fi facility	<b>Screen Size</b>	20 inch
	<b>Processor type</b>	i5 or higher
	<b>Processor Generation</b>	10th
	<b>Graphic Card (GB)</b>	Integrated Graphics(Dedicated/Discrete)
	<b>RAM Size</b>	4 GB or higher
	<b>Hard Disk type</b>	SSD
	<b>Total HDD Capacity (GB)</b>	500 GB or higher
	<b>Power Supply Capacity (Watt)</b>	150.0 - 150.0 Or lower

	<b>Operating System</b>	Windows 10 Professional
	<b>Printer</b>	LaserJet multifunction (Print, Copy & Scan) monochrome printer
Public Address System	<b>Power</b>	12 V
	<b>Mike</b>	1 no.
	<b>Amplifier</b>	1 no.
	<b>Speaker</b>	2 no.
Fire Extinguisher	<b>Types</b>	ABC
GPS Tracker	<b>GPS Tracker</b>	GPS based Vehicle Tracking Devices - Intangles Make [complete information related to GPS tracking along with GPS integration( <b>open API</b> )
Other accessories	<b>Test Tube stand</b>	· Qty- 1 no. · Material- polycarbonate or equivalent
	<b>Spatula Holder</b>	· Qty- 1 no.
	<b>Separating Funnel Holder with Stand</b>	· Qty- 1 no. · Rod, Base and Holder
	<b>Pipette Stand</b>	· Qty- 1 no.
	<b>Stools</b>	· Qty- 2 no. · Material- SS
	<b>Sitting arrangements</b>	· Fixed Seat with backrest - 2 nos. · Front Seat with backrest (excl. Driver seat) - 2 nos.
	<b>Dustbin</b>	· Qty- 2 no.
	<b>Tissue Paper Holder</b>	· Qty. - 1 no.
	<b>Liquid Soap Dispenser</b>	· Qty. - 1 no.
	<b>White Board with Marker Pen and Duster</b>	· Qty. - 1 no.
Other Equipment Tools	<b>Other Equipment Tools</b>	· Basic tools for simple repairs Equipment I (screwdrivers, wrenches etc.) tools · Emergency kit (extinguisher, towing cable, emergency sign, emergency light) · First-aid kit
Warranty of all above i		

including Calibration and other necessary services (if any)

-

5 years(other than base vehicle)

\*\* **Make, Model of the vehicle and other equipment must be mentioned in sheet in the Technical Bid.**

**separate**

## **B. WHO CAN BID**

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The bidder must be an Indian based manufacture of the base vehicles/customized vans of similar nature viz ambulance, food truck with controlled atmosphere, mobile hospitals, mobile health check up van, mobile training/ exhibition van, mobile water and soil testing van etc or its authorized sole sale & service dealer/ Fabricator.

In case fabrication of the Mobile Food Testing Laboratory is carried out other than base Vehicle Manufacturing Plant, the bidder has to mention the name & address of the Fabricator Workshop in the technical bid documents along with the documentary proof of the fabricator workshop that having in house facility to produce complete Mobile Food Testing Laboratory.

The Bidder should have been in its comprehensive operational after sales service network in the state of West Bengal at least for last three years.

## **C. Inspection, Testing and Quality Control**

-

Pre-Inspection of fabrication of Mobile Food Testing Laboratory by the bidders: The bidder should satisfy themselves that the fabrication work of Mobile Food Testing Laboratory are in accordance with the terms of the contract and fully conform to the required specification by carrying out a thorough pre-inspection including shower test of the Mobile Food Testing Laboratory before actually tendering the same for inspection to the Inspection Committee nominated under the terms of Contract. Such precaution on the part of the bidder minimizes the chances of rejection and the consequences thereof.

Inspection during fabrication: - Bidder should intimate the TIA in writing for site inspection before installing Food Testing Laboratory equipments and finalizing equipments layouts.

Pre-Dispatch Inspection by Inspection Committee:

i) The Mobile Food Testing Laboratory on no account be dispatched / delivered

without getting the same inspected and issue of Inspected notes by the Inspector committee nominated in this reference.

ii) The Bidder should ensure that fabrication work of Mobile Food Testing Laboratory accepted by the Inspection Committee after inspection have been properly and legibly stamped by latter's identification stamp/Seal.

iii) The Bidder shall allow all reasonable facilities and free access to his works and records to the Inspection Committee. The Bidder shall afford to the Inspection Committee all reasonable facilities as may be necessary for satisfying himself that the Mobile Food Testing Laboratory are being and/or have been manufactured/Fabricated in accordance with the contract requirements. For the aforesaid purpose it may require the fabricator to make arrangements for inspection and/or testing of the supplies or any part thereof or any material at his premises or at any other place specified by the Inspection Committee. The samples, all materials, tools, labour, testing equipment and assistance which the Inspection Committee may demand of him to verify the conformity of the ambulances to the quality requirement etc. will be provided without any extra charge.

iv. Inspection by a committee with regard manufacturing capacity & availability of infrastructure prior to acceptance offer may be undertaken by the department, case of any deviation is found in tender submission and conclusion of by inspection committee aforesaid, the offer of the Bidder may not be considered.

#### **D. Packing & Insurance**

i) The Mobile Food Testing Laboratory will be delivered at the destination in perfect condition. The firm if so desires may insure against loss by theft, destruction or damage during transit/fabrication under exposure to weather or otherwise in any situation. The insurance charges will have to be borne by the fabricator and the department shall not be required to pay any such charges, if incurred.

ii) In the event of any loss or damage to the Mobile Food Testing Laboratory during transit, firm shall be liable for repair and replace the Mobile Food Testing Laboratory at destination after the Checking/inspection of Mobile Food Testing Laboratory by the consignee. No extra cost on such account shall be admissible.

#### **E. Emblems, Marking & Colour Scheme**

Complete body exterior should be uniform white in colour. All external marking should be retro- reflective in nature, Standard Specification for Retro-reflective sheeting for Traffic Control. **All exterior full body Graphic design & lettering should be as per requirement of the TIA (As per specific requirement of customer).**

**F. Layout Drawings**

The bidders MUST provide 2D & 3D rendered drawings for the quoted Mobile Food Testing Laboratory showing location of various components, sub-assemblies for structure, interior layouts, fitment of Testing equipments, layout of seats & furniture medical equipments, non-OEM electrical system layout, etc along with the technical bid.

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

**Amendment I**

**1. Point No.2 " . Experience Criteria: Bidder should submit following documents of same similar type of equipment in support of supplies made to Govt. Hospitals or reputed private hospitals for the period of last three calendar years ending December 2022:**

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

**OR**

• **Proof of payment against supply and installation of the same / similar type of equipment ".....DELETED**

**2. Bidder should mention the bid reference number along with the quoted make and model of the B vehicle & equipment in the OEM Authorization certificate and the certificate should be issued to bidder from OEM after publishing of the bid. However, authorization for Rapid Milk Screening Apparatus / Raw Milk Quality and Adulteration Screening Analyzer may be submitted either during submission of bid or prior to issuance of Award of Contract**

**3.Delivery Timeline : 60 Days**

**4. Revised Technical Specifications**

**Mobile Food Testing Laboratory (MICROBIOLOGY READY) - SSAI**

**Major product category: Motor Vehicles**

<b>Parameters</b>	<b>Descriptions</b>	<b>Bid Requirement (Allowed Values)</b>
	Category of Vehicle	Medium
	Vehicle Engine capacity	2500 cc or above

Vehicle parameters(Generic)	Minimum Engine Torque (Nm) at rated RPM	220.0 or higher
	Type of Fuel	Diesel
	Vehicle Emission Compliance	BS -VI,Stage-2
	Type of Steering	Power Operated
	Ground Clearance (mm)	180 to 210
	Length of the Van body (Lab area) excluding driver cabin.	2900mm and above.
	Inside height of the Van body (Lab area).	1800 mm or above.
	Width of the Van body (Lab area)	1750mm or above.
	Pay load capacity of the vehicle	2600kgs or above.
	No of wheels	Rear -4, Front-2, Stepney-1
Type of rear door	Two leaf divided rear door or flap type rear door at rear end with side-ways opening.	
Additional requirement	The alignment between the driver cabin and van body is a critical requirement for this project. It is imperative that no part of the van body projects or outlines beyond the dimensions of the driver cabin.	
Warranty:-	Comprehensive warranty for 3 (three) lakh Km / 3-year whichever is earlier.	

Van Body	<ul style="list-style-type: none"> <li>· The Insulated Van is fabricated as per the requirement of the conditions inside the unit.</li> <li>· The PUF Insulated Van Body is built and designed for transportation of perishable materials at Low Temperature and in Highly Clean and Hygiene Conditions.</li> </ul>
Features of the Panel Van	<ul style="list-style-type: none"> <li>· Base frame made up of 100X50mm channel.</li> <li>· Cross channel 75X40mm.</li> <li>· External Structure made up of 1.6 mm GI sheets</li> </ul>
	<ul style="list-style-type: none"> <li>· Plane sheet for the Van made out of 1.6 mm GI and inside 0.5 mm SS 304 grade/3mm FRP.</li> <li>· All sheets joints are continuously welded with MS welding rod to strengthen the Van. The internal strength is given by the internal framing by pipes/ MS strips.</li> <li>· The external paint colour shade and marking shall be as per specific customer requirements.</li> <li>· The PUF will have average density of 38 - 40 kg/m<sup>3</sup> and thermal conductivity value of 0.017 W/m deg. K. All six sides of the Body shall be homogeneously insulated with PUF.</li> <li>· The average insulation thickness will be 50 mm.</li> <li>· Rear Door with Flush Toughened Glass Windows (02 Flaps)</li> <li>· Sliding windows x 2, Fixed Windows - 1 no.</li> <li>· The Van Body floor is 16 mm plywood laid over the insulation.</li> <li>· Insulated Body is double door fitted with</li> </ul>

Van Body

Others

th inner and outer seals.

- Electrical wiring: Electrical wiring to be done as per the requirement, fitment of sockets/ switches, Light (DC) and Fan (DC) x 4 nos.

- Screws, Bolts and Rivets: Stainless Steel (SS-304) and placed at even spacing.

- Chassis & Body Integration: U Bolts

- **Retractable/ pull out awning from side of vehicle of dimensions 2900 ( ± 300) mm x 1523( ± 100) mm**

- The interior paneling of the Lab compartment including sidewalls, 60 mm

- **Toughened Glass partition** in between Microbiological and Chemical Work Flow Area.

- **Partition between n procedure cabin and driver cabin**, roof, door panels and all other surfaces in the compartment should be made from long life superior quality material such as non-halogenated Flame Retardant Polymer of grade C-1196 HF.

- The interior material should have the following characteristics: Thickness - minimum 3.0 mm,

- Fire retardant as per IS - 6746 of 1988 or latest equivalent as applicable. No painting shall be allowed

- The insulating material should be heavy duty thermal PU F insulation to provide better temperature control.

- Sufficient reinforcement for holding the wall/floor mount

		<p>ed equipment securely while in transit should be present on the side walls</p> <ul style="list-style-type: none"> <li>The van interiors are suitable for easy cleaning, scientific fumigation &amp; treatment with disinfectants. Joints should be flushed, seamless, hermetically sealed, waterproof &amp; easy to disinfect. All interior materials shall comply with the fire safety requirements.</li> </ul>
Exterior	<b>Exterior</b>	<ul style="list-style-type: none"> <li>The vehicle has an additional Exhaust fan. The Body has a carrier and the Ladder.</li> <li>Ceiling of the body should have insulator material (as coating or a material) on the inside.</li> <li>Glass Window (size 50" X18") for complete Toughened Glass (6mm thickness) view Panel sized 54"X56" with MS Frame Structure (duly painted 2" in size) for provision for display of TV, Books (A4 size) and posters (A3 size)</li> <li>Electronic Scroller Display (Left Side)</li> <li>Outdoor Image Display Scroller with additional provision with Toughened Glass 5 mm with operable door and FRP cover from inside (48"X36")</li> <li>There is one set of a radio and an amplifier along with two movable loudspeakers with fixtures on the roof.</li> <li>Foot step is at the back end of the vehicle for entering/climbing</li> </ul>
		<ul style="list-style-type: none"> <li>Workbenches on both sides with adequate moving space</li> </ul>

Interior  
(All furniture-  
SS 304 Grade)

of a minimum two feet in the central area. Workbenches have storage below and above the working platforms. All the work benches should be made of SS-304 {16 SWG (1.6 mm) for top of the bench and 18 SWG (1.2 mm) for the body of the bench). All the storage cabinet and drawers for storing minor instruments, accessories, basic glassware and chemicals must be made of SS-304 only.

- Space is provided for safely fixing the generator, refrigerator and also securing the gas cylinder(s).
- The interior have chemical resistant Vinyl / PVC flooring or any suitable material.
- Provision is made to safely secure the equipment under a vibration free, cushioned and fitting separations in order to prevent any damage during the vehicle is under movement.
- Sliding windows is provided on both the walls of the vehicle.
- Collapsible/retractable ledge of 9-inch depth x 30 inch {18 SWG (1.2 mm) of SS 304} outside one of the windows for acceptance of samples. This ledge is in such a way that it can be secured flat on the body of the vehicle when the MFTL is on the move.
- Stowing area/room for accommodating the stools after working.

		<ul style="list-style-type: none"> <li>· Tissue paper roll holder, hand wash holder, towel holder, spatula holder, tweezers holder, pipette holder, test tube stand holder, separating funnel holder etc. is placed inside the lab in such a way that it can be accessed by sitting on the stool itself. The bottle holder should be air tight and spillage free.</li> <li>· The door have full length grab rail that is not projecting outside from the door front surface. The grab rails should be made of powder coated Aluminium.</li> <li>· Dedicated space for keeping One 10 liters carboy to be provided.</li> <li>· Appropriate space and easily accessible positioning for placing fire extinguisher.</li> <li>· Fabrication : Warranty as per the bid criteria</li> </ul>
Power Supply	<b>Power Supply</b>	<ul style="list-style-type: none"> <li>· One Dual Mode Petrol driven Silent Generator with self start of a minimum 7 KVA. One 5 KVA UPS to be provides as Backup for the Generator for minimum 45 min -1 HR Backup. All equipment/AC should be powered by gen-set when stationary OR external line available at location to the Genset.</li> <li>· Minimum of 10 meter cable for direct connection of power from outside sources is required.</li> </ul>
	<b>Capacity of fresh water tank (liter)</b>	100 (minimum)

Water Tank and Sink (Acid and Alkaline resistant)	<b>Capacity of waste water collecting tank with outside drain (liter)</b>	100 (minimum)
	<b>Sink</b>	Sink of SS, moulded as one piece. The minimum dimension of the sink is 32x32x20 cms. The sink does not have any sharp corners inside
Air Conditioner including Compressor	<b>Type of Air Conditioner</b>	Split (having Copper coil)
	<b>Nominal cooling capacity in Ton</b>	1
	<b>BEE Star Rating</b>	3
	<b>Others</b>	In-door unit is installed appropriately for uniform cooling inside the lab area
Refrigerator	<b>Capacity</b>	80 - 100 Litres
	<b>Type of Door</b>	Single
	<b>Temperature</b>	0-4°C
Television	<b>Type</b>	LED (Smart)
	<b>Screen Size</b>	40 Inches
	<b>Screen Resolution</b>	1920 x 1080 (Full HD)
Electrical Fittings and Wiring	<b>Minimum number of Power points on each side on two work benches</b>	6 nos. or higher
	<b>Power Points</b>	<ul style="list-style-type: none"> <li>· Minimum six power points on each side are given on two work benches to make equipment's operable. The power supply of these points is from the generator.</li> <li>· Each of these power points has both 5 A and 15A (12 nos of 5A &amp; 5nos of 15A)</li> </ul>
Lighting	<b>Lighting</b>	LED lights & Tube Lights in the lab for adequate illumination.
Eye wash pump	<b>Eye Wash Pump</b>	Suitable eye wash pump shall be provided near the wash basin.

Digital Balance	<b>Weighing Range (gm )</b>	300g / 0.01 g
	<b>Readability</b>	0.01 g
	<b>Repeatability</b>	± 0.03 g
	<b>Power Supply</b>	AC Adapter : 9V / 500 mA
Clean Air Biological Section Cabinet	<b>Approx. size of Body Outer Size</b>	Laminar Air Flow (WxD xH) in mm – 710 x 610 x 1040
	<b>Approx. size of Inner Chamber Size</b>	Laminar Air Flow working area (WxDxH) in mm – 625 x 515 x 450
		<ul style="list-style-type: none"> <li>· Completely made of 304 grades S.S. workbench covered with 304 SS grade perforated sheet, microprocessor control digital display with filter alarm.</li> <li>· Microprocessor based switch for blower and fluorescent light, UV light with LCD system.</li> <li>· Pre Filter 99.00% down to 5 micron.</li> <li>· HEPA Filter: ISO 14644 Class 5 (Class 100), 99.97%- 99.99% down to 0.3 micron, mesh guard for protection of HEPA filters.</li> <li>· Air flow: Vertical.</li> <li>· Noise Level: 60 decibel ±5%.</li> <li>· Velocity: 0.35-0.50m/sec.</li> <li>· Work Table: 304 Grade S.S. &amp; Cock for gas on work table</li> <li>· Front Door: Acrylic</li> <li>· UV lamp: 15/30w Philips Holland.</li> <li>· Illumination: 20/40w florescent tube with defogger. Power: 230V, 50Hz.</li> <li>· Air Flow Type: Constant Air Volume type with automatic bypass.</li> <li>· Interior Construction and Liners: Standard Model with thick Water/Heat/Fire</li> </ul>

	<b>Specification for Laminar Air Flow</b>	<p>Resistant Phenolic Resin Lamination</p> <ul style="list-style-type: none"> <li>· Support Base with storage cabinet.</li> <li>· The storage cabinet at base to store chemical or apparatus and fitted with exhaust port connected internally to, work in tandem with the main exhaust system.</li> <li>· Electric Supply Socket: Two sockets to be located on the side panel for optimum convenience of using small electrical devices inside the cabinet</li> <li>· Front Counter balanced Sash/ Shutter: A vertical rising sash/ shutter consist of a thick toughened transparent glass /Acrylic window for a clear inside view. The sash should be counter balanced for smooth and light weight operation for easier access to work zone and enhanced user safety.</li> <li>· Sash (Window): Made of 6-8 mm thick toughened transparent glass/Acrylic</li> <li>· Apparatus Holding Grid: Apparatus holding grid for easy clamping/ holding to various laboratory glassware's and accessories.</li> </ul>
BOD Incubator (Portable Type)	<b>Capacity (Liter)</b>	28.0 - 30.0
	<b>Temp. Range</b>	5°C to 60°C (Resolution 0.1°C)
	<b>Temp. Accuracy</b>	±0.5°C at 37 °C Force Convention Type
	<b>MOC Outer</b>	Made of Stainless Steel (SS- 304)
	<b>MOC Inner</b>	Chamber and trays made of Stainless Steel (SS-304)

Fume Hood  
 Chemical  
 Section with  
 Exhaust System  
 & Glove Ports &  
 Attached Lab  
 Blender in The  
 Work Station

<b>Body Outer Size (Approx. size)</b>	Fume Hood (WxDxH) in mm - 1110 x 610 X 1040
<b>Inner Chamber Size (Approx. size)</b>	Fume Hood working area (WxDxH) in mm - 800 x 400 x 700
<b>Specification of FUME HOOD Cabinet</b>	<ul style="list-style-type: none"> <li>• Double wall construction made of Stainless Steel as per requirement . The construction materials of fume hoods are type 304 stainless steel</li> <li>• Fume hood generally equipped with vertical sashes but as required horizontal sashes can be fixed.</li> <li>• Front Door: Acrylic.</li> <li>• UV lamp: 15/30w Philips Holland.</li> <li>• Illumination: 20/40w fluorescent.</li> <li>• Highly recommended for exhaust of toxic gases, acidic/alkaline fumes, chemical vapours, removable of odours etc. from the hood working area.</li> <li>• These fume hoods are designed in both Ducted and ductless pattern.</li> <li>• The front door moves vertically up and down with concealed counter balanced weight.</li> <li>• Electric Supply Socket: Two sockets to be located on the side panel for optimum convenience of using small electrical devices inside the cabinet</li> <li>• Front Counter balanced Sash/ Shutter: A vertical rising sash/ shutter consist of a thick toughened transparent glass/Acrylic window for a clear inside view. The sash should be counter balanced for smooth and light weight operation for easier access to work</li> </ul>

			k zone and enhanced user safety.
		<b>Front facing panel</b>	To be fitted with 15/5 Amp socket with switch and fluorescent light
		<b>Power Supply</b>	220 / 230 volts A.C. Supply.
			<ul style="list-style-type: none"> <li>· Raw Milk Quality and Adulteration Screening Analyzer should be a portable instrument, based on the Advanced FTIR Technology approved by global bodies like AOAC INTERNATIONAL (Association of Official Analytical Chemists), IDF (International Dairy Federation) 141:2013(E) and ISO (International Standards Organization). ISO 9622:2013(E), which recommends the application of FTIR Technology for Liquid Milk Analysis.</li> <li>· Raw Milk Quality and Adulteration Screening Analyzer should use the recommended FTIR technology for Milk Parameter analysis like Fat, SNF and Protein.</li> <li>· Raw Milk Quality and Adulteration Screening Analyzer should include an inbuilt calibration including a detailed "fingerprint" of the Milk Sample's chemical composition.</li> <li>· Raw Milk Quality and Adulteration Screening Analyzer should compare the spectrum of the Sample Raw Milk with the spectrum of Pure Raw Milk that is built-in the FTIR analyzer using statistical techniques called the PCA and SEP (commonly use</li> </ul>

Rapid Milk Screening Apparatus / Raw Milk Quality and Adulteration

Screening Analyzer

**Display Rapid Milk Screening Apparatus / Raw Milk Quality and Adulteration Screening Analyzer**

d techniques in spectroscopy).

- After comparison and differentiation, the Raw Milk Quality and Adulteration Screening Analyzer should display the abnormality in sample milk.

- The Raw Milk Quality and Adulteration Screening Analyzer should be able to give a DIRECT Measurement of FAT, SNF and PROTEIN and not a software calculated display

- Raw Milk Quality and Adulteration Screening Analyzer should be able to screen maximum number of common adulterants by the same FTIR technique at different concentration levels like Added Water, Urea, Ammonium Sulphate, Sucrose, Maltodextrin, Glucose, Sorbitol, Melamine, Sodium Chloride, Sodium Citrate, Starch, Hydrogen Peroxide, Detergents, Sodium Carbonate, Sodium bicarbonate, Vegetable Oil when mixed with Chemical Emulsifier; and Qualify the Milk as Abnormal Milk. It should display Milk Abnormality or name of the chemicals when such chemicals are present in Milk at various concentrations

- The Raw Milk Quality and Adulteration Screening Analyzer should also display the presence of primary adulterants like Added Water, Urea, Sucrose, Ammonium Sulphate and Maltodextrin.

- SNF and Protein calibrations should be

e de-sensitized towards the presence of common adulterants, therefore assuring the results of SNF and Protein are not affected by the presence of these adulterants.

- FTIR spectrophotometer should be able to analyze raw unhomogenized Milk sample for Fat, SNF & Protein in the range of minimum to maximum range of  
a. 0-12% Fat  
b. 0-8 % Protein  
c. 0-14% SNF

- Accuracy of the FTIR spectrophotometer milk parameters to be submitted by the manufacturer

- - a. Fat  $\leq 0.14$  SD
  - b. Protein  $\leq 0.10$  SD
  - c. SNF  $\leq 0.14$  SD

- Repeatability of the FTIR spectrophotometer milk parameters to be submitted by the manufacturer.

- - a. Fat  $\leq 0.05$  SD
  - b. Protein  $\leq 0.05$  SD
  - c. SNF  $\leq 0.10$  SD

- Analysis speed required 40-50 seconds

- Instrument warm up time Maximum 20-30 minutes.

- Sample Temperature Raw Milk should be measured in a temperature range of 5-40 deg . C

- Sample Volume should be less than 5 ml.

- Display LCD, Graphical Display

- Built-in Diagnostics: Optics Test, Cuvette test, Stability test, Cleaning Message display, Error Message display

		<ul style="list-style-type: none"> <li>Manuals: Instrument should be supplied with Quick Guide, User Manuals</li> <li>Training and Installation: Training and Installation services should be offered along with the Instrument</li> </ul>
Digital Multi-Parameter Hand Held Meter (pH, Conductivity, TDS and Temperature)	<b>pH range</b>	0 to 14.00,
	<b>TDS</b>	0 to 1000 ppm or better
	<b>Conductivity</b>	0.00 - 20.00 mS/cm or better
	<b>mV</b>	-1000 to 1000 mV or better
	<b>Temperature</b>	0.0 to 60.0 °C, 32 to 140.0 °F
	<b>Power</b>	DC 1.5 V x 4 battery (UM-4/AAA) Auto power off after 10 minutes
Digital refractometer/ B utyro refractometer -Po rtable	<b>Sugar Content / Temperature Range</b>	Brix -0 to 85% or better
	<b>Temperature Range</b>	0 to 40°C or better (32 to 104°F or better)
	<b>Refractive Index</b>	1.3330 to 1.5000 or better
	<b>Sugar Content Resolution/Accuracy</b>	0.1% Brix/ ±0.5% Brix or better
	<b>Refractive index Resolution / Accuracy</b>	0.0001 / ± 0.0003 or better
	<b>Temperature Resolution/Accuracy</b>	0.1 °C (0.1°F)/ ±0.5 °C { ± 1 °F) or better
	<b>Measurement Time</b>	Approximately 3 seconds or better
	<b>Display</b>	LCD
	<b>Battery Type / Life</b>	9V or AAA / approximately 5000 readings
Hot Plate	<b>Body</b>	M.S. Body with S.S. top
	<b>Size</b>	10" x 12" rectangular or 10" x 10" circular
	<b>Power Supply</b>	220/230 volts AC, Supply 50 Hz Single Phase I.

		5KW
Portable Autoclave	<b>M.O.C</b>	Stainless Steel 304, Single wall Chamber
	<b>Capacity</b>	20 Ltrs 2.0 KW, 0-2.1 kg/cm <sup>2</sup> {30 psi}
	<b>Exhaust of pressure</b>	Manually through exhaust valve
	<b>Power Supply</b>	220/230 volts AC, 50-60 Hz
Mixer Grinder	<b>No. of jars</b>	At least 2 jars
	<b>Power supply</b>	50Hz : 220-240V;
	<b>Power consumption</b>	500 Watt
	<b>Operation</b>	at 3 different speeds
	<b>Jar Material</b>	Stainless steel
Desktop Computer and other accessories with wi-fi facility	<b>Screen Size</b>	20 inch
	<b>Processor type</b>	i5 or higher
	<b>Processor Generation</b>	10th
	<b>Graphic Card (GB)</b>	Integrated Graphics(Dedicated/Discrete)
	<b>RAM Size</b>	4 GB or higher
	<b>Hard Disk type</b>	SSD
	<b>Total HDD Capacity (GB)</b>	500 GB or higher
	<b>Power Supply Capacity (Watt)</b>	150.0 - 150.0 Or lower
	<b>Operating System</b>	Windows 10 Professional
	<b>Printer</b>	LaserJet multifunction (Print, Copy & Scan) monochrome printer
Public Address System	<b>Power</b>	12 V
	<b>Mike</b>	1 no.
	<b>Amplifier</b>	1 no.
	<b>Speaker</b>	2 no.
Fire Extinguisher	<b>Types</b>	ABC

GPS Tracker	<b>GPS Tracker</b>	GPS based Vehicle Tracking Devices - Intangibles Make [complete information related to GPS tracking along with GPS integration( <del>open API</del> )
Other accessories	<b>Test Tube stand</b>	· Qty- 1 no. · Material- polycarbonate or equivalent
	<b>Spatula Holder</b>	· Qty- 1 no.
	<b>Separating Funnel Holder with Stand</b>	· Qty- 1 no. · Rod, Base and Holder
	<b>Pipette Stand</b>	· Qty- 1 no.
	<b>Stools</b>	· Qty- 2 no. · Material- SS
	<b>Sitting arrangements</b>	· Fixed Seat with backrest - 2 nos.
		· Front Seat with backrest (excl. Driver seat) - 2 nos.
	<b>Dustbin</b>	· Qty- 2 no.
	<b>Tissue Paper Holder</b>	· Qty. - 1 no.
	<b>Liquid Soap Dispenser</b>	· Qty. - 1 no.
	<b>White Board with Marker Pen and Duster</b>	· Qty. - 1 no.
Other Equipment Tools	<b>Other Equipment Tools</b>	· Basic tools for simple repairs Equipment (screwdrivers, wrenches etc.) tools · Emergency kit (extinguisher, towing cable, emergency sign, emergency light) · First-aid kit
Warranty of all above including Calibration and other necessary services (if any)	-	5 years(other than base vehicle)

**\*\* Make, Model of the vehicle and other equipment must be mentioned in separate sheet in the Technical Bid.**

**B. WHO CAN BID**

-

The bidder must be an Indian based manufacture of the base vehicles/customized vans of similar nature viz ambulance, food truck with controlled atmosphere, mobile hospitals, mobile health check up van, mobile training/ exhibition van, mobile water and soil testing van etc or its authorized sole sale & service dealer/ Fabricator.

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- iii) The Bidder shall allow all reasonable facilities and free access to his works and records to the Inspection Committee. The Bidder shall afford to the Inspection Committee all reasonable facilities as may be necessary for satisfying himself that the Mobile Food Testing Laboratory are being and/or have been manufactured/Fabricated in accordance with the contract requirements. For the aforesaid purpose it may

require the fabricator to make arrangements for inspection and/or testing of the supplies or any part thereof or any material at his premises or at any other place specified by the Inspection Committee. The samples, all materials, tools, labour, testing equipment and assistance which the Inspection Committee may demand of him to verify the conformity of the ambulances to the quality requirement etc. will be provided without any extra charge.

iv. Inspection by a committee with regard manufacturing capacity & availability of infrastructure prior to acceptance offer may be undertaken by the department, in case of any deviation is found in tender submission and conclusion of by inspection committee aforesaid, the offer of the Bidder may not be considered.

#### **D. Packing & Insurance**

i) The Mobile Food Testing Laboratory will be delivered at the destination in perfect condition. The firm if so desires may insure against loss by theft, destruction or damage during transit/fabrication under exposure to weather or otherwise in any situation. The insurance charges will have to be borne by the fabricator and the department shall not be required to pay any such charges, if incurred.

ii) In the event of any loss or damage to the Mobile Food Testing Laboratory during transit, firm shall be liable for repair and replace the Mobile Food Testing Laboratory at destination after the Checking/inspection of Mobile Food Testing Laboratory by the consignee. No extra cost on such account shall be admissible.

#### **E. Emblems, Marking & Colour Scheme**

Complete body exterior should be uniform white in colour. All external marking should be retro-reflective in nature, Standard Specification for Retro-reflective sheeting for Traffic Control. **All exterior full body Graphic design & lettering should be as per requirement of the TIA (As per specific requirement of customer).**

#### **F. Layout Drawings**

The bidders MUST provide 2D & 3D rendered drawings for the quoted Mobile Food Testing Laboratory showing location of various components, sub-assemblies for structure, interior layouts, fitment of Testing equipments, layout of seats & furniture medical equipments, non-OEM electrical system layout, etc along with the technical bid.

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

## **Amendment II**

# Technical Specifications

## Mobile Food Testing Laboratory (MICROBIOLOGY READY) - SSAI

### Major product category: Motor Vehicles

<b>Parameter s</b>	<b>Descriptio ns</b>	<b>Bid Requi rement (Allowed Values)</b>
Vehicle parameter s(Generic)	Category of Vehicle	Medium
	Vehicle Engine capacity	2500 cc or above
	Minimum Engine Torque (Nm) at rated RPM	220.0 or higher
	Type of Fuel	Diesel
	Vehicle Emission Compliance	BS -VI,Stage-2
	Type of Steering	Power Operated
	Ground Clearance (mm)	180 to 210
	Length of the Van body (Lab area) excluding driver cabin.	2900mm and above.
	Inside height of the Van body (Lab area.	1800 mm or above.
	Width of the Van body (Lab area)	1750mm or above.
	Pay load capacity of the vehicle	2600kgs or above
	No of wheels	Rear -4, Front-2, Steepney-1
	Two leaf divided rear	

	Type of rear door	door or flap type rear door at rear end with side-ways opening.
	Additional requirement	The alignment between the driver cabin and van body is a critical requirement for this project. It is imperative that no part of the van body projects or outlines beyond the dimensions of the driver cabin.
	Warranty:-	Comprehensive warranty for 3 (three) lakh Km / 3-year whichever is earlier.
	Van Body	<ul style="list-style-type: none"> <li>· The Insulated Van is fabricated as per the requirement of the conditions inside the unit.</li> <li>· The PUF Insulated Van Body is built and designed for transportation of perishable materials at Low Temperature and in Highly Clean and Hygiene Conditions.</li> </ul>
	Features of the Panel Van	<ul style="list-style-type: none"> <li>· Base frame made up of 100X50mm channel.</li> <li>· Cross channel 75X40mm.</li> <li>· External Structure made up of 1.6 mm GI sheets</li> </ul>

· Plane sheet for the Van made out of 1.6 mm GI and inside 0.5 mm SS 304 grade/3mm FRP.

· All sheets joints are continuously welded with MS welding rod to strengthen the Van. The internal strength is given by the internal framing by pipes/ MS strips.

· The external paint colour shade and marking shall be as per specific customer requirements.

· The PUF will have average density of 38 - 40 kg/m<sup>3</sup> and thermal conductivity value of 0.017 W/ m deg. K. All six sides of the Body shall be homogeneously insulated with PUF.

· The average insulation thickness will be 50 mm.

· Rear Door with Flush Toughened Glass Windows (02 Flaps)

· Sliding windows x 2, Fixed Windows - 1 no.

· The Van Body floor is 16 mm plywood laid over the insulation.

· Insulated Body is double door fitted with inner and outer seals.

· Electrical wiring: Electrical

Van Body

Others

wiring to be done as per the requirement, fitment of sockets/ switches , Light (DC) and Fan (DC) x 4 nos.

· Screws, Bolts and Rivets: Stainless Steel (SS-304) and placed at even spacing.

· Chassis & Body Integration : U Bolts

· **Retractable / pull out awning from side of vehicle of dimensions 2900 ( ± 300) mm x 1523( ± 100) mm**

· The interior paneling of the Lab compartment including sidewalls, 60 mm

· **Toughened Glass partition** in between Microbiological and Chemical Work Flow Area.

· **Partition between procedure cabin and driver cabin**, roof, door panels and all other surfaces in the compartment should be made from long life superior quality material such as non-halogenated Flame Retardant Polymer of grade C-1196 HF.

· The interior material should have the following characteristics: Thickness - minimum 3.0 mm,

			<ul style="list-style-type: none"> <li>· Fire retardant as per IS - 6746 of 1988 or latest equivalent as applicable. No painting shall be allowed</li> <li>· The insulating material should be heavy duty thermal PUF insulation to provide better temperature control.</li> <li>· Sufficient reinforcement for holding the wall/floor mounted equipment securely while in transit should be present on the side walls</li> <li>· The van interiors are suitable for easy cleaning, scientific fumigation &amp; treatment with disinfectants. Joints should be flushed, seamless, hermetically sealed, waterproof &amp; easy to disinfect. All interior materials shall comply with the fire safety requirements.</li> </ul>
			<ul style="list-style-type: none"> <li>· The vehicle has an additional Exhaust fan. The Body has a carrier and the Ladder</li> <li>· Ceiling of the body should have insulator material (as coating or a material) on the inside.</li> <li>· Glass Window (size 50" X 18") for complete Toughened Glass (6mm</li> </ul>

	Exterior	<b>Exterior</b>	<p>thickness) view Panel sized 54"X56" with MS Frame Structure (duly painted 2" in size) for provision for display of TV, Books (A4 size) and posters (A3 size)</p> <ul style="list-style-type: none"> <li>· Electronic Scroller Display (Left Side)</li> <li>· Outdoor Image Display Scroller with additional provision with Toughened Glass 5 mm with operable door and FRP cover from inside (48"X36")</li> <li>· There is one set of a radio and an amplifier along with two movable loud speakers with fixtures on the roof.</li> <li>· Foot step is at the back end of the vehicle for entering/climbing</li> </ul>
			<ul style="list-style-type: none"> <li>· Workbenches on both sides with adequate moving space of a minimum two feet in the central area. Workbenches have storage below and above the working platforms. All the work benches should be made of SS-304 { 16 SWG (1.6 mm) for top of the bench and 18 SWG (1.2 mm) for the body of the bench). All the storage cabinet and drawer</li> </ul>

Interior  
(All furniture-  
SS 304 Grade)

s for storing minor instruments, accessories, basic glassware and chemicals must be made of SS-304 only.

- Space is provided for safely fixing the generator, refrigerator and also securing the gas cylinder(s).

- The interior have chemically resistant Vinyl / PVC flooring or any suitable material.

- Provision is made to safely secure the equipment under a vibration free, cushioned and fitting separations in order to prevent any damage during the vehicle is under movement.

- Sliding windows is provided on both the walls of the vehicle.

- Collapsible/retactable ledge of 9-inch depth x 30 inch {18 SWG (1.2 mm) of SS 304} outside one of the windows for acceptance of samples. This ledge is in such a way that it can be secured flat on the body of the vehicle when the MFTL is on the move.

- Stowing area /room for accommodating the stools after working.

			<ul style="list-style-type: none"> <li>· Tissue paper roll holder, hand wash holder, towel holder, spatula holder, tweet pipette holder, test tube stand holder, separating funnel holder etc. is placed inside the lab in such a way that it can be accessed by sitting on the stool itself. The bottle holder should be airtight and spillage free.</li> <li>· The door have full length grab rail that is not projecting outside from the door front surface. The grab rails should be made of powder coated Aluminium.</li> <li>· Dedicated space for keeping One 10 liter carboy to be provided.</li> <li>· Appropriate space and easily accessible positioning for placing fire extinguisher.</li> <li>· Fabrication : Warranty as per the bid criteria</li> </ul>
			<ul style="list-style-type: none"> <li>· One Dual Mode Petrol driven Silent Generator with self start of a minimum 7 KVA. One 5 KVA UPS to be provided as Backup for the Generator for minimum 45 min -1 HR Backup. All equipment/AC should be powered</li> </ul>

Power Supply	<b>Power Supply</b>	by gen-set when stationary OR external line available at location to the Genset. Minimum of 10 meter cable for direct connection of power from outside sources is required.
Water Tank and Sink (Acid and Alkaline resistant)	<b>Capacity of fresh water tank (liter)</b>	100 (minimum)
	<b>Capacity of waste water collecting tank with outside drain (liter)</b>	100 (minimum)
	<b>Sink</b>	Sink of SS, moulded as one piece. The minimum dimension of the sink is 32x32x20 cms. The sink does not have any sharp corners inside
Air Conditioner including Compressor	<b>Type of Air Conditioner</b>	Split (having Copper coil)
	<b>Nominal cooling capacity in Ton</b>	1
	<b>BEE Star Rating</b>	3
	<b>Others</b>	In-door unit is installed appropriately for uniform cooling inside the lab area
Refrigerator	<b>Capacity</b>	80 - 100 Litres
	<b>Type of Door</b>	Single
	<b>Temperature</b>	0-4°C
Television	<b>Type</b>	LED (Smart)
	<b>Screen Size</b>	40 Inches
	<b>Screen Resolution</b>	1920 x 1080 (Full HD)

	<b>Minimum number of Power points on each side on two work benches</b>	6 nos. or higher
Electrical Fittings and Wiring	<b>Power Points</b>	<ul style="list-style-type: none"> <li>Minimum six power points on each side are given on two work benches to make equipment's operable. The power supply of these points is from the generator.</li> <li>Each of these power points has both 5A and 15A (12 nos of 5A &amp; 5nos of 15A)</li> </ul>
Lighting	<b>Lighting</b>	LED lights & Tube Lights in the lab for adequate illumination.
Eye wash pump	<b>Eye Wash Pump</b>	Suitable eye wash pump shall be provided near the wash basin.
Digital Balance	<b>Weighing Range (gm)</b>	300g / 0.01 g
	<b>Readability</b>	0.01 g
	<b>Repeatability</b>	± 0.03 g
	<b>Power Supply</b>	AC Adapter : 9V / 500 mA
	<b>Approx. size of Body Outer Size</b>	Laminar Air Flow (WxDxH) in mm - 710 x 610 x 1040
	<b>Approx. size of Inner Chamber Size</b>	Laminar Air Flow working area (WxDxH) in mm - 625 x 515 x 450
		<ul style="list-style-type: none"> <li>Completely made of 304 grades S.S. workbench covered with 304 SS grade perforated sheet, microprocessor or control digital display with filter alarm.</li> <li>Microprocess</li> </ul>

Clean Air Biological Section Cabinet

**Specification for Laminar Air Flow**

or based switch for blower and fluorescent light, UV light with LCD system.

- Pre Filter 99.00% down to 5 micron.
- HEPA Filter: ISO 14644 Class 5 (Class 100), 99.97%- 99.99% down to 0.3 micron, mesh guard for protection of HEPA filters
- Air flow: Vertical.
- Noise Level: 60 decibel  $\pm$ 5 %.
- Velocity: 0.35-0.50m/sec.
- Work Table: 304 Grade S.S . & Cock for gas on work table.
- Front Door: Acrylic.
- UV lamp: 15/30w Philips Holland.
- Illumination: 20/40w fluorescent tube with defogger. Power: 230V, 50Hz.
- Air Flow Type : Constant Air Volume type with automatic by pass.
- Interior Construction and Liners: Standard Model with thick Water/Heat/Fire Resistant Phenolic Resin Lamination
- Support Base with storage cabinet.
- The storage cabinet at base to store chemical or apparatus and fittings

			<p>d with exhaust port connected internally to, work in tandem with the main exhaust system.</p> <ul style="list-style-type: none"> <li>· Electric Supply Socket: Two sockets to be located on the side panel for optimum convenience of using small electrical devices inside the cabinet</li> <li>· Front Counter balanced Sash/ Shutter: A vertical rising sash/ shutter consist of a thick toughened transparent glass/Acrylic window for a clear inside view. The sash should be counter balanced for smooth and lightweight operation for easier access to work zone and enhanced user safety.</li> <li>· Sash (Window): Made of 6-8 mm thick toughened transparent glass/Acrylic</li> <li>· Apparatus Holding Grid: A apparatus holding grid for easy clamping/ holding to various laboratory glassware's and accessories.</li> </ul>
BOD Incubator	<b>Capacity (Liter)</b>	28.0 - 30.0	
	<b>Temp. Range</b>	5°C to 60°C (Resolution 0.1°C)	
	<b>Temp. Accuracy</b>	±0.5°C at 37 °C Force Convention	

	(Portable Type)	Type
	<b>MOC Outer</b>	Made of Stainless Steel (SS- 304)
	<b>MOC Inner</b>	Chamber and trays made of Stainless Steel (SS-304)
Fume Hood Chemical Section with Exhaust System & Glove Ports & Attached Lab Blender in The Work Station	<b>Body Outer Size (Approx. size)</b>	Fume Hood (WxDxH) in mm - 1110 x 610 X 1040
	<b>Inner Chamber Size (Approx. size)</b>	Fume Hood working area (WxDxH) in mm - 800 x 400 x 700
	<b>Specification of FUME HOOD Cabinet</b>	<ul style="list-style-type: none"> <li>• Double wall construction made of Stainless Steel as per requirement. The construction materials of fume hoods are type 304 stainless steel</li> <li>• Fume hood generally equipped with vertical sashes but as required horizontal sashes can be fixed.</li> <li>• Front Door: Acrylic.</li> <li>• UV lamp: 15/30w Philips Holland.</li> <li>• Illumination: 20/40w florescent.</li> <li>• Highly recommended for exhaust of toxic gases, acidic/alkaline fumes, chemical vapours, removable of odours etc. from the hood working area.</li> <li>• These fume hoods are designed in both Ducted and ductless pattern.</li> <li>• The front door moves vertically up and down with concealed counter balanced weight.</li> <li>• Electric Supply</li> </ul>

		<p>Socket: Two sockets to be located on the side panel for optimum convenience of using small electrical devices inside the cabinet</p> <ul style="list-style-type: none"> <li>• Front Counter balanced Sash/ Shutter: A vertical rising sash/ shutter consist of a thick toughened transparent glass/Acrylic window for a clear inside view. The sash should be counter balanced for smooth and lightweight operation for easier access to work zone and enhanced user safety.</li> </ul>
	<b>Front facing panel</b>	To be fitted with 15/5 Amp socket with switched for exhaust system and fluorescent light
	<b>Power Supply</b>	220 / 230 volts A.C. Supply.
		<ul style="list-style-type: none"> <li>• Raw Milk Quality and Adulteration Screening Analyzer should be a portable instrument, based on the Advanced FTIR Technology approved by global bodies like AOAC INTERNATIONAL (Association of Official Analytical Chemists), IDF (International Dairy Federation) 141:2013(E) and ISO (International Standards Organization). ISO 9622:2013(E), which recommends the application of FTIR Technology for Liquid Milk</li> </ul>

Analysis.

- Raw Milk Quality and Adulteration Screening Analyzer should use the recommended FTIR technology for Milk Parameter analysis like Fat, SNF and Protein.
- Raw Milk Quality and Adulteration Screening Analyzer should include an inbuilt calibration including a detailed "fingerprint" of the Milk Sample's chemical composition.
- Raw Milk Quality and Adulteration Screening Analyzer should compare the spectrum of the Sample Raw Milk with the spectrum of Pure Raw Milk that is built-in the FTIR analyzer using statistical techniques called the PCA and SEP (commonly used techniques in spectroscopy).
- After comparison and differentiation, the Raw Milk Quality and Adulteration Screening Analyzers should display the abnormality in sample milk.
- The Raw Milk Quality and Adulteration Screening Analyzer should be able to give a DIRECT Meas

Rapid Milk Screening Apparatus / Raw Milk Quality and Adulteration

Screening Analyzer

**Display Rapid Milk Screening Apparatus / Raw Milk Quality and Adulteration Screening Analyzer**

urement of FAT, SNF and PROTEIN and not a software calculated display

Raw Milk Quality and Adulteration Screening Analyzer should be able to screen maximum number of common adulterants by the same FTIR technique at different concentration levels like Added Water, Urea, Ammonium Sulphate, Sucrose, Maltodextrin, Glucose, Sorbitol, Melamine, Sodium Chloride, Sodium Citrate, Starch, Hydrogen Peroxide, Formaldehyde, Detergents, Sodium Carbonate, Sodium bicarbonate, Vegetable Oil when mixed with Chemical Emulsifier; and Qualify the Milk as Abnormal Milk. It should display Milk Abnormality or name of the chemicals when such chemicals are present in Milk at various concentrations

The Raw Milk Quality and Adulteration Screening Analyzer should also display the presence of primary adulterants like Added Water, Urea, Sucrose, Ammonium Sulp

hate and Malt  
odextrin.

- SNF and Protein calibration should be de-sensitized towards the presence of common adulterants, therefore assuring the results of SNF and Protein are not affected by the presence of these adulterants.

- FTIR spectrophotometers should be able to analyze raw unhomogenized Milk sample for Fat, SNF & Protein in the range of minimum to maximum range of a. 0-12 % Fat b. 0-8% Protein c. 0-14% SNF

- Accuracy of the FTIR spectrophotometer milk parameters to be submitted by the manufacturer.  
a. Fat  $\leq$  0.14 SD  
b. Protein  $\leq$  0.10 SD  
c. SNF  $\leq$  0.14 SD

- Repeatability of the FTIR spectrophotometer milk parameters to be submitted by the manufacturer.  
a. Fat  $\leq$  0.05 SD  
b. Protein  $\leq$  0.05 SD  
c. SNF  $\leq$  0.10 SD

- Analysis speed required 40-50 seconds

- Instrument warm up time

			<p>Maximum 20-30 minutes.</p> <ul style="list-style-type: none"> <li>· Sample Temperature Raw Milk should be measured in a temperature range of 5-40 deg. C</li> <li>· Sample Volume should be less than 5 ml</li> <li>· Display LCD, Graphical Display</li> <li>· Built-in Diagnostics: Optics Test, Cuvette test, Stability test, Cleaning Message display, Error Message display</li> <li>· Manuals: Instrument should be supplied with Quick Guide, User Manuals</li> <li>· Training and Installation: Training and Installation services should be offered along with the Instrument</li> <li>· <b>Installation in India: Minimum 30 Instruments should be supplied in last two years to any reputed government institute for mobile laboratory / van application</b></li> </ul>
Digital Multi-Parameter Hand Held Meter (pH, Conductivity,	<b>pH range</b>	0 to 14.00,	
	<b>TDS</b>	0 to 1000 ppm or better	
	<b>Conductivity</b>	0.00 - 20.00 mS/cm or better	
	<b>mV</b>	-1000 to 1000 mV or better	

TDS and Temperature)	<b>Temperature</b>	0.0 to 60.0 °C, 32 to 140.0 °F
	<b>Power</b>	DC 1.5 V x 4 battery (UM-4/AAA) Auto power off after 10 minutes
Digital refractometer/ Butyro refractometer -Portable	<b>Sugar Content / Temperature Range</b>	Brix -0 to 85% or better
	<b>Temperature Range</b>	0 to 40°C or better (32 to 104°F or better)
	<b>Refractive Index</b>	1.3330 to 1.5000 or better
	<b>Sugar Content Resolution/Accuracy</b>	0.1% Brix/ ±0.5% Brix or better
	<b>Refractive index Resolution / Accuracy</b>	0.0001 / ± 0.0003 or better
	<b>Temperature Resolution/Accuracy</b>	0.1 °C (0.1°F)/ ±0.5 °C {± 1 °F} or better
	<b>Measurement Time</b>	Approximately 3 seconds or better
	<b>Display</b>	LCD
	<b>Battery Type / Life</b>	9V or AAA / approximately 5000 readings
Hot Plate	<b>Body</b>	M.S. Body with S.S. top
	<b>Size</b>	10" x 12" rectangular or 10" x 10" circular
	<b>Power Supply</b>	220/230 volts AC, Supply 50 Hz Single Phase 1.5KW
Portable Autoclave	<b>M.O.C</b>	Stainless Steel 304, Single wall Chamber
	<b>Capacity</b>	20 Ltrs 2.0 KW, 0-2.1 kgf/cm <sup>2</sup> {30 psi)
	<b>Exhaust of pressure</b>	Manually through exhaust valve
	<b>Power Supply</b>	220/230 volts AC, 50-60 Hz

Mixer Grinder	<b>No. of jars</b>	At least 2 jars
	<b>Power supply</b>	50Hz : 220-240V;
	<b>Power consumption</b>	500 Watt
	<b>Operation</b>	at 3 different speeds
	<b>Jar Material</b>	Stainless steel
Desktop Computer and other accessories with wi-fi facility	<b>Screen Size</b>	20 inch
	<b>Processor type</b>	i5 or higher
	<b>Processor Generation</b>	10th
	<b>Graphic Card (GB)</b>	Integrated Graphics(Dedicated/Dedicated)
	<b>RAM Size</b>	4 GB or higher
	<b>Hard Disk type</b>	SSD
	<b>Total HDD Capacity (GB)</b>	500 GB or higher
	<b>Power Supply Capacity (Watt)</b>	150.0 - 150.0 Or lower
	<b>Operating System</b>	Windows 10 Professional
<b>Printer</b>	LaserJet multifunction (Print, Copy & Scan) monochrome printer	
Public Address System	<b>Power</b>	12 V
	<b>Mike</b>	1 no.
	<b>Amplifier</b>	1 no.
	<b>Speaker</b>	2 no.
Fire Extinguisher	<b>Types</b>	ABC
GPS Tracker	<b>GPS Tracker</b>	GPS based Vehicle Tracking Devices - Intangles Make [complete information related to GPS tracking along with GPS integration( <b>open API</b> )
		Qty- 1 no.

Other accessories	<b>Test Tube stand</b>	Material- polycarbonate or equivalent
	<b>Spatula Holder</b>	Qty- 1 no.
	<b>Separating Funnel Holder with Stand</b>	Qty- 1 no. Rod, Base and Holder
	<b>Pipette Stand</b>	Qty- 1 no.
	<b>Stools</b>	Qty- 2 no. Material- SS
	<b>Sitting arrangements</b>	Fixed Seat with backrest - 2 nos.
		Front Seat with backrest (excl. Driver seat) - 2 nos.
	<b>Dustbin</b>	Qty- 2 no.
	<b>Tissue Paper Holder</b>	Qty. - 1 no.
	<b>Liquid Soap Dispenser</b>	Qty. - 1 no.
	<b>White Board with Marker Pen and Duster</b>	Qty. - 1 no.
Other Equipment Tools	<b>Other Equipment Tools</b>	<ul style="list-style-type: none"> <li>· Basic tools for simple repairs Equipment I (screwdrivers, wrenches etc.) tools</li> <li>· Emergency kit (extinguisher, towing cable, emergency sign, emergency light)</li> <li>· First-aid kit</li> </ul>
Warranty of all above including Calibration and other necessary services (if any)	-	5 years(other than base vehicle)

**\*\*Make, Model of the vehicle and other equipment must be mentioned in separate sheet in the Technical Bid.**

### **B. WHO CAN BID**

-

The bidder must be an Indian based manufacture of the base vehicles/customized vans of similar nature viz ambulance, food truck with controlled atmosphere, mobile hospitals, mobile health check up van, mobile training/ exhibition van, mobile water and soil testing van etc or its authorized sole sale & service dealer/ Fabricator.

In case fabrication of the Mobile Food Testing Laboratory is carried out other than base Vehicle Manufacturing Plant, the bidder has to mention the name & address of the Fabricator Workshop in the technical bid documents along with the documentary proof of the fabricator workshop that having in house facility to produce complete Mobile Food Testing Laboratory.

The Bidder should have been in its comprehensive operational after sales service network in the state of West Bengal at least for last three years.

### **C. Inspection, Testing and Quality Control**

Pre-Inspection of fabrication of Mobile Food Testing Laboratory by the bidders: The bidder should satisfy themselves that the fabrication work of Mobile Food Testing Laboratory are in accordance with the terms of the contract and fully conform to the required specification by carrying out a thorough pre-inspection including shower test of the Mobile Food Testing Laboratory before actually tendering the same for inspection to the Inspection Committee nominated under the terms of Contract. Such precaution on the part of the bidder minimizes the chances of rejection and the consequences thereof.

Inspection during fabrication: - Bidder should intimate the TIA in writing for statutory inspection before installing Food Testing Laboratory equipments and finalizing equipments layouts.

Pre-Dispatch Inspection by Inspection Committee:

- i) The Mobile Food Testing Laboratory on no account be dispatched / delivered without getting the same inspected and issue of Inspected notes by the Inspection Committee nominated in this reference.
- ii) The Bidder should ensure that fabrication work of Mobile Food Testing Laboratory accepted by the Inspection Committee after inspection have been properly and legibly stamped by latter's identification stamp/Seal.
- iii) The Bidder shall allow all reasonable facilities and free access to his works and records to the Inspection Committee. The Bidder shall afford to the Inspection Committee all reasonable facilities as may be necessary for satisfying himself that the Mobile Food Testing Laboratory are being and/or have been manufactured/Fabricated in accordance with the contract requirements. For the aforesaid purpose it may

require the fabricator to make arrangements for inspection and/or testing of the supplies or any part thereof or any material at his premises or at any other place specified by the Inspection Committee. The samples, all materials, tools, labour, testing equipment and assistance which the Inspection Committee may demand of him to verify the conformity of the ambulances to the quality requirement etc. will be provided without any extra charge.

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### **Amendment III**

1. Point No.1 under Buyer Added text based ATC clauses “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 havan**. 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 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”-**DELETED**

2. Point No.10 under Buyer Added text based ATC clauses , Please read “Price Validity: 2(two) years from the last date of online bid submission”

AS

“Price Validity: 1(One) year from the last date of online bid submission”

3. Please read

**Amendment II** under **Technical Specifications** under **Parameters** “Rapid Milk Screening Apparatus / Raw Milk Quality and Adulteration Screening Analyzer” under **Descriptions** “Display Rapid Milk Screening Apparatus Raw Milk Quality and Adulteration Screening Analyzer under **Bid Requirement (Allowed Value)** “Installation in India: Minimum 30 Instruments should be supplied in last two years to any reputed government institute for mobile laboratory / van application”

AS

“Installation in India: Minimum 5 Instruments should be supplied in last two years to any reputed government institute for mobile laboratory / van application”

### **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:	
<p>.....</p> <p>(Signature &amp; Office Seal of authorized representative of Consignees with date)</p> <p>[Name and designation of the signatory to be written capital letter]</p>	
<p>.....</p> <p>(Signature &amp; Office Seal of Head of the Institute/Hospital with date)</p> <p>[Name and designation of the signatory to be written capital letter]</p>	

**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 i

n 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.**

SI	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 NHM 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),

SI	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 of

Signature _____	Unit Head: (HOD/MO-IC/Others)
Name _____	Name (in Block):
Designation with stamp _____	Designation with Stamp:
Date _____	

5. Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.
6. Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.
7. Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.
8. Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch technical parameters, the bid is liable for rejection.
9. Warranty period of the supplied products shall be as given in specifications from the date of final acceptance goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the warranty period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.
10. Installation, Commissioning, Testing, Configuration, Training (if any - which ever is applicable as per scope of supply) is to be carried out by OEM / OEM Certified resource or OEM authorised Reseller.
11. Over and above the normal Warranty terms as per GeM GTC, the successful bidder / OEM shall have to provide Comprehensive Warranty during the entire Standard warranty period as per contract. : The comprehensive warranty shall be covering the following scope  
All spare parts & labour  
(Upload an undertaking with the bid confirming compliance by the bidder if Bidder is taking onus of this compliance. In case OEM is taking onus of this compliance, OEM undertaking is to be uploaded along with Bid undertaking)
12. Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods
13. Successful Bidder can submit the Performance Security in the form of Payment online through RTGS / internet banking also (besides PBG which is allowed as per GeM GTC). On-line payment shall be in Beneficiary name

West Bengal Medical Services Corporation Ltd.

Account No.

105605003391

IFSC Code

ICIC0001056

Bank Name

ICICI BANK

Branch address

BIDHANNAGAR, SALT LAKE, SECTOR-V

. Successful Bidder to indicate Contract number and name of Seller entity in the transaction details field at the time of on-line transfer. Bidder has to upload scanned copy / proof of the Online Payment Transfer in place of PBG within 15 days of award of contract.

14. Successful bidder will have to ensure that adequate number of dedicated technical service personals / engine 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, as per Service level agreement indicated in the relevant clause of the bid.
15. Scope of supply includes Training: Number of employees to be trained  
70  
, Place for Training  
at the consignee location  
and Duration of training  
2  
days.
16. Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 7 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG). Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to reimburse the cost of such service / rectification to the Buyer.
17. The bidder is required to upload, along with the bid, all relevant certificates such as BIS licence, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.
18. Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:
  - i) The Seller fails to comply with any material term of the Contract.
  - ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
  - iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
  - iv) The Seller becomes bankrupt or goes into liquidation.
  - v) The Seller makes a general assignment for the benefit of creditors.
  - vi) A receiver is appointed for any substantial property owned by the Seller.
  - vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.
19. While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

## Disclaimer

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.

2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process.
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations

\*This document shall overwrite all previous versions of Bid Specific Additional Terms and Conditions.

[This Bid is also governed by the General Terms and Conditions](#)