

**GWALIOR SAHAKARI DUGDHA SANGH MARYADIT, GWALIOR  
GOLA KA MANDIR, GWALIOR**

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Please do mention tender reference and opening date on envelop.

**E-TENDER DOCUMENTS**

Tender for : **Supply, Installation , Testing , Commissioning, Glassware and Laboratory Equipment at GSDS**

SCHEDULE – I : General Terms and Conditions

SCHEDULE – II : Items specifications

UPLOAD ONLINE (MANDATORY) IN ENVELOPE-A : ANNEXURE –I

(UPLOAD MANDATORY IN TECHNICAL DOCUMENT) ENVELOPE- B : ANNEXURE –II

Tender reference : GSDS/PUR/Laboratory Items/2025-26

Published Date : 26-12-2025 Time 11.00 A.M

Bid Submission End Date : 15-01-2026 Time: 03.00 P.M

Bid Opening Date : 16-01-2026 Time 03.30 P.M

Contract & PBG Format : ANNEXURE –III & IV

Place of opening Tender : Office of the Gwalior Sahakari Dugdha Sangh Maryadit, Gwalior Golam Ka Mandir Gwalior MP

Cost of Tender Document: Rs. 1000/-  
EMD Rs. 50000.00

**Chief Executive Officer  
Gwalior Sahakari Dugdh Sangh Maryadit Gwalior**

**GWALIOR SAHAKARI DUGDHA SANGH MARYADIT, GWALIOR  
GOLA KA MANDIR  
GWALIOR**

1. डी.सी.एस इक्यूपमेंट ई-निविदा प्रपत्र [www.mptenders.gov.in](http://www.mptenders.gov.in) से प्राप्त किये जा सकेंगे।
2. निविदा प्रपत्र राशि रुपये 1000/- का ऑनलाईन भुगतान करना होगा, जो कि वापसी योग्य नहीं होगा। निविदा प्रपत्र राशि हेतु डी.डी मान्य नहीं किया जावेगा।
3. निविदा प्रपत्र में अंकित ई.एम.डी राशि का भुगतान ऑनलाईन भुगतान करना होगा, जिसकी प्रति ऑनलाईन अपलोड करना होगी। एवं मध्य प्रदेश के सूक्ष्म एवं लघु उद्योगों को निविदा में प्रतिभूति/ई0एम0डी0 राशि के भुगतान से छूट रहेगी। परन्तु एम0एस0एम0ई पंजीयन की प्रति ऑनलाईन अपलोड करनी होगी।
4. ई.एम.डी राशि का ऑनलाईन भुगतान करते समय Confirm to Pay करने उपरान्त बदलाव नहीं होगा। जिसकी संघ की कोई जिम्मेवारी नहीं होगी।
5. निविदा स्वीकृत होने उपरान्त निविदाकार को निर्धारित सिक्यूरिटी राशि रुपये 50000/- डी.डी अथवा नगद जमा करना होगी।
- 6- सफल निविदाकार को प्रदाय सामग्री के एवज् में प्रस्तुत दर कर सहित का 10 प्रतिशत राशी क़य आदेश दिनांक से एक वर्ष तक Performance Bank Guarantee रखनी होगी।
- 7- सफल निविदाकार को संघ के साथ एक वर्ष हेतु निर्धारित प्रारूप में अनुबंध निष्पादित करना होगा।

**GWALIOR SAHAKARI DUGDHA SANGH MARYADIT, GWALIOR**  
**GOLA KA MANDIR, GWALIOR**  
 SCHEDULE – I

The Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior invites Online tenders from bonafide manufactures/association of such manufactures and their authorized dealers for the supply of the material of different types and sizes strictly in adherence to the detailed specification given in the schedule – II of the tender.

The Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior reserves the right to accept any or all tenders which in their opinion justify such actions without further explanation to the tenderers.

**1.0 Tender Submission :**

- 1.1 The tender should be submitted Envelope A, B & C along with required documents online on [www.mptenders.gov.in](http://www.mptenders.gov.in).
- 1.2 The tender shall be opened online in presence of tenderers / or their authorized representative who wish to witness tender opening ceremony.
- 1.2 The tender received by the Fax / E-mail / Telegram will not be considered.
- 1.3 The tenders should clearly states in their offers the address, Fax / E-mail / Telephone and Telex No. any change in the address should immediately be notified to the Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit, GOLA KA MANDIR, Gwalior and correspondence thereafter will be made at the changed address.
- 1.4 Offer for each tender under reference should be sent under separate cover. Failure to adhere to this instruction will render the offer liable for rejection.
- 1.5 Individual signing the tender and other related documents must specify where he has signed as
  - a) The sole proprietor of the firm or constitution attorney of such proprietor.
  - b) A partner of the firm, if it is partnership firm in which case he must have authorities to refer to the arbitration disputes concerning the business of the partnership either by virtue of partnership deed or by power of attorney.

**1.6 Document Required:**

- a) Receipt of Payment with Envelope – A . Submit online (mandatory Upload)
- b) Technical Document is mandatory Upload in Envelope – B:
  1. Copy of Factory License/MSME Certificate/Shop Act Registration
  2. Copy of GST
  3. Copy of PAN
  4. Envelope ‘C’ – Price Bid – To be submitted only online.
- 2.1 exemption for E.M.D. to any registered unit in S.S.I./MSME shall be considered. Any tender which is not accompanied by Earnest Money Deposit shall be rejected. E.M.D. of unsuccessful tenders will be returned within 60 days from the date of opening of the tender. The E.M.D. of successful tenders will be released after completion of supply / work order.

2.0 No interest will be paid on Earnest Money / Security Deposit for which the period during the earnest money / security deposit with Gwalior Sahakari Dugdh Sangh Maryadit, GOLA KA MANDIR, Gwalior

2.1 **After Approval of tender tenderer must deposit security deposit as per mentioned into tender documents..**

3.0 **Prices :**

3.1 The offered by the tenderers should be firm clear and free from all escalations. The prices offered should be valid for one year from the approval of the rates. We would communicate our rate approval within 45 days from the opening of tenders. Supply is to be made as per scheduled mentioned in our purchase orders. The orders should be placed in parts as per requirement of Dugdh Sangh.

3.0 The tenders should quote rates are F.O.R. Delivery at Dairy Plant, Banmore, Morena

3.1 The tender should quote rates are inclusive all taxes and FOR Dairy Plant.

3.2 Octroi duty if applicable at the destination shall be borne by supplier / tenderer.

3.3 The prices charged for the stores supplied under the contract by the supplier firm in no event exceed the lowest price in which the supplier firm, sales the stores of identical tender description to any other persons during the period and until the performance of all supply order placed during the contract period are completed. Manufacturing units situated in Madhya Pradesh has to provide the M.P. Sales Tax benefit certificate, while considering their offers as the goods mentioned in this would be resold by the Sangh.

4.0 **Mode of Despatches :**

4.1 The material to be supplied by the tenderer shall be dispatched to Dairy Plant Banmore by Road under intimation to Gwalior Dugdh Sangh. The supplies shall carry out proper packing / crating to avoid damage during transit period depending upon the type of material.

4.0 After receiving confirmed purchase order, the material must be dispatched as mentioned in purchase order.

5.0 **Insurance :**

5.1 All Transit Insurance shall be arranged by the supplier / tenderer.

6.0 **Payment :**

6.1 Our normal terms of payments is full payment after receipt, inspection and acceptance of materials by the competent authorities within a period of 30 days after receipt of the bills.

6.1 Payment shall be made by account payee cheques / RTGS. The Bank Commission charges shall be borne by suppliers itself.

7.0 **General Terms & Conditions :**

7.1 The acceptance of the tender and award of the purchase order shall be sole right of the Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit, GOLA KA MANDIR, Gwalior who does not bound himself to accept a Tender in whole or in part or reject any or all tenders received, without assigning any reasons and no explanation can be demanded of the cause of rejection of the tender by any of the tenderers.

- 7.1 Any tender not properly addressed and identified may be opened by the Chief Executive Officer and in such cases no responsibility can attract to the Chief Executive Officer for such premature opening of the tender and the Chief Executive Officer in his discretion may allow or reject tender to be considered along with other tender. The tenders received against the advertisement upto the specified time limit shall only be considered. But awarding the tender the lowest rates could not be criteria but also considering the other criteria such as quality, our specification and make also.
- 7.2 Negligence on the part of the tenderers in filling the tender confirm no right to withdraw the tender after it has been opened. If the tenderer fails to make supply within the stipulated period mentioned in purchase order without any valid reason, the order would be treated as cancelled and the firm may be blacklisted and EMD/SD/BILLS would be forfeited.
- 7.3 The tenderer should send their offers alongwith the specifications, necessary drawing ISI certificate, etc. which will form the basis, of their quotations and integral part thereof.
- 7.4 Correction if any in the tender should be noted over and signed at the place of each correction made.
- 7.5 The other Bank Commission, Postage shall be borne by the suppliers.
- 7.6 The Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit, GOLA KA MANDIR, Gwalior reserves the right to lace order for sole requirement with any tenderer or split the order among one or more tenderers.
- 7.7 Each tender should be accompanied with Income Tax / GST/Registration No. without that the tender may not be entertained.
- 7.8 The submission of a tender by tenderer implies that he has read the notice and terms and conditions of tender and has made himself aware of the scope and specifications of the supplies to be made and the destination where the supply has to be made and satisfied himself regarding the quality and specification of the articles.
- 7.9 The tenderer should submit the tender in prescribed forms and no conditional tenders shall be considered.
- 7.10 No person or firm is permitted to submit more than one tender under different names.
- 7.11 Each page of the tender and its enclosures must be signed.
- 7.12 The tenderer shall not contract or assign to any other party or parties the whole or any portions of the tender awards.
- 7.13 The quality indicated in Schedule – II is tentative and shall increase / decrease up to any extend.

## 8.0 **Liquidated Damages :**

Once firm delivery dates are established then it shall be strictly adhered to. In case they are not followed, Gwalior Sahakari Dugdh Sangh Maryadit, GOLA KA MANDIR, Gwalior reserves the right either to cancel the order and make alternative purchase at the risk and expense of the defaulting supplier or deduction will be made as mentioned below :-

### **Delivery:**

	on of Delay	ated Damages
	5 Days	
	en 16 to 30 Days	
	d 30 Days	

### **Services:**

	on of Delay	ated Damages
	5 Days	
	en 16 to 30 Days	
	d 30 Days	

## 9.0 **Inspections :**

- 9.1 All the goods are subjected to inspection at our works before acceptance. If goods are rejected due to defective or wrong supplies, our inspection report in this regard shall be treated as FINAL and no correspondence on the subject would be entertained. The rejected goods should be lifted from our premises by supplier within 15 days after communication of our office. In case party is not in position to life out the goods within a stipulated period, than Dugdh Sangh is liable to auction to same goods.

## 10.0 **Samples :**

- 10.1** Samples of the articles should be produced before the competent authority within 7 days or as mutually agreed.
- 10.2** Demonstration of articles shall be arranged by the tenderer at the desired place on the cost of the tenderer wherever requested by Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior.
- 11.0 Warfage & Demurrage** :Warfage / demurrage etc. On the account of incorrect or delayed despatch of material or by documents shall be responsibility of suppliers / recovered from their bills / security.

- 11.1** Delivery of the material is to be made as per the purchase order.
- 11.2** The validity of tender rates shall be valid for one year from the date of approval. Period may be extended for one more year on mutual consent.

## 12.0 **Termination of Contract :**

- 12.1** If any act of commissions or commission of a unit brings the Gwalior Sahakari Dugdha Sangh Maryadit, GOLA KA MANDIR, Gwalior to dispute, the Gwalior Sahakari Dugdha Sangh Maryadit, GOLA KA MANDIR, Gwalior shall be competent to debar / black list the unit from further business with the Gwalior Sahakari Dugdha Sangh Maryadit, GOLA KA MANDIR, Gwalior and EMD also may be forfeited.

**13.0 Drawing & Specification :**

- 13.1 The rate should be quoted for the specification given in the Schedule-II. Where no specification / incomplete specifications are give in it, detailed specifications of the articles and its components should be mentioned by the tenderer giving reference to ISI & registration with the GDS and National Dairy Development Board if any alogwith printed literature etc. if available.
- 13.2 If the tenderer have any doubt, clarification shall be obtained before submission of tender.

**14.0 Consequences of Branch of Conditions :**

- 14.1 If the authorised person of the unit or a partner in the tendering firm commits breach of any of the conditions of the agreement it shall be lawful for the Chief Executive Officer, Gwalior Sahakari Dugdha Sangh Maryadit, GOLA KA MANDIR, Gwalior to cancel the purchase order / Contract which on the risk of tenderer.
- 14.2 If the tenderer fails to make supply within the stipulated time mentioned in purchase order then they may be blacklisted and EMD/SD also may be forfeited.

**15 Dispute Arbitration Final Authority :**

- 16.1 It should be clearly understood that in the event of tenderer failing to accept and execute the supply order within the stipulated time decision of the Chief Executive Officer, Gwalior Sahakari Dugdha Sangh Maryadit, GOLA KA MANDIR, Gwalior in this respect shall be final and binding on tenderer.
- 16.2 For the matters of dispute relating to the interpretation of the above clause the decision of the Chairman/Competent Authority Gwalior Sahakari Dugdha Sangh Maryadit, GOLA KA MANDIR, Gwalior shall be final and binding on all concerned under orbitation and council Act, 1996.

**Chief Executive Officer  
Gwalior Sahakari Dugdha Sangh Maryadit Gwalior**

Note : Tender reference must be indicates on top of the envelope

**GWALIOR SAHAKARI DUGDHA SANGH MARYADIT, GWALIOR**  
**GOLA KA MANDIR, GWALIOR (M.P.)**  
**SCHEDULE – II**

Supply, Installation, Testing, Commissioning of following  
Glassware Laboratory Equipments at GSDS

**1. ANALYTICAL WEIGHING BALANCE**

<b>Specification</b>	<b>Requirement</b>
Quantity	2(Two)
Suggested make	Mettler Toledo, Shimadzu, OHAUS, and (Phoenix)
Capacity	200 g/ 210 g/ 220 g
Least count	0.01mg
Accuracy	0.01 gm
Readability	0.01mg
Repeatability (Standard deviation)	±0.1 mg
Linearity	±0.2 mg or better
Response time	Less than 10 sec
Stabilization	Approx. 4.0 sec (0.1mg) / 15 sec (0.01mg)
Weighing pan	<ul style="list-style-type: none"> <li>• Circular/square/rectangular</li> <li>• Single Pan Top</li> <li>• Grid type</li> <li>• Eccentric load deviation 0.2/0.25 mg</li> </ul>
Minimum overall diameter of pan	8-10 cm
Tare facility	Yes
Calibration (internal)	<ul style="list-style-type: none"> <li>• Fully automatic, time/temperature controlled internal calibration</li> <li>• Should be capable to adjust itself</li> <li>• Must be provided with calibration certificate by an agency accredited by NABL or with traceable to International Standard.</li> </ul>
Weight Box traceable to international standards	<ul style="list-style-type: none"> <li>• 1 mg - 200 g, E2 (1 no)</li> <li>• Accuracy class acc. to OIML R111: E2</li> <li>• Nominal mass value: 1 mg to 200 g. Up to 500 mg as wire weights</li> <li>• Material: special steel, non-magnetizable, density 8.0 g/cm<sup>3</sup>, highly corrosion-resistant, knob weights highly polished and laser marked, in wooden case.</li> </ul>
Operational requirements	<ul style="list-style-type: none"> <li>• Digital display: Backlit display with soft touch screen operation along with accessibility to date and time etc.</li> <li>• To have inner adjustable draft shield</li> <li>• Glass draft shield with flexible configuration for left/right hand operation</li> <li>• Weighing with automatic and manual start and provision for data interface the manufacturer to provide the specification data needed to facilitate calculation of uncertainty</li> </ul>
Environmental factors	<ul style="list-style-type: none"> <li>• Safety for electromagnetic compatibility</li> </ul>



	<ul style="list-style-type: none"> <li>• Permanent shock absorption facility</li> <li>• Capacity of operating in temperature range between -5°C to 45°C and relative humidity of 80%</li> </ul>
Operating manuals, service manuals, other manuals	Should provide
Warnings	Any warning signs would be adequately displayed
Back-up rechargeable battery	Back-up battery for use of equipment during power shut down.
Balance leveling	Balance should indicate immediately as & when it is required to be leveled and should have the facility for horizontal plane calibration (mercury bubble adjustment), if not otherwise available.
Supplier/ manufacturer	Must be ISO certified for quality
Service contract clauses, including prices	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached
Operating manuals, service manuals, other manuals	Should provide: - User, technical and maintenance manuals in English language List of procedures required for local calibration and routine maintenance Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.
Warranty	2 years after satisfactory installation and working excluding consumable parts and accessories.
List of Spares and Accessories	List of all the spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached
Quality Requirement	Should be compliant with the requirements of FDA/CE/BIS Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard) Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety Should have necessary certification for safety and quality standards from national/ international bodies
IQ/PQ/OQ	On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument
Training	The supplier must carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 2. PH METER

Specifications	Requirement
Quantity	1( One)
Suggested Make	Mettler Toledo, Thermo Fisher, Hash, Metroohm, OHAUS, HAANA, HORIBA
Working pH Range	0 – 14 pH
pH resolution	± 0.01 pH
Mv	<ul style="list-style-type: none"> <li>Range 0 - ± 1999</li> <li>Accuracy± 1mV</li> <li>Resolution 1 mV</li> </ul>
Temperature Compensation	0 to 100 ° C
Temperature	Range -10 to +105°C Resolution 0.1°C Accuracy ±0.5°C ATC range 0 to 100°
Calibration Points	Should have 3 stage calibration with auto buffer recognition
Alarm	Calibration reminder interval (1 to 999hrs)
Temperature Compensation	Automatic
Display	<ul style="list-style-type: none"> <li>Backlit blue LCD with operation icon</li> <li>digital display with 0.001 pH unit readability</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>Extra Electrode</li> <li>Standard buffer solution (pH 4.0, 7.0, 9.0 x 500ml for each bottle)</li> <li>Standard electrode holder</li> <li>AC /DC Adaptor.</li> </ul>
Power	9V DC
Data storage& Output	Data storage facility and record maximum and minimum value.
Documents Certificates Performance and safety standards	<ul style="list-style-type: none"> <li>Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> <li>Complete with IQ, OQ, PQ, Documents, Operations and Maintenance manuals</li> </ul>
Supplier/ Manufacturer	Must be ISO certified for quality
Service contract clauses, including prices	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached.
Operating manuals, service manuals, other manuals	Should provide 2 sets (hardcopy and soft-copy) of: <ul style="list-style-type: none"> <li>User, technical and maintenance manuals along with machine diagrams;</li> <li>List of equipment and procedures required for local calibration and routine maintenance;</li> <li>Service and operation manuals to be provided</li> </ul>

	<ul style="list-style-type: none"> <li>• Certificate of calibration and inspection</li> </ul>
Operation and maintenance training	The supplier will have to carry out successful installation at our laboratory premises and provide on – site comprehensive training for scientific personnel operating the system and support services till customer satisfaction with the system.
Training	The supplier must carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

### 3. PH Meter (Pen type)

Specifications	Requirement
Quantity	1(One)
Suggested Make	Mettler Toledo, Thermo Fisher, Hash, Metroohm, OHAUS, HAANA, HORIBA
Parameter	Ph
Range	0 – 14
Resolution	0.1
Power	1.5V x 2 Lithium Batteries LR44
Accuracy	2% FS
Temperature	0 - 80 Deg C
Dimension	35 mm x 155 mm
Calibration Points	Should have 3 stage calibration with auto buffer recognition
Alarm	Calibration reminder interval (1 to 999hrs)
Temperature Compensation	Automatic
Display	<ul style="list-style-type: none"> <li>• Backlit blue LCD with operation icon</li> <li>• digital display with 0.001 pH unit readability</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>• Extra Electrode</li> <li>• Standard buffer solution (pH 4.0, 7.0, 9.0 x 500ml for each bottle)</li> <li>• Standard electrode holder</li> <li>• AC /DC Adaptor.</li> </ul>
Power	9V DC
Data storage& Output	Data storage facility and record maximum and minimum value.
Documents Certificates Performance and safety standards	<ul style="list-style-type: none"> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> <li>• Complete with IQ, OQ, PQ, Documents, Operations and Maintenance manuals</li> </ul>
Supplier/ Manufacturer	Must be ISO certified for quality
Service contract clauses, including prices	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and

	repairs in future after guarantee/warranty period should be attached.
Operating manuals, service manuals, other manuals	Should provide 2 sets (hardcopy and soft-copy) of: <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals to be provided</li> <li>• Certificate of calibration and inspection</li> </ul>
Operation and maintenance training	The supplier will have to carry out successful installation at our laboratory premises and provide on – site comprehensive training for scientific personnel operating the system and support services till customer satisfaction with the system.
Training	The supplier must carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

#### 4. Autoclave

Specifications	Requirement
Quantity	3 (Three)
Suggested make	Narang Scientific, Tempo, Equitron
Chamber	<ul style="list-style-type: none"> <li>• Steam collection bottles to remove most of the steam during operation</li> <li>• Ware inlet and outlet valve</li> <li>• Drain valve for cleaning or changing with fresh water</li> <li>• Constructed with appropriate stainless steel with superior corrosion resistance to water and steam</li> <li>• High temperature and pressure resistant silicon gasket</li> <li>• Built-in analog pressure gauge</li> <li>• Manual pressure release valve</li> </ul>
Chamber size/Capacity	Approx. 270 lit
Gauges	<ul style="list-style-type: none"> <li>• Should have a water level gauge</li> <li>• Analog gauges for measuring inner and outer steam pressure.</li> <li>• Should have an inner temperature indicator.</li> </ul>
Display	<ul style="list-style-type: none"> <li>• Fully Automatic PID Control <math>\pm 0.1</math> °C</li> <li>• LED display for temperature and remaining time</li> </ul>
Operating Temperature and accuracy	<ul style="list-style-type: none"> <li>• Maximum 123°C</li> </ul>

	<ul style="list-style-type: none"> <li>• Temperature Accuracy: <math>\pm 0.5^{\circ}\text{C}</math> at <math>150^{\circ}\text{C}</math></li> <li>• Must have Temperature calibration function</li> </ul>
Operating pressure and gauge	<ul style="list-style-type: none"> <li>• 15 -20 psi</li> <li>• ANALOG PRESSURE GAUGE ( 0 -400 psi pressure gauge) indicating actual pressure</li> </ul>
Timer	Automatic START/STOP timer
Safety warnings and alarms	<ul style="list-style-type: none"> <li>• A cycle cannot start if the door is open or not properly locked</li> <li>• The door cannot unlock until chamber pressure reaches room pressure</li> <li>• Over-Temperature Cut-Off with audio visual alarm</li> <li>• Low Temperature Warning: If the temp. stays below <math>121^{\circ}\text{C}</math> for more than 5 seconds</li> <li>• Low Heat Warning: If the temp. does not reach the sterilization temperature during the set periods</li> <li>• Over-Pressure Cut-Off with audio visual alarm</li> <li>• Over Current Cut-off with audio visual alarm.</li> <li>• Low Water Level heater cut-off and ALARMS</li> </ul>
Calibration certificates	Certificate from ISO17025 accredited lab for temperature, pressure gauges & timer.
Operation and maintenance training component	The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system and support services till customer satisfaction
Certificates Performance and safety standards	<p>Should be compliant with the requirements of FDA/CE/BIS</p> <ul style="list-style-type: none"> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>
Supplier/ Manufacturer	Must be ISO certified for quality
Service Support Contact details	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer
Comprehensive maintenance	Comprehensive Maintenance of the equipment supplied, installed, commissioned for 60 months after 2 year Warranty/Defects Liability Period. This will include start- up/commissioning routine servicing, regular maintenance, preventive maintenance of equipment and

	components and break down repairs as and when occurring, ensuring that system does not remain out of service for a period more than 24 hours in case of major breakdowns and 6-8 hour in the case of minor breakdowns due to any unforeseen break down. The institution will provide Water / Electricity power, etc. for maintenance work. The successful tenderer shall keep the essential spares at site during the Contract Period to avoid the delay in attending faults / maintenance
Accessories	<ul style="list-style-type: none"> <li>• Perforated corrosion free baskets made up of SS 304 (3-4 Nos.) that are stackable two high or even more levels,</li> <li>• Silicone gasket</li> </ul>
Recommendations or warnings	<ul style="list-style-type: none"> <li>• Any warning signs would be adequately displayed</li> </ul>
Service contract clauses, including prices	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached
Operating manuals, service manuals, other manuals	<p>Should provide 2 sets (hardcopy and soft-copy) of</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>
Training	The supplier must carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 5. INCUBATORS

Specifications	Requirement
Quantity	3(Three)
Suggested make	Thermolab Scientific Equipments Pvt Ltd, <b>HMG (INDIA), Coslab India, Newtronic Equipment Company, tempo instruments &amp; equipments pvt ltd</b>
Material of construction	<ul style="list-style-type: none"> <li>• Double walled construction with complete inner chamber made of Corrosion resistant stainless steel (AISI 430)</li> <li>• Outer chamber should be of steel sheet finished with powder coated point Insulation to maintain desired temperature</li> <li>• Inner glass door</li> <li>• Inner chamber should be fabricated with ribs for adjusting shelves to convenient height and shelves to be supplied</li> <li>• Shelves should be made of polished stainless-steel sheet as per chamber</li> </ul>
Capacity	Approximately 200 L
Temperature range	<ul style="list-style-type: none"> <li>• Temperature should be thermostatically controlled</li> <li>• Temperature should be thermostatically controlled with range 1) Ambient to 70° ±1° C and 2) 5 °C to 50°C ±1° C 3) 37 C±1° C</li> <li>• Over-Temperature cut-off with audio/ visual alarm</li> <li>• Low Temperature Warning alarm</li> </ul>
Unit	<ul style="list-style-type: none"> <li>• Air ventilators to be provided on both side</li> <li>• The equipment should be provided with microprocessor controlled digital display</li> <li>• Temperature homogeneity between top and bottom shelves should be maintained by forced circulation</li> </ul>
Calibration	Certificate from a ISO 17025 accredited lab for 3 different temperature points
Recommendations or warnings	Any warning signs would be adequately displayed
Supplier/ Manufacturer	Must be ISO certified for quality
Service Support Contact details	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/Adhoc) to be declared by the manufacturer
Warranty	Warranty for 2 years after satisfactory installation and working excluding consumable parts and accessories
Service contract clauses, including prices	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and

	repairs in future after guarantee/warranty period should be attached
Operating manuals, service manuals, other manuals	<p>Should provide 2 sets (hardcopy and soft-copy) of</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>
Training	The supplier must carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 6. WATER BATH

Specification	Requirement
Quantity	6(Six)
Approved Make	Kumar Sales, Tempo, Narang Scientific, Remi, etc.
Power supply	200-240V, 50 Hz
Material of construction	<ul style="list-style-type: none"> <li>• Rounded, seamless stainless-steel bath to preventing rust, chemical damage and contamination.</li> <li>• Powder coating like epoxy coating exterior for easy cleanup</li> <li>• Corrosive resistant stainless-steel Gabled drip free lid</li> </ul>
Unit	<ul style="list-style-type: none"> <li>• Microprocessor controlled digital display.</li> <li>• Instrument should have lift up drip free bath cover;</li> <li>• Carrier racks should be given for flasks and test tubes racks.</li> <li>• Convenient water bath drains.</li> <li>• Water bath surface coating should prevent contamination and formation of algae.</li> <li>• Easy cleaning</li> </ul>
Temperature	<ul style="list-style-type: none"> <li>• Temperature Range: +20°C to 99°C</li> <li>• Temperature Accuracy: <math>\pm 0.2^{\circ}\text{C}</math> at 37 .0°C</li> <li>• Temperature Uniformity: <math>\pm 0.5^{\circ}\text{C}</math> at 37 .0°C</li> <li>• Digital LED display for operating status of TEMP</li> <li>• Over-Temperature Cut-Off</li> </ul>



	<ul style="list-style-type: none"> <li>• Temperature calibration function</li> </ul>
Alarms	<ul style="list-style-type: none"> <li>• Audible warning safety signals should be there for high/low temperature warnings</li> <li>• Low liquid level</li> </ul>
Recommendations or Warnings	Any warnings would be adequately displayed
Power supply	200-240V, 50 Hz
Lid	Made of SS 304
Display	Digital display
Size	Dimensions of inner chamber: 400mm (L)*240 mm (W)*260 mm (H). Negative tolerance of 20 mm and Positive tolerance of 40 mm on all the dimensions would be acceptable.
Other	<ul style="list-style-type: none"> <li>• The equipment should be supplied with 2 No. Of SS test tube rack for holding 24 Test Tubes of size 12 X 75 mm - 1 No. &amp; 15 X 75 mm - 1 No.</li> <li>• At the time of installation, the performance of the equipment should be demonstrated as per the provided specifications or OEM catalogue, whichever is better.</li> </ul>
Operating manuals, service manuals, other manuals	<p>Should provide 2 sets (hardcopy and soft-copy) of</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>
Training	The supplier must carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 7. AIR FUMIGATOR

Specifications	Requirement
Quantity	2(Two)
Suggested make	Neptune Fairdeal Products Pvt. Ltd, Taurus International, Speedway Machines, Skan Inc., etc.
Capacity	5 L with easy cleaning facility
Material of construction	Body should be compact, durable, leak proof and made of stainless steel /heavy duty plastic

Particle size	<ul style="list-style-type: none"> <li>• It should produce aerosols with particle size of less than 5 microns</li> <li>• The blower head should be rust proof inert to Formaldehyde, KMnO<sub>4</sub>, H<sub>2</sub>O<sub>2</sub> and deliver aerosols uniformly.</li> </ul>
Unit	<ul style="list-style-type: none"> <li>• It should be compatible with all disinfectant solutions usual concentration.</li> <li>• It should be compatible with maximum pH range (both acid and alkali).</li> <li>• The equipment should be of good quality and conform to national/ international standards.</li> </ul>
Power supply	<ul style="list-style-type: none"> <li>• The machine should operate on 220 +/- 10 volts, 50 Hz, single phase, A.C</li> <li>• Provided with Cable should be at least 15 meters in length, ISI marked.</li> </ul>
Operation	<ul style="list-style-type: none"> <li>• The discharge rate should not be less than 1 L/25 minutes.</li> <li>• The tank capacity, discharge rate and timer on the machine should be so that the disinfectant should be able to disinfect 4000-5000 cubic feet in one cycle of 2 hours (max).</li> </ul>
Warranty	Warranty for 3 years after satisfactory working excluding consumable parts and accessories
Service contract clauses, including prices	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached
Operating manuals, service manuals, other manuals	<p>Should provide 2 sets (hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation</li> </ul>
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 8. HOT AIR OVEN

Specification	Requirements
Quantity	2(Two)
Suggested make	RNS Engineering, Advance Techo, Imperial Biotech
Size	Inner Volume 250 L
External Body	Mild Steel with powder coated/ Stainless Steel 304 Grade
Internal Chamber	Stainless Steel 304 Grade
Insulation	Mineral Wool/ Ceramic Wool
Door	<ul style="list-style-type: none"> <li>• Inner: Stainless Steel 304 Grade</li> <li>• Outer: Powder coated Mild Steel/ Stainless Steel 304 Grade</li> <li>• Self-closing magnetic lock having door sealing material suitable to high temp</li> </ul>
Adjustable Shelf	2– 3 Perforated Stainless-Steel shelves (Removable) 304 Grade
Shelf Rest Pitch	30 mm
Temperature Range	40 °C to 300 °C
Least Count	0.1°C
Temperature Accuracy	± 0.5°C or better
Temperature Uniformity	±2°C or better
Heating Element	Nichrome wire / Kanthal A1/SS tube/pipe heater
Time to attain Maximum Temperature	Approximately 90 minutes
Control Panel	Door mounted Digital LCD display for set temperature, attained temperature, set time, heating ON/OFF
Preset Timer	<ul style="list-style-type: none"> <li>• With buzzer</li> <li>• Digital display of time</li> <li>• Least count- 1 minute</li> </ul>
Circulation Method	Blower
Power Source	220-240 V, Single phase
Exhaust Port	30 mm ID on opposite side walls
Safety Device	<ul style="list-style-type: none"> <li>• Self-diagnosis function including overshoot/undershoot of temperature and over current protection</li> <li>• Audio Visual alarm for door opening after 2 minutes</li> </ul>
Optional Requirements	<ul style="list-style-type: none"> <li>• Dot Matrix Printer interface</li> <li>• Temperature chart recorder</li> <li>• PLC Controller</li> <li>• Extra shelves</li> <li>• Heating Thermostat</li> <li>• Manufacturer calibration certificate for three different temperature points from ISO 17025/NABL accredited laboratory</li> </ul>
Recommendations or Warnings	Any warning signs would be adequately displayed
UPS	Suitable on - line UPS (10 KVA) to support the instrument.
Operating manuals, service manuals, other manuals	Should provide <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals in English language</li> </ul>

	<ul style="list-style-type: none"> <li>List of equipment and procedures required for local calibration and routine maintenance</li> <li>Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.</li> </ul>
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 9. MICROPIPETTES

Specifications	Requirement		
Quantity	5(Five)		
Suggested make	<b>Rainin (Mettler Toledo), Eppendorf, Sartorius, Microlit, BEXCO, and Borosil.</b>		
General	Liquid handling equipment, Autoclavable with high precision, robust and reliable		
Material of construction	Corrosion resistant piston and sealing material to allow smooth and uniform pipetting		
Pipette Tip Cone	Pipette tip cone should be universal type suitable for any make of microtips. Pipette tip cone should be removable for easy cleaning, maintenance and autoclaving.		
Operation	Effortless single hand operation of volume setting, volume lock, pipetting and tip ejection, all operations with the same hand		
Display	Should have 4-position display with an integrated lens for better display. Display always visible and facing the user.		
Sterilization	Completely autoclavable at 121 °C, 20 min without disassembly		
Volume Range and Quantity specified	Range	Maximum permissible Systemic error (at 100% volume)	Maximum permissible Random error (at 100% volume)
	100-1000 µL	± 0.6 %	± 0.2%
Identification	Each pipette must have a individual identification number engraved and also have an individual labelling area.		
Accessories	1. Suitable Tips for all pipettes, Tip boxes 2. Rotatable holder with Large rubber feet protection from liquids spilled on bench top to hold and for storing up to 6 pipettes in upright position: 4 Nos		
Calibration Certificate	3-point calibration certificate with Uncertainty measurement from ISO 17025 (NABL) accredited lab		

## 10. Bulk density tester

Specifications	Requirement
Quantity	1(One)
Suggested make	<b>Anton Paar, Labindia Instruments, DBK Instruments, Optics Technology, Asian Scientific Instruments</b>
Infrared / Rapid Heat Oven	
Measuring cylinder volume	100 (100 ml)
Balance	Analytical balance with sensitivity ~ 0.1 mg (or better)
Tapping/Compaction apparatus (Stampf-volumeter / Tap-density tester)	mechanical, reproducible tapping
Drop / Tap height	$14 \pm 2$ mm or $3 \pm 0.2$ mm
Tapping frequency / speed	adjustable; typical range ~ 250–300 taps/min
Number of taps (or strokes) allowed	0 to 9999
Display / Controls / Data Handling	Digital counter / microcontroller-based control; often allows stroke count, drop height, speed, etc.
Cylinders supported	100 ml
Calculation of output parameters	Bulk density (g/mL), tapped density (g/mL), plus derived parameters like compressibility index and flowability indicators
Power supply / Operation mode	220–230 V, 50 Hz
Reproducibility / Precision / Accuracy	repeatability error to be $\leq 1\%$ .
Operating manuals, service manuals, other manuals	Should provide <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals in English language</li> <li>• List of equipment and procedures required for local calibration and routine maintenance</li> <li>• Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.</li> </ul>
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 11. DIGITAL THERMOMETER

Specifications	Requirement
Quantity	5(Five)
Suggested Make	<b>Omron, Dr Trust, Hicks, and Beurer</b>
Build quality, chemical resistance	PTFE tubing, glass electrodes, inert valves, robust body
Measurement range	-18°C to 150 °C
Accuracy / Precision	± 0.1 °C
Resolution / Display units	Digital display
Sensor type	electronic sensor (thermistor or similar)
Response time	Much faster
Beep/Alert	beep/alarm
Auto shut-off	
Memory (last reading)	Store the last measured temperature and display it when switched on next time
Display options	Celsius
Safety	mercury-free and often with a break-resistant outer design
Calibration Certificate	3-point calibration certificate with Uncertainty measurement from ISO 17025 (NABL) accredited lab
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 12. Sodium analyzer

Specifications	Requirement
Quantity	2(Two)
Suggested make	Mettler Toledo, Thermo Fisher Scientific, National Analytical Corporation, Plasmid Biotech
Measuring Range	Na+: 0 to 199.9 ppm K+:0 to 199.9 ppm Ca 2+ :0-99.9 ppm Li 2+: 0 to 9.99 ppm
Sensitivity	Na+= 0.1 ppm K+ = 0.1 ppm
Specificity	less than 0.5% interference when concentrations are equal to test sample concentrations
Gas Control	Adjustable with knobs
Ignition System	Auto Ignition System
Flame Failure	Auto detection
Gas Cut off	Automatic
Reproducibility	Less than 1% coefficient of variation for 20 consecutive samples using 10 ppm Na set as maximum standard
Linearity	Less than 1%
Display	LED, 12.5 mm (1/2")

Fuel supply	High-grade propane/butane mixture regulated at approximately 30 psi
Air supply	6 L/min at 12 psi; oil and moisture free
Recorder	output 0.05 to 5 V (switchable)
Operating manuals, service manuals, other manuals	Should provide <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals in English language</li> <li>• List of equipment and procedures required for local calibration and routine maintenance</li> <li>• Service and operation manuals to be provided</li> </ul> Advanced maintenance tasks documentation, if any.
Recommendations or Warnings	Any warning signs would be adequately displayed
Calibration Standard	Must supply traceable standard solutions for Na <sup>+</sup> , K <sup>+</sup> and Ca <sup>2+</sup>
Warranty	Warranted for 2 year, extendable up to 3 years, after satisfactory installation and working excluding consumable parts and accessories.
Stabiliser	Suitable Stabilizer as required for functioning of the equipment
Quality Requirement	Should be compliant with the requirements of FDA/CE/BIS <ul style="list-style-type: none"> <li>• Quality Certification: ISO certified.</li> <li>• Should provide calibration certificates from NABL accredited agency every year during warranty &amp; CMC period. Calibration cost will have to be borne by the supplier.</li> <li>• Equipment should be FDA / CE certified or equivalent standard of repute. It should be ISO 9001:2000 or other equivalent All calibration certificates must be from ISO 17025: 2017 certified laboratory</li> </ul>
List of Spares and Accessories	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

### 13. PETRIDISHES

Specifications	Requirement
Quantity	50(Fifty)
Suggested make	Borosil, <b>Thermo Scientific</b>
Dimensions	100 mm (diameter) x approx. 50 mm (height/depth)
Material	Borosilicate Glass (reusable) or High-quality Polystyrene/Polypropylene (disposable/autoclavable plastic)
Transparency	Optically clear for easy observation

Lid Design	Loosely fitting lid to allow necessary gas exchange while minimizing contamination	
Base	Flat and stable for uniform media distribution and microscope observation	
Wall Thickness	4 millimeter	
Category of Petri Dish	Petri Dishes (Glass) Conforming to Indian Standard IS 2626	
Autoclavability	The Petriplates should be Autoclavable	
Limit of Alkalinity	When graded according to the method prescribed in IS : 2303-1963, the petridishes shall conform to Type 1 of the glass.	
Calibration Certificate	3-point calibration certificate with Uncertainty measurement from ISO 17025 (NABL) accredited lab	
Parameters	Top dish	Bottom Dish
Internal Diameter	130±1 mm	100±1 mm
External Height	15±1 mm	17±1 mm
Wall Thickness	1.5 mm	1.5 mm

#### 14. PIPETTE

Specifications	Requirement
Quantity	20(Twenty)
Suggested make	Thermo Fisher Scientific, BrandTech, Borosil
Accuracy & Precision	Delivered volume matches set volume (accuracy); consistency of repeated volumes (precision). Class A
Volume Range	10 ml
Material	The pipettes shall be made from clear, neutral, heat-resistant glass tubing
Ergonomics	Lightweight, single-handed operation, low force, intuitive buttons, comfortable grip.
Calibration Certificate	3-point calibration certificate with Uncertainty measurement from ISO 17025 (NABL) accredited lab
Autoclavability	Lower part or full pipette should be autoclavable for sterilization.
Distance from zero line to lowest graduation line	180 to 220 mm
Distance from highest to lowest figured graduation lines for each( mm ) other pipette	160 to 220 mm
Distance from highest graduation line 1 to top of pipette	100 mm
External diameter of suction tube	6.8 to 8.3 mm
Length of tube of uniform bore below lowest graduation line	10 mm
Overall length	360
Length of tapered portion forming jet	25 mm



External diameter of jet at top of bevel	3
Wall thickness	1mm
Graduation lines shall be clean permanent and uniform lines of thickness not exceeding 3 mm.	

## 15. BURETTE

Specifications	Requirement
Quantity	8(Eight)
Suggested make	Borosil, Pyrex
Accuracy Class	Class A
Material	Borosilicate glass 3.3, glass of chemical resistance and thermal properties at least to HGB3 in accordance with ISO 719
Capacity	50 mL
Graduations	Fine, high-contrast permanent markings
Graduation Interval	0.1 mL for a 50 mL burette.
Tolerance (Error Limit)	$\pm 0.05$ mL for a 50 mL Class A model.
Stopcock	PTFE (Teflon) key for smooth, leak-proof operation without the need for lubrication,
Subdivision	0,10 ml
Scale length	500 mm to 600 mm
Overall length	820 mm (max)
Distance of zero line from top of burette	Min 50mm
Distance of lowest graduation line from top of stopcock	Min 50mm
Length of tube of uniform bore below lowest graduation line	Min 20 mm
Distance of end of jet from underside of stopcock	Min 50mm
Delivery time	60 to 100 s
Calibration Certificate	3-point calibration certificate with Uncertainty measurement from ISO 17025 (NABL) accredited lab

## 16. Bursting strength tester

Specifications	Requirement
Quantity	1(One)
Suggested make	Presto Group, Testronix, Nova Engineers, Perfect Group India, and EIE Instruments
Capacity	0-40 or 0-50 kg/cm <sup>2</sup> (typical for paper/packaging).
Accuracy	$\pm 1\%$ or better (e.g., $\pm 0.5\%$ ) of full scale.
Least Count	0.1 kg/cm <sup>2</sup> (for digital models).
Fluid Displacement Rate	95 cc/minute (standard).
Test Fluid	approx. 98%
Clamping	Pneumatic or Manual with ball spring.
Upper Clamp Opening	30.5 mm or 35.5 mm diameter.

Lower Clamp Opening	38.1 mm diameter
Display	Digital LCD with Peak Hold Function.
Power	220V, Single Phase, 50 Hz.
Pressure Range	Up to 50 kg/cm <sup>2</sup> or higher, depending on material.
Time to Burst	(20 ± 5) seconds for the pressure increase
Standards	Aligns with IS 1966 (Part 2), IS 15844, ISO 13938-2, ASTM D3786, TAPPI T810
Test Area	Common sizes include 50 cm <sup>2</sup> (79.8 mm diameter), 100 cm <sup>2</sup> , 10 cm <sup>2</sup> , 7.3 cm <sup>2</sup> .
Operating manuals, service manuals, other manuals	Should provide <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals in English language</li> <li>• List of equipment and procedures required for local calibration and routine maintenance</li> <li>• Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.</li> </ul>
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

### 17. Digital Micrometer

Specifications	Requirement
Quantity	1(One)
Suggested make	<b>Mitutoyo, Starrett, Sylvac</b>
Measurement Range	0-25 mm
Resolution (Least Count)	0.001 mm
Accuracy	±0.002 mm
Repeatability	The ability to produce consistent results with repeated measurements
Measuring Force	5-10 N.
Spindle and Anvil	The screw thread on the spindle shall have a pitch of 0.5 or 1 mm
Deviations and Tolerances	shall not exceed 3 pm
Operating manuals, service manuals, other manuals	Should provide <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals in English language</li> <li>• List of equipment and procedures required for local calibration and routine maintenance</li> <li>• Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.</li> </ul>
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on

	– site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction
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### 18. Antibiotic, Aflatoxin, Pesticide residue testing Equipment & kit

Specifications	Requirement
Quantity	2(Two)
Suggested make	Thermo Fisher Scientific, PerkinElmer, Neogen Corporation, Bioeasy
storage	2 to 8°C
Shelf life	12 month
Limit of Detection	0.1µg/L ( Aflatoxin), 0.03 µg/ml( Antibiotic), 0.005 µg/ml ( Pesticides)
Operating manuals, service manuals, other manuals	Should provide <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals in English language</li> <li>• List of equipment and procedures required for local calibration and routine maintenance</li> <li>• Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.</li> </ul>
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction
Cost effective and affordable solution	
Minimal False Positive/Negative Result	
Fulfil the regulatory compliance of requirements set by FSSAI	

### 19. REFRIGERATOR

Specification	Requirements
Quantity	2(Two)
Suggested Make	Haier, LG, SAMSUNG, SONY
Material	Stainless steel
Capacity	Approx. 500 L and above
Adjustable Shelves	Tempered glass shelves 05 No.
Doors	Two Stainless steel doors side by side Refrigerator and freezer must be side by side
Temperature Range	Independent Digital display and temperature controls for refrigerator and freezer: Refrigerator +2 to +8°C Freezer -15 to -20°C

Audio alarm	Alarm if door is ajar for long
Inner body	Rust Free Material
Refrigerant	CFC / HCFC Free
Frost Free	In built Voltage Stabilizer
Door Lock & Interior light	High/Low cut with timer delay
Temperature Control	Same Temperature: Top to Bottom Microprocessor based Temperature Controller with Digital Display
Compliance statement	The quote should also include a compliance statement vis-à-vis specifications in a “tabular form” clearly stating the compliance and giving justification, if any supported by technical literature. This statement must be signed, with the company seal, for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification
Warranty	2 years after successful installation and 10 years for the compressor
Operating manuals, service manuals, other manuals	Should provide 2 sets (hardcopy and soft-copy) of:- <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation</li> </ul>
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

## 20. Deep freezer

Specification	Requirements
Quantity	1(One)
Suggested Make	Haier, LG, SAMSUNG, SONY
Type	Vertical
No of Door	Single
Position of Door	Front
Type of Insulation	PUF
Frost Free	Yes
Type of Cooling	Direct

Castor	Heavy Duty Lockable
Capacity	250 L or higher
Shelves/ Drawers	Sealed 5-7 pullout drawers / shelves of different sizes that can be adjusted for storage flexibility
Material Of Chamber Interior	Stainless steel, preferably 304 grades
Material of Chamber Exterior	Stainless steel, preferably 304 grades
Door Material	Stainless steel, preferably 304 grades
Finish	Powder coated exterior finish
Temperature Range	- 10 °C to - 30 °C
Temperature Uniformity in Degree Celsius	±3 °C or less
Temperature Stability of System in Degree Celsius	±3 °C
Lockable Outer and Inner Lids	Yes
Control	Fully programmable microprocessor controlled with membrane keypad and eye level control panel
Display	Easy to read, LED control panel and alarm status with integrated diagnostics
Acoustic Safety alarms	Should be equipped with for High/low temperature, door ajar and malfunction alarms, sudden power failure, system failure and battery low
Temperature History	Data logger for temperature and temperature history which can be downloaded via a USB port
Battery Back Up	Yes
Refrigerants	CFC-Free, HCFC-Free non inflammable refrigerants
CO <sub>2</sub> cylinder should be supplied with freezer for backup	Yes
Operating manuals, service manuals, other manuals	<p>Should provide</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals in English language</li> <li>• List of equipment and procedures required for local calibration and routine maintenance</li> <li>• Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.</li> </ul>
Warranty of complete unit	3 Year from the date of satisfactory functioning
Warranty of stabilizer in years	3 Year
Warranty of compressor in years	10 years or more
Voltage Stabiliser	Stabilizer as required for functioning of the equipment
Quality Requirement	Should be compliant with the requirements of FDA/CE/BIS

	<ul style="list-style-type: none"> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> <li>• Should have necessary certification for safety and quality standards from national/ international bodies</li> </ul>
Operation and training component	The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction

**Note :**

1. *The sample shall have to be submitted whenever demanded.*
2. *Material shall be purchased as per requirement*

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ANNEXURE –I

**GWALIOR SAHAKARI DUGDHA SANGH MARYADIT**  
**GOLA KA MANDIR, GWALIOR**  
***Envelop-A – EMD***

**UPLOAD ONLINE (MANDATORY) IN ENVELOPE-A**

Acknowledgement No. of Online Tender Fee And EMD	
DATE	
AMOUNT	
Bank Name	
Name of Tenderer	

## ANNEXURE –II

### GWALIOR SAHAKARI DUGDHA SANGH MARYADIT

#### GOLA KA MANDIR, GWALIOR

#### *Envelop-B - Technical Bid*

#### **(UPLOAD MANDATORY IN TECHNICAL DOCUMENT) ENVELOPE- B**

1	Name of Unit	
2	Address of the Unit-Office	
	Factory	
3	Name of Proprietor / Partner 1	
	2	
	3	
4	Name with designation of other person authorised to sign the documents on behalf of the unit if any.	
5	Telephone Nos. Office	
6	Mobile Nos. / Fax	
7	Email Address:	
8	Particulars of the Registration Certificate issued by the competent authority.	
9	Factory License/ Shop Act Registration/MSME Registration No. & date <b>(Upload online in Technical Document)</b>	
10	GST NO. <b>(Upload online in Technical Document)</b>	
11	PAN <b>(Upload online in Technical Document)</b>	
12	Whether the unit or its sister concerned unit or any unit of the proprietorship or partnership, if any has been penalised by any Central or State Government / Organisation of Other Dugdh Sanghs any time ?	
13	If the reply is "Yes" when & Why ? Give reasons in details :	
14	Enclosed Last Two Year Supply Order	



### ANNEXURE -III

#### CONTRACT FORM

(On the Non-judicial Stamp paper as per the **Stamp Act of Local State Govt.**

THIS AGREEMENT is made at \_\_\_\_\_ on the \_\_\_\_\_ day of \_\_, 2025 between *[name and address of GSDS]*, (hereinafter called Principal”) of the one part and \_\_\_\_\_ (hereinafter called “the Contractor”) of the other part:

WHEREAS Gwalior Sahakari Dugdh Sangh Maryadit Gwalior. being desirous of getting the tendered work done and accordingly the Supplier/Contractor has accepted a bid \_\_\_\_\_ in response to the GSDS Bidding Document Reference \_\_\_\_\_ with regards to undertaking of the \_\_\_\_\_ (description of the WO/PO), for a sum of Rs. \_\_\_\_\_ (Rupees ..... ) (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSTH AS FOLLOWS:

1. In this agreement words and expressions shall have the same meaning as in the Terms and Conditions and in Schedule I & Schedule II Annexure-I ,II in the above referred Bidding Document.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz :
  - a. the offer and price schedule submitted by the Contractor:
  - b. the schedule of requirement/list of items and the technical specifications in Section I, III and Annexure-I ,II in the above referred Bidding Document:
  - c. The terms and conditions in the above referred Bidding Document:
  - d. The Principal’s PO/Work Order No. \_\_\_\_\_ dated \_\_\_\_\_ (File ref.: )
3. In consideration of the payments to be made by the Principal to the Contractor, the Contractor hereby covenants with the Principal to undertake the work (as per the tender) and to remedy defects therein in conformity in all respects with the provisions of the Work Order given by the Principal and Bidding Document.
4. The Union hereby covenants to pay the Contractor, in consideration of undertaking the work / Mechanical and Electrical work and the remedying of defects therein, the contract Price or such other sum as may become payable under the provisions of the Work Order at the times and in the manner prescribed in the Work Order and Bidding Document.
5. Arbitration: In the event of any dispute in the interpretation of the terms of this agreement/ purchase order or difference of opinion between the parties on any point in the purchase order arising out of or in connection with the agreement/ accepted purchase order or with regard to performance of any obligation hereunder by either party, the parties hereto shall use their best efforts to settle such disputes or difference of opinion amicably by mutual negotiations. In case no agreement is reached, either party may forthwith give to the other, a notice in writing of the existence of such question, dispute

or difference of opinion and the same shall be referred to the adjudication of sole arbitrator to the appointed by “GSDS” whose decision in the matter shall be final and binding on the parties. The arbitration proceedings shall be governed under the provisions of the Indian Arbitration & Conciliation Act, 1996 and the rules thereunder or any statutory modification thereof for the time being in force. In this agreement/purchase order, venue of such arbitration shall be Gwalior (M.P.).

6. Jurisdiction: Courts at Gwalior, MP, alone shall have jurisdiction regarding any matter arising out of this agreement.

IN WITNESS whereof the parties hereto have caused this agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by  
the said

Signed, Sealed and Delivered by the  
said

ChiefExecutive Officer  
(GSDS)

Authorized Signatory  
(For the Contractor)

In the presence of:  
Witness

In the presence of:  
Witness

1) Signature

1) Signature

Name Address

Name Address

2) Signature

2) Signature

Name  
Address

Name Address

**ANNEXURE -IV***(Form of Bank Guarantee for Performance Security)*

*(On the Non-judicial Stamp paper as per the Stamp Act of Local State Govt.)*

Performance Guarantee No .....*[insert guarantee reference number]*

Date .....*[insert date of issue of the guarantee]*

To: *[insert the name of the Purchaser/GSDS]*

WHEREAS \_\_\_\_\_*[name and address of Supplier]*  
(hereinafter called "the Applicant") has undertaken, in pursuance of Contract No. \_\_\_\_\_  
dated \_\_\_\_\_ to execute  
\_\_\_\_\_ *[name of Contract and brief description of Goods and related Services]* (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Applicant shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Applicant such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Applicant, up to a total of

\_\_\_\_\_ *[amount of guarantee 11]* \_\_\_\_\_  
*[in words]*, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_ *[amount of guarantee]* as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Applicant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Goods and related Services to be supplied thereunder or of any of the Contract documents which may be made between you and the Applicant shall in any way release us from

any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until ..... (i.e.) 90 days following the Completion date of the Contract including any warranty obligations, and any demand for payment under it must be received by us at this office on or before that date.

Signature and seal of the guarantor \_\_\_\_\_  
Name of Bank \_\_\_\_\_  
Address \_\_\_\_\_  
Date \_\_\_\_\_