



**GOVERNMENT OF ANDHRA PRADESH**

\* \* \* \* \*

**Web Site : <https://tender.apemprocurement.gov.in>**

**TENDER DOCUMENT**

**FOR**

**Procurement and supply of Food Laboratory Equipment to Visakhapatnam in Andhra Pradesh (Comprehensive Mode) (e- Procurement)**

**Tender Notice No. : 4.1A/APMSIDC/2024-25 Dt: 17.09.2024.**

**Name of the Agency :**  
.....  
**and Address**  
.....  
.....

-----  
**Implementing Agency :**  
**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE  
DEVELOPMENT CORPORATION  
(Formerly APMHIDC)  
(AN ENTERPRISE OF GOVT. OF A.P.)  
2<sup>nd</sup> Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri,  
Guntur District- 522503.  
e-mail: - [aphmhdc@gmail.com](mailto:aphmhdc@gmail.com) & [ed.apmsidc16@gmail.com](mailto:ed.apmsidc16@gmail.com)**

**Mobile No: 8978644900**

## INDEX

S. No.	DESCRIPTION	
	<b>Introduction</b>	
1	SECTION - I	INVITATION FOR BIDS (IFB)
2	SECTION - II	INSTRUCTIONS TO BIDDERS
3	SECTION - III	GENERAL CONDITIONS OF CONTRACT
4	SECTION - IV	SPECIAL CONDITIONS OF CONTRACT
5	SECTION - V	SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS
6	SECTION - VI	PRE - QUALIFICATION CRITERIA
7	SECTION - VII (A)	BID FORM
8	SECTION - VII (B)	Model PRICE Schedules (available on e-procurement Platform)
9	SECTION - VIII	BID SECURITY FORM
10	SECTION - IX	CONTRACT FORM
11	SECTION - X	PERFORMANCE SECURITY FORM
12	SECTION - XI	FORMAT B1: PROFORMA FOR PERFORMANCE (for a period of last three years) FORMAT B2 : CA (STATUTORY AUDITOR) CERTIFICATE FORMAT B3: FINANCIAL CAPACITY OF THE BIDDER
13	SECTION - XII	PROFORMA For Manufacturer's Authorization Form ( <i>to be submitted by manufacturers</i> ) PROFORMA For Manufacturer's Authorization Form <i>to be submitted by authorized dealers/representatives/importers</i>
14	SECTION - XIII	DECLARATION FORM
15	SECTION - XIV	Check List : Documents to be Uploaded as part of the Bid and Notes to Bidders I. Documents with the Technical Bid
16	Annexure - I	Proforma: Installation Certificate
17	Annexure - II	Proforma : Satisfactory Performance Certificate after 3 months from Installation Date
18	Annexure - III	WARRANTY CERTIFICATE
19	Annexure - IV	PREVENTIVE MAINTENANCE CHECKLIST
20	Annexure - V	CALIBRATION CHECK LIST
21	Annexure - VI	List of Spare Parts
22	Annexure - VII	GENERAL INFORMATION ABOUT THE TENDERER
23	Annexure - VIII	SERVICE CENTRE DETAILS

## INTRODUCTION

- 1.1. The Andhra Pradesh Medical Services & Infrastructure Development Corporation – APMSIDC (formerly APMHIDC) (Tender Inviting Authority) is a fully owned Government of Andhra Pradesh for providing services to the various health care institutions under the Department of Family Welfare and Health. One of the key objectives of the APMSIDC is to act as the central procurement agency for all essential drugs and equipments for all health care institutions (hereinafter referred to as user institutions) under the department. The corporation has also been entrusted with the setting up and running of all kinds of modern Medical and Paramedical or medical based ancillary facilities such as hospitals, pathological labs, diagnostic centres, x-ray/scanning facilities.
- 1.2. Over the last decades, several equipments have been procured and installed in the various health care institutions under the government under different schemes. One of the major problems encountered is the maintenance of the equipments. Site preparation, timely replacement of consumables, calibration of sensitive equipments, up gradation of technology, training to the doctors and paramedical staff- all poses problems. The corporation has been formed by the government to fill in these grey areas and to act as total service providers to the all the government health care institutions. Of course, this mammoth task could be achieved only with the active involvement and support of the manufacturers/dealers of the equipments.
- 1.3. In this tender, the lowest price is the sole criteria for selecting the equipment/supplier. The two-bid system, which is followed, has been designed to eliminate those equipments which do not match the technical specifications, or not having the proven technology and to eliminate firms that do not have the financial or technical capability to supply, install and maintain the equipments. i.e., to provide after sales support for a period of minimum 5 years from the date of installation and to ensure 98 % uptime in performance/operation of the equipment.
- 1.4. The payment to the successful tenders will be settled after obtaining a 'three month performance certificate' from the head of the user institution - three month period is a period of trail run- during which the performance of the equipments will be keenly observed. At the same time, it may be noted that the Corporation is not the agency finalizing the requirements of equipments and their technical specifications. These parameters are finalized by the user institutions and funding agencies and forwarded to the corporation for procurement. On our side, we ensure that the technical specifications are not biased towards a particular equipment/firm, through consultations during the

pre-tender meetings with the prospective tenderers. Amendments in the terms and conditions of the tender documents may be resorted to on the basis of expert advice to see that more than one firm qualifies for the final round. Technology specific specifications/conditions and entertaining direct purchase will be undertaken, if and only if, the user agency certifies the equipment required is of proprietary nature. Since the equipments procured are dealing with precious human life in government hospitals, depended by the poor and downtrodden of the society, it is our endeavor to ensure that most modern, but proven and durable equipments are procured and supplied. The tender documents are prepared after assessing the market to meet such objectives.

- 1.5. Every paisa spend by the corporation is public money and hence accountable. Therefore, after sales service and up-time guarantee on the performance of the equipment purchased by the Corporation have to be given paramount importance. Corporation will be dealing with defaulters in these fronts with a firm hand, which may lead to black listing and recovery of damages. We request our valuable suppliers to avoid such unpleasant situations.
- 1.6. It is also essential while dealing with public money that utmost transparency has to be maintained in the procurements of the corporation. All decisions will be published from time to time on our website [www.msfdc.ap.nic.in](http://www.msfdc.ap.nic.in). The corporation will not wait for the mandatory 30 days period to provide any information under Right to Information Act and will provide the information within the minimum possible time. The Corporation will uphold the fundamental "right to be heard" enshrined under the Constitution of India and will take harsh decisions only after providing opportunity for hearing/submission of facts. Tenderers could prefer appeal to the government against all decisions of the corporation.

## SECTION - I: INVITATION FOR BIDS (IFB)

### GOVERNMENT OF ANDHRA PRADESH

#### ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

\*\*\*\*

Tender Notice No. **4.1A/APMSIDC/2024-25** Dt: 17.09.2024.

1. Bids are invited on the e-procurement platform for certain medical equipment as described in the Section V- Schedule of Requirements from the eligible manufacturers/Authorized Distributors. The details of bidding conditions and other terms can be downloaded from the electronic procurement platform of Government of Andhra Pradesh i.e. <https://tender.apecurement.gov.in>.
2. Bidders would be required to register on the e-Procurement market place "www.eprocurement.gov.in" and submit their bids online. On registration with the e-Procurement market place they will be provided with a user id and password by the system through which they can submit their bids online.
3. The bidders need to scan and upload the required documents as per the Check list given in **Annexure XIV**. Such uploaded documents pertaining to technical bid need to be attached to the tender while submitting the bids on line. The attested copies of all these uploaded documents of technical bid, signed undertaking of tenderer should be submitted off line to **Managing Director, APMSIDC, Mangalagiri, Guntur on or before the next day of the last date of submission of bids**. The Corporation will consider only the bids submitted through on-line over the copies of the paper based bids.
4. a) The participating bidder/s will have to pay tender processing fee (non-refundable) **for the amounts specified in the Schedule of Requirements (Section – V)**, in the form of online only.  
b) **Further the bidder/s shall furnish, as part of it bid, the Bid security for the amounts specified in the Schedule of Requirements (Section –V) to be paid** in the form of crossed Demand Draft drawn in favour of Managing Director, APMSIDC, Guntur along with bids. The bidders should note that the local MSME units are exempted from payment of E.M.D, subject to the production of necessary documentation to that extent by them.  
c) Further all the participating bidders have to electronically pay a non-refundable transaction fee to M/s. APTS, the service provider through "Payment Gateway Service on E-Procurement platform", as per the Government Orders placed on the e-procurement website.  
d) APMSIDC will not accept the tenders from blacklisted companies or undependable Suppliers whose past performance with APMSIDC was found poor due to delayed and/or erratic supplies and those with frequent product failures,

**4.1A/APMSIDC/2024-25, Dt: 17.09.2024**

**5**

and also against whom there have been adverse reports of **Sub-Standard Quality / Poor Service of Equipment** supplies, as defined in the other parts of the Bidding document.

e) **“Complaint/s:** Any complaints/representation regarding tender will be entertained only after depositing of Rs. 25,000/- in form of Demand Draft in the name of Managing director, APMSIDC, Mangalagiri, Guntur. Subsequently necessary action will be taken by the Managing Director and decision of Managing Director will be binding upon the complainant. If the complaint turns out to be false or invalid the amount will be forfeited. The amount shall be refunded if after scrutiny the complaint is found to be true. No further complaint/representation from the same complainant for the same tender will be entertained. If the complaint or allegation made is found to be false or baseless and without any valid point, the tender inviting authority in its discretion, can prevent / blacklist / declare ineligible, such bidder from participating in its procurement process, either indefinitely or for a stated period of time.”

5. **Period of Delivery:** 60 Days from the date of receipt of the Notification of Award (Purchase Order) of Contract. The delivery terms include the total time given for supply, installation, testing and training of staff.

*Time Limits prescribed*

Sl. No	Activity	Time Limit
5.1.1.	Installation & Delivery period	60 days from date of issuance of Supply Order
5.1.2.	Comprehensive warranty period	as specified at section V schedule of requirements against each equipment.
5.1.3.	Frequency of visits to all User Institution concerned during Warranty	One visit every three months (4 visits in a year) for periodic/preventive maintenance and any time for attending repairs/break down calls.
5.1.4	Submission of Performance Security and entering into contract	15 days from the date of issuance of Supply Order
5.1.5	Payment Installments of Price of equipments and ratio	Three Installments and in the ratio 60:30:10
5.1.6	Time for making payments by Tender Inviting Authority	Within 60 days from the date of submission of proper documents
5.1.7.	Maximum time to attend any Repair call	Within 48 hours
5.1.8	Uptime in a year	95%

**6. Bidders eligibility and qualifications: Defined at Clause 13 of Instructions to Bidders (Section II) and Qualification Criteria (Section-VI)**

**7. Details of Tender Process:**

1.	Downloading of documents	from 28-10-2024 to 11-11-2024 up to 02.55 PM
2.	Queries up to	01-11-2024 @ 11.00 AM
3.	Due date for Receipt of tenders	11-11-2024 up to 3.00 P.M
4.	Time and date of opening of technical Bids	11-11-2024 @ 3.01 PM
5.	Time and date of opening of financial bids	Will be intimated later

**Note:** The dates stipulated above are firm and under no circumstances they will be relaxed unless otherwise extended by an official notification or happen to be Public Holidays. For the assistance in the online submission issues, the bidder may contact the help desk of M/s Vupadhi Techno Services Pvt. Ltd. (e-procurement) at their e-mail address: [eprocsupport@vupadhi.com](mailto:eprocsupport@vupadhi.com) or on the mobile nos. **8645-246370 / 71 / 72 / 73 / 74**

**8. Procedure for Bid Submission**

- a. The Tenderers/Bidders who are desirous of participating in e-procurement shall submit their Technical bids, price bids etc., in the Standard formats prescribed in the Tender documents, displayed at e-procurement market place.
- b. The bidders shall sign on all the statements, documents, certificates, uploaded by them, owning responsibility for their correctness / authenticity.
- c. The hard copies of all the uploaded Technical / Price bid, to be attested by a Gazetted Officer or properly notarized.
- d. The Corporation shall not hold any risk on account of postal delay. Similarly, if any of the certificates, documents, etc., furnished by the tenderer are found to be false / fabricated / bogus, the bidder will be disqualified, **blacklisted for a period of 3 years**, action will be initiated as deemed fit and the EMD will be forfeited.
- e. The Corporation will not hold any risk and responsibility for the loss in transit during uploading of the scanned document, for the invisibility of the scanned document online, and any other problem(s) encountered by the Tenderers while submitting his bids online.

## **9. Important Instructions to the Bidders:**

- 9.1 Quality of Supplied Equipment throughout its life cycle period, timely supplies and prompt maintenance support during the warranty and CMC period without default are being given paramount importance by the Corporation. The Corporation will be dealing with the defaulters with firm hand, which may lead to blacklisting for a specified period in addition to levying penalties.
- 9.2 In case of complaints on the quality and poor maintenance support of the products supplied, bills will be withheld till receipt of Satisfactory reports. Further:
- If one item of any Supplier is found of 'Sub-Standard Quality' during the Contract period, then that particular item will be blacklisted for a period of (3) three years immediately succeeding the Contract year
  - If two items of any Supplier are found of 'Sub-standard Quality' during the Contract period, then Supplier will be blacklisted for a period of (3) three years immediately succeeding the Contract year
- 9.3 The Corporation will blacklist the Supplier, who is declared as 'Undependable for two (2) items or in two (2) instances during the Contract period, for a period of one year immediately succeeding the Contract year apart from taking other penal actions under the Contract.
- 9.4 The decision of the Managing Director, APMSIDC, or any officer authorized by him in respect of the quality of the supplied Equipment and other goods etc., shall be final and binding.
- 9.5 No claims shall be allowed against the APMSIDC in respect of interest on Earnest Money Deposit or on Security Deposit or late payments.
- 9.6 Savings Clause: No suit, prosecution or any legal proceedings shall lie against APMSIDC or any person for anything, which is done in good faith or intended to be done in pursuance of bid.



**SECTION - II : INSTRUCTIONS TO BIDDERS**

**TABLE OF CLAUSES**

<b>Clause Number</b>	<b>Topic</b>	<b>Clause Number</b>	<b>Topic</b>
	<b>A. Introduction</b>		<b>D. Submission of Bids</b>
1	Source of funds	18	Sealing & Marking of Bids
2	Eligible Bidders	19.	Dead line for submission of Bids
3	Eligible Goods & Services	20	Late Bids
4	Cost of Bidding	21	Modification & Withdrawal of Bids
	<b>B. Bidding Documents</b>		<b>E. Bid Opening &amp; Evaluation</b>
5.	Content of Bidding Document	22.	Opening of Bids
6.	Clarification of Bidding Documents	23	Clarification of Bids.
7	Amendment of Bidding Documents	24	Preliminary Examination.
	<b>C. Preparation of Bids</b>	25.	Conversion to single currency.
8	Language of Bid	26.	Evaluation & comparison of Bids
9	Documents comprising the Bid	27.	Margin of Preference
10	Bid form	28	Contacting the purchaser.
11	Bid prices		
12	Bid currencies		<b>F. Award of contract</b>
13	Documents establishing, Bidders Eligibility & qualifications	29	Post qualification
14	Documents establishing goods, eligibility & conformity to bid documents.	30	Award criteria
15	Bid security	31	Purchasers right to vary quantities at time to award
16	Period of validity of Bids	32	Purchasers right to accept any bid or reject any or all bids.
17	Format & signing of Bid Bids.	33.	Notification of award
		34	Signing of contract
		35.	Performance security.
		36.	Fraud and Corruption

## **A. Introduction**

### **1. Source of funds:**

The funds are made available by the State Government of Andhra Pradesh, to the Managing Director, APMSIDC Scheme wise towards the procurement processed under this tender notification.

### **2. Eligible Bidder**

2.1 This invitation for Bids is open to all Manufacturers or their authorized distributors, who fulfill the eligibility criteria mentioned in the Clause 13 and who meet qualification criteria mentioned in the Section VI.

### **3 Eligible Goods and services**

3.1 All goods and ancillary services to be supplied under the contract shall have their origin in eligible source country. The goods shall meet the requirements as specified in the Technical Specifications. And meet the eligibility criteria as given at Clause 14 of ITB.

3.2. For purpose of this clause, "origin" means the place where the goods are mined, grown, or produced or from which the ancillary services are supplied. Goods are produced, through manufacturing processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

3.3 The origin of goods and services is distinct from the nationality of the Bidder.

### **4. Cost of bidding.**

4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Managing Director, APMSIDC, Mangalagiri, Guntur here in after referred to as " the purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

## **B. The Bidding Documents**

### **5. Content of Bidding Documents**

5.1 In addition to the Invitation for Bids, the bidding documents include:

- (a) Instruction to Bidders;
- (b) General conditions of contract;
- (c) Special conditions of contract;
- (d) Schedule of requirements;
- (e) Technical specifications;
- (f) Bid form and price schedules;
- (g) Bid security form;
- (h) Performance security form.
- (i) Firm Registration/manufacturer license
- (j) Performance statement form.
- (k) Declaration Form
- (l) Check List of the documents uploaded on e-platform as part of the bid

5.2 The bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidders risk and may result in rejection of its bid.

### **6. Clarification of bidding documents**

6.1 A prospective Bidder requiring any clarification of the bidding documents may notify the purchaser in writing at the purchasers mailing address indicated in the Invitation for bids. The purchaser will respond in writing to any request for clarification of the Bidding documents if the same is received in the first week of the tender notice prescribed by the purchaser. Written copies of the purchaser's response (including an explanation of the query but without identifying the source or inquiry) will be sent to all prospective bidders which have received the bidding documents.

### **7. Amendment of bidding documents**

7.1 At any time prior to the deadline for submission of bids, the purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by prospective bidder, modify the bidding documents by amendment.

7.2 The amendment will be notified online.

7.3 In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bid, the purchaser may, at its discretion, extend the deadline for the submission of bids.

## **C. Preparation of Bids**

### **8. Language of Bid.**

- 8.1. The Bid prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the bidder and the purchaser, shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages in which case, for purposes of interpretation of the bid, the English translation shall govern.

### **9. Documents comprising the bid**

- 9.1 The bid prepared by the bidder shall comprise the following components:

#### **1. Technical Bid:**

- (a) A Bid form completed in accordance with clause 10
- (b) Documentary evidence established in accordance with clause 13 that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.
- (c) Documentary evidence established in accordance with clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services confirm to the Bidding Documents; and
- (d) Bid security furnished in accordance with clause 15.

#### **2. The Price Bid completed in accordance with clauses 11 and 12.**

### **10. Bid Form**

- 10.1 The Bidder shall complete the bid form provided in the Bidding documents, indicating for the goods to be supplied, brief description of the goods, their country of origin and quantity and other declaration statements.

### **11. Bid prices.**

- 11.1 The Bidder shall indicate on the appropriate price schedule, made available in the e-procurement platform and a model format is also attached to these documents, the unit prices and total bid prices of the goods it proposes to supply under the contract, for each item separately. **The unit prices shall be rounded off to nearest Indian rupee.** The bidder may quote one or more items for which copy of necessary **documents**, wherever necessary have to be produced along with the bid.
- 11.2. Prices indicated on the price schedule shall be entered separately in the following manner:
- (i) The price of the goods, quoted ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, or delivered, as applicable, including all duties and sales and other taxes including transportation, installation, commissioning at site and all incidental charges associated with the contract.

- (ii) Cost of **5 years** Comprehensive Maintenance Contract as defined in the Clause 18 of the Special Conditions of the Contract.

11.3 The Bidder's separation of the price components in accordance with para 11.2 above will be solely for the purpose of facilitating the comparison of bids by the purchaser and will not in any way limit the purchaser's right to contract on any of the terms offered.

11.4 Fixed Price. Price quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation except for any changes made by the Statute in respect of local taxes. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to clause 24.

## **12. Bid currencies.**

12.1 Prices shall be quoted in Indian Rupees; Bids quoted other than Indian currency will be rejected.

## **13. Documents Establishing Bidder's Eligibility and Qualifications.**

13.1 Pursuant to clause 9, the bidder shall furnish, as part of its bid, documents establishing the bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted

13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the purchaser's satisfaction that the bidder, at the time of submission of the bid, is an eligible bidder as defined under clause 2.

13.3 The documentary evidence of the Bidders qualifications to perform the contract if its bid is accepted, shall establish to the purchaser satisfaction;

(a) That, in the case of bidder offering to supply goods under the contract which the bidder is manufacture produce, **Firm Registration/manufacturer license that the bidder is manufacturer & also Memorandum of Articles.** or otherwise produce, the bidder has been duly authorized (as per authorization form in section XII a).

(b) that, in the case of bidder offering to supply goods under the contract which the bidder did not manufacture or otherwise produce, the bidder has been duly authorized (as per authorization form in section XII b) by the goods manufacturer or producer to supply the goods in India.

(i) the legal status, place of registration and principle place of business of the company or firm or partnership etc.

(ii) Details of experience and past performance of the bidder on specified item offered in the bid within the past three years and details of current contracts in hand and other commitments (suggested proforma given in section XI);

- (iii) Copy of the GST Certificate and Details of IT Returns- PAN / TIN copies
- (iv) The details in compliance to the Qualification Criteria (Section VI).

13.4 The check list for the details of documents to be submitted is given at Annexure XIV

#### **14. Documents Establishing Goods Eligibility and conformity to bidding documents.**

- 14.1 Pursuant to clause 9 the bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding document of all goods and services which the bidder proposes to supply under the contract.
- 14.2 The documentary evidence of the goods and services eligibility shall consist and of statement in the price schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.
- 14.3 The documentary evidence of the goods and services conformity to the bidding documents may be in the form of literature, drawings and data, and shall furnish:
  - (a) A detailed description of the goods essential technical and performance characteristics of the goods.
  - (b) A clause by clause commentary on the purchaser technical specifications demonstrating the goods and services substantial responsiveness to those specifications or statement of deviations and exceptions of the Technical specifications.
- 14.4 For purpose of the commentary to be furnished pursuant to clause 14.3 above, the bidder shall note that standards for workmanship, material and goods, and references to brand names or catalogue numbers designated by the purchaser in its technical specifications are intended to be descriptive only and not restrictive. The bidder may substitute alternative standards, brand name and / or catalogue numbers in its bid, provided that it demonstrates to the purchasers satisfaction that the substitutes are substantially equivalent or superior to those designated in the Technical specifications.

#### **15. Bid security**

- 15.1 Pursuant to Clause 9, the Bidder shall furnish, as part of it bid, the Bid security for the amounts specified in the Invitation for Bids (Section -1)
- 15.2 The bid security is required to protect the purchaser against risk of bidders conduct which would warrant the security forfeiture, pursuant to clause 15.7
- 15.3 The bid security shall be in Indian Rupees and shall be in online only.

- 15.4 Any bid not secured in accordance with para 15.1 and 15.3 above will be rejected by the purchaser as non-responsive pursuant to clause 24.
- 15.5 Unsuccessful Bidder's bid security will be discharged/ returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity prescribed by the purchaser pursuant to clause 16.
- 15.6 The successful Bidder's bid security will be discharged upon the Bidders executing the contract, pursuant to clause 34 and furnishing the performance security pursuant to clause 35.
- 15.7 The bid security may be forfeited;
- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid form; or
  - (b) In case of successful Bidder, if the Bidder fails;
    - (i) to sign the contract in accordance with clause 34; or
    - (ii) to furnish performance security in accordance with clause 35.
  - (c) If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited.

**16. Period of validity of Bids.**

- 16.1 Bids shall remain valid for 90 days after the date of bid opening prescribed by the purchaser pursuant to Clause 19.1. A bid valid for shorter period may be rejected by the purchaser as non-responsive.
- 16.2 In exceptional circumstances, the Purchaser may solicit the Bidders consent to an extension of the period of validity the request and the responses thereto shall be made in writing (or by mail). The bid security provided under clause 15 shall also be suitably extended. A bidder may refuse the request without forfeiting its bid security.

**17. Format and signing of Bid.**

- 17.1 The bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the bidder to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the bid. All pages of the bid, except for unammended printed literature, shall be initialed by the person or persons signing the bid.

- 17.2 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors and made by the bidder in which case such corrections shall be initialed by the person or persons signing the bid.

#### **D. Submission of Bids**

#### **18. Sealing and Marking of bids.**

- 18.1 The bids shall be uploaded (submitted) electronically, as described in the Invitation for Bids (Section –I). The hard copies of the bids in sealed covers must be received by the Purchaser at the address specified above on or before the due date of submission of bids (Section –I).
- 18.2 The Bids shall be addressed to the purchaser at the following address:  
  
The Managing Director, APMSIDC, 2<sup>nd</sup> Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri, Guntur District- 522503.
- 18.3 The Bids shall bear the name of the invitation for bids (IFB) and Number and also the words "Do not open before 15.00 Hrs on 11-11-2024". The envelopes shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it declared "late".
- 18.4 If the envelope is not sealed and marked as required by Para 18.2 and 18.3 above, the purchaser will assume no responsibility for the bids misplacement or premature opening.

#### **19. Deadline, for submission of bids.**

- 19.1 The Bids (both electronic and Hard copies) must be received by the purchaser, no later than the time and date specified in the Invitation for Bids (Section I). In the event of the specified date for the submission of Bids being declared a holiday for the purchaser, the Bids will be received up to the appointed time on the next working day.
- 19.2 The purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid documents in accordance with clause 7, in which case all rights and obligations of the purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

#### **20. Late Bids.**

- 20.1 Any bid received by the purchaser after the deadline for submission of bids prescribed by the purchaser, pursuant to clause 19, will be rejected and/ or returned unopened to the Bidder.

#### **21. Modification and Withdrawal of Bids.**

- 21.1 No bid may be modified subsequent to the deadline for submission of bids.



**21.2** No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid form. Withdrawal of bid during this interval may result in the Bidders forfeiture of its bid security , pursuant to Clause 15.7

## **E. Bid Opening and Evaluation**

### **22. Opening of Bids by Purchaser**

- 22.1 The Purchaser/or his authorized representative will download the technical bids on **11-11-2024** at 3.01 PM.
- 22.2 The Financial Bids of the Technically responsive bidder would be downloaded subsequently from the e-platform, once the technical evaluation is completed.

### **23. Clarification of Bids.**

- 23.1 To assist in the examination, evaluation and comparison of bids the purchaser may at his discretion, ask the Bidder for clarification of his bid. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.

### **24. Technical Evaluation (Preliminary Examination and Pre-Qualification)**

- 24.1 The purchaser will examine the bids to determine whether they are complete, whether required securities have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 24.2 Prior to the financial evaluation, pursuant to clause 26, the purchaser will determine the responsiveness of each bid to the bidding documents. For purposes of these clauses, a responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. The purchaser's determination of bids responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 24.3 Further the purchaser will determine to his satisfaction whether the Bidder is qualified to satisfactorily perform the contract. The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder pursuant to clause 13 as well as such other information as the purchaser deems necessary and appropriate.
- 24.4 An affirmative determination will be prerequisite for the opening of the financial bids. A negative determination will result in rejection of the Bidder's bid.
- 24.5 A bid determined as not substantially responsive will be rejected by the purchaser.
- 24.6 The Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any bidder.

24.7 The Preliminary Evaluations of the bidders are kept available at APMSIDC website <http://msidc.ap.nic.in>

**25. Deleted.**

**26. Evaluation and comparison of Bids.**

26.1 The Purchaser will evaluate and compare bids previously determined to be substantially responsive, pursuant to clause 24 for each schedule separately.

26.2 The purchasers evaluation of a bid will take into account; in addition to the bid price (ex-factory/ex-warehouse/off-the-shelf price of the goods offered from within India, such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, on the finished goods and cost of incidental services required. The following costs to the extent specified:

- a. cost of inland transportation, insurance and other costs within India incidental to the delivery of goods to their final destination;
- b. The comprehensive annual maintenance charges (inclusive of four Preventive Maintenance visits and all distress calls in a year and costs of all spares required during the repairs) for a period mentioned against equipment at section V- (Schedule of requirements) subsequent to free guarantee maintenance period mentioned against equipment at section V- (Schedule of requirements).
- c. the availability in India (Preferably in Andhra Pradesh) of spare parts and after-sales services for the equipment offered in the bid. To this extent the bidders shall give:
  - An undertaking for the uninterrupted supply of adequate spares for at least a period of 7 years shall be furnished.
  - An Undertaking Availability/ establishment of after sales service facility at least in (1) region of Andhra Pradesh to ensure uninterrupted after sales service during warranty period shall be confirmed. The details of service facility available / proposed to be set up shall be furnished with their bid.

27. Deleted

**28. Contacting the purchaser.**

28.1 Subject to clause 23, no Bidder shall contact the purchaser on any matter relating to the bid, from the time of the bid opening to the time, the contract is awarded.

28.2 Any effort by a Bidder to influence the Purchaser in the purchaser's bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidders bid.

## **F. Award of Contract**

### **29. Post - Qualification**

Not Applicable

### **30. Award Criteria**

- 30.1 Subject to clause 32, the purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

### **31. Purchaser's right to vary quantities at Time of Award**

- 31.1 The purchaser reserves the right, at the time of award of contract to increase or decrease to any extent of the quantity of goods and services specified in the schedule of requirements without any change in price or other terms and conditions.

### **32. Purchaser's right to accept any Bid and to reject any or all Bids.**

- 32.1 The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to award of contract, without there by incurring any liabilities to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

### **33. Notification of Award.**

- 33.1 Prior to the expiry of the period of the bid validity, the purchaser will notify the successful Bidder in writing by registered letter or cable or telex, duly confirming that the bid has been accepted.
- 33.2 The notification of award will constitute the formation of the contract.
- 33.3 Upon the successful Bidder's furnishing of performance security, pursuant to clause 34, the purchaser will promptly notify each unsuccessful Bidder and will discharge their bid security, pursuant to clause 15.

### **34. Signing of contract**

- 34.1. Within 15 days of receipt of the notification of award the successful Bidder shall sign the contract.

### **35. Performance security**

- 35.1 Within 15 days of the receipt of notification of award from the purchaser, the successful Bidder shall furnish the performance security in accordance with

the conditions of contract, in the performance security form provided in the Bidding documents or another form acceptable to the purchaser and signs the agreement.

- 35.2 Failure of the successful Bidder to comply with the requirement of clause 34 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the purchaser may make the award to the next lowest evaluated bidder or call for new bids.

## **36 Fraud and corruption**

- 36.1** It is the **purchaser's** policy that requires that the bidders, suppliers and contractors and their subcontractor observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the **purchaser**;

(a) defines, for the purposes of this provision, the terms set forth below as follows:

(i) "**corrupt practice**" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

(ii) "**fraudulent practice**" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

(iii) "**collusive practice**" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

(iv) "**coercive practice**" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

(v) "**obstructive practice**" is

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

(bb) acts intended to materially impede the exercise of the purchaser's inspection and audit rights provided for under sub-clause 36.2 (d) below.

- 36.2 The purchaser may, without prejudice to other terms of the bidding:

(a) will reject a proposal for award if it determines that the bidder considered for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;

(b) will cancel the contract if the purchaser determines at any time that the bidder, supplier and contractors and their sub contractors engaged in corrupt, fraudulent, collusive, or coercive practices.

(c) will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a contract; and

(d) will have the right to inspect the accounts and records of the bidders, supplier, and contractors and their subcontractors and to have them audited by auditors appointed by the Purchaser.

## **SECTION - III: GENERAL CONDITIONS OF CONTRACT**

### **TABLE OF CLAUSES**

<b><u>Clause Number</u></b>	<b><u>Topic</u></b>
1.	Definitions
2.	Application
3.	Country of Origin
4.	Standards
5.	Use of contract Documents and Information
6.	Patent Rights
7.	Performance Security
8.	Inspection and Tests
9.	Packing.
10.	Delivery and Documents
11.	Insurance
12.	Transportation
13.	Incidental services
14.	Spare Parts
15.	Warranty
16.	Payment
17.	Prices
18.	Change Orders
19.	Contract Amendments
20.	Assignment
21.	Subcontracts
22.	Delays in suppliers Performance
23.	Liquidated Damages
24.	Termination for Default
25.	Force Majeure
26.	Termination for Insolvency
27.	Termination for convenience
28.	Resolution of Disputes
29.	Governing Languages
30.	Applicable Law.
31.	Notices
32.	Taxes and Duties.

### **Section III: General Conditions Of Contract**

#### **1. Definitions**

1.1 In this contract, the following terms shall be interpreted as indicated;

- (a) "The contract" means the agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by references therein.
- (b) "The Contract Price" means the price payable to the supplier under the contract for the full and proper performance of its contractual obligations.
- (c) "The Goods" means all the equipment and / or other materials which the supplier is required to supply to the purchaser under the contract.
- (d) "Services" means services ancillary to the supply of the goods, such as transportation, insurance and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the supplier covered under the contract.
- (e) "An undependable Supplier/s' under contract means any Supplier who do not accept the purchase order or who delays the supply of required quantities beyond the permitted delays with liquidated damages
- (f) "The Purchaser or Corporation" means the APMSIDC, the purchasing agency
- (g) "The Supplier" means the individual or firm supplying the goods under this contract.
- (h) "The Government" means the Government of Andhra Pradesh or its authorized representatives
- (i) "The Project Site", where applicable means the place or places named in Schedule of Requirements
- (j) "The End-User" means the authorized user of the equipment/the Medical Superintendent/Head of the Department of the concerned specialty.
- (k) "Day" means calendar day
- (l) "Delivery period" means the period applicable up to completion of supply,



Installation and testing of the equipment and the training of the staff on the equipment, by the supplier at the Project site and accepted by the Purchaser or its representative

## **2. Application**

- 2.1. These General conditions shall apply to the extent that they are not superseded by provisions in other parts of the contract.

## **3. Country of Origin: Deleted.**

## **4. Standards**

- 4.1 The Goods supplied under this contract shall conform to the standards mentioned in the Technical specifications and when no applicable standard is mentioned the authoritative standard appropriate to the goods country of origin shall be followed and such standard shall be the latest issued by the concerned institution.

## **5. Use of contract documents and Information**

- 5.1 The supplier shall not without the purchaser's prior written consent, disclose the contract or any provision thereof or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the purchaser in connection therewith to any person other than a person employed by the supplier in performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchasers prior written consent make use of any document or information enumerated in para 5.1 except for purposes of performing the contract.
- 5.3 Any document other than the contract itself enumerated in para 5.1 shall remain the property of the purchaser and shall be returned (in all copies) to the purchaser on completion of the suppliers performance under the contract if so required by the purchaser.

## **6. Patent Rights**

- 6.1 The supplier shall indemnify the purchaser against all third party claims of infringement of patent, trademark for industrial design rights arising from use of the goods or any part thereof in India.

## **7. Performance Security**

- 7.1 Within 15 days after the supplier's receipt of notification of award of the contract, the supplier shall furnish performance security to the purchaser for the amount specified in the special conditions of contract.

- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete its obligations under the contract
- 7.3 The performance security shall be denominated in Indian Rupees and shall be in one of the following forms:
- (a) A bank guarantee [in favour of Managing Director, APMSIDC, Guntur] issued by any scheduled commercial bank located in India acceptable to the purchaser and in the form provided in the Bidding documents or in any other form acceptable to the purchaser: or.
  - (b) A Banker's cheque or Demand Draft in favour of Managing Director, APMSIDC, Guntur.
- 7.4 Fifty percent (50%) of the performance security will be discharged by the Purchaser and returned to the supplier not later than 60 days following the date of completion of the supplier's performance obligations, including any warranty obligations. The balance 50% of the performance security will be retained towards performance security for the maintenance services to be provided for 4 years after the 3 years warranty period and this 50% will be discharged after completion of performance obligations under maintenance services after 7 years.
- 7.5 The supplier shall accordingly; either furnishes a fresh bank guarantee for the 50% value or an extension of bank guarantee for 50% of the value covering the 4 years maintenance period after 3 years warranty period. Only after receipt of the above, the 50% of the performance security will be discharged after the warranty period.

## **8. Inspections and Tests.**

- 8.1 The purchaser or his representatives shall have the right to inspect and / or to test the Goods to confirm their conformity to the contract. The special conditions of contract and / or the Technical specifications shall specify what inspections and tests the purchaser requires and where they are to be conducted. The purchaser shall notify the supplier in writing of the identity of any representatives retained for these purposes.
- 8.2 The inspections and tests may be conducted in the premises of the supplier or its subcontractor(s) at point of delivery and/or at the goods final destination. Where conducted on the premises of the supplier or its subcontractor(s) all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the purchaser.
- 8.3 Should any inspected or tested goods fail to conform to the specifications the purchaser may reject them and the supplier shall either replace the rejected

goods or make alternatives necessary to meet specifications, requirements free of cost to the purchaser.

- 8.4 The purchaser's right to inspect, test and where necessary reject the goods after the goods arrival at site and shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by the purchaser or its representative prior to the goods shipment from the country of origin.
- 8.5 Nothing in clause 8 shall in any way release the supplier from any warranty or other obligations under this contract.

## **9. Packing**

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration where appropriated the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements, as shall be provided for in the contract and subject to clause 18 and any subsequent instructions ordered by the purchaser.

## **10. Delivery and Documents**

- 10.1 Delivery of the Goods shall be made by the supplier in accordance with the terms specified by the purchaser in the Notification of Award.

## **11. Insurance**

The goods supplied under the contract shall be fully insured in Indian Rupees against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the special conditions of contract.

## **12. Transportation**

- 12.1 The supplier is required to deliver the goods to the destinations specified in the contract and the cost thereof shall be included in the contract price.
- 12.2 The transportation of the Goods after the delivery at the final destination shall be the responsibility of the Purchaser.

## **13. Incidental services.**

- 13.1 The supplier is required to provide the following services, including additional services, if any, specified in SCC:
- (a) Performance of the on-site assembly and start-up of the supplied Goods;
  - (b) Furnishing of tools required for assembly and maintenance of the supplied Goods;
  - (c) Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
  - (d) Performance of maintenance and repair of the supplied Goods, for a period of 7 years, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
  - (e) Training of the users and maintenance personnel, in operation, maintenance and repair of the supplied Goods.
- 13.2 Prices charged by the Supplier for incidental services, if not included in the contract price of the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

#### **14. Spare Parts:**

- 14.1 As specified in the special conditions of contract, the supplier may be required to provide the following materials and notifications pertaining to spare parts **manufacturer:**
- (a) Such of spare parts as the purchaser may select to purchase from the supplier providing that this selection shall not relieve the supplier of any warranty obligations under the contract and
  - (b) In the event of termination of production of the spare parts;
    - (i) advance notification to the purchaser of the pending terminating in sufficient time to permit the purchaser to procure needed requirements: and
    - (ii) Following such termination, furnishing at no cost to the purchaser, the blueprints, drawing and specifications of the spare parts, if and when requested.

#### **15. Warranty**

- 15.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract. The supplier

further warrants that the goods supplied under this contract shall have no defect arising from design materials or workmanship (except insofar as the design or material is required by the purchasers specifications) or from any act or omission the supplied goods in conditions obtaining in the country of final destination.

- 15.2 This warranty shall remain valid for as specified at section V schedule of requirements against each equipment or any portion thereof as the case may be have been delivered at the final destination indicated in the contract, unless specified otherwise in the special conditions of the contract. The warranty period starts from date of commissioning after installation by the firm.
- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the supplier shall, with all reasonable speed, repair or replace the defective goods or parts thereof without cost to the purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced goods or parts from the port of entry to the final destination.
- 15.5 If the supplier, having been notified, fails to remedy the defect (s) within a reasonable period, the purchaser may proceed to take such remedial action as may be necessary, at the suppliers risk and expenses and without prejudices to any other right which the purchaser may have against the supplier under the contract.
- 15.6 Site Visits: The successful tenderer shall visit each User Institution as part of preventive maintenance as per the frequency mentioned **under clause 5.1.3** (section-I of IFB) during the warranty period. The tenderer shall attend any number of break down/repair calls as and when informed by the Tender Inviting Authority/User Institution.
- 15.7 During every visit, a copy of the service report/break down call report, duly signed by the custodian of the equipment/head of the health care institution and stamped shall be forwarded by email/fax/post to the APMSIDC office within 10 days from the due date.
- 15.8 A warranty certificate (as per format in **Annexure III**) duly signed and with proper stamp of the institution concerned and also signed by the authorized signatory with the stamp of the successful tenderer shall be submitted to the Tender Inviting Authority for keeping it under safe custody along with the Installation Certificate. A copy of the original warranty papers has to be given to the institution head concerned.

15.9 The tenderer shall submit the activities to be carried out during the preventive maintenance visit as per the format in **Annexure IV**.

## **16. Payment**

16.1 The method and conditions of payment to be made to supplier under the contract shall be specified in the special conditions

16.2 The Suppliers request (s) for payment shall be made to the purchaser in writing accompanied by an invoice describing as appropriate the goods delivered and the services performed and by shipping document, submitted pursuant to clause 10, and upon fulfillment of other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the purchaser within sixty (60) days of submission of the invoices / claims by the supplier duly furnishing the certificate specified in the bid document from the competent authority.

16.4 Payment shall be made in Indian Rupees.

## **17. Prices**

17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not with the exception of any price adjustments authorized by the special conditions of contract, vary from the prices quoted by the supplier in its bid.

## **18. Change Orders**

18.1 The Purchaser may at any time by written orders given to the supplier pursuant to clause 31 , make changes within the general scope of the contract in any one or more of the following;

- (a) drawings, designs or specifications, where goods to be furnishing under the contract are to be specifically manufactured for the purchaser;
- (b) the method of shipping or packing;
- (c) the place of delivery; or
- (d) the services to be provided by the supplier;

18.2 If any such changes causes an increase or decrease in the cost of or the time required for the suppliers performance of any part of the work under the contract, whether changed or not changed by the order, an equitable adjustment shall be made in the contract price or delivery schedule or both and the contract shall accordingly be amended. Any claims by the supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the suppliers receipt of the purchasers change order.

## **19. Contract Amendments**

19.1 Subject to clause 18, no variation in an modification of the terms of the contract shall be made except by written amendment signed by the parties.

## **20. Assignment**

19.2 The supplier shall not assign in whole or in part, its obligations to perform under the contract, except with the purchasers prior written consent.

## **21. Sub-contracts**

21.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under the contract if not already specified in his bid. Such notification, in his original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

## **22. Delays in the suppliers performance**

22.1 Delivery of the goods and performance of the services shall be made by the supplier in accordance with the time schedule specified by the purchaser in its schedule of requirements.

22.2 Any unexcused delay by the supplier in the performance of its delivery obligations shall render the supplier liable for any or all of the following; i.e. forfeiture of its performance security, imposition of liquidation damages and or termination of the contract for default.

22.3 If at any time during the performance of the contract, the supplier or its subcontractor (s) should encounter performance of the services the supplier shall promptly notify the purchaser in writing of the fact of the delay its likely duration and its causes. As soon as practicable after receipt of the suppliers notice, the purchaser shall evaluate the situation and may at its discretion extend the suppliers time for performance, in which case the extension shall be ratified by the parties by amendment of the contract.

## **23. Liquidated Damages**

23.1 Subject to clause 25, if the supplier fails to deliver any or all of the goods within the time period specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price as liquidated damages, an amount as specified in the SCC for the period of delay, until actual delivery or performance, up to a maximum deduction of **10 percent of the total contract value**. Once the maximum is reached, the purchaser may consider termination of the contract.

## **24. Termination for Default**

- 24.1 The purchaser may, without prejudice to any other remedy for breach of contract by written notice of default sent to the supplier, terminate the contract in whole or part:
- (a) if the supplier fails to deliver any or all of the goods within the time periods specified in the contract or any extension thereof granted by the purchaser pursuant to clause 22; or
  - (b) if the supplier fails to perform any other obligations under the contract.
- 24.2 In the event the purchaser terminates the contract in whole or in part, 24.1 the purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar Goods. However, the supplier shall continue the performance of the contract to the extent not terminated.

## **25. Force Majeure**

- 25.1 Notwithstanding the provisions of clauses 22,23,24, the supplier shall not be liable for forfeiture of its performance security liquidated damages or termination or default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.
- 25.2 For purposes of this clause "Force Majeure" means an event beyond the control of the supplier and not involving the suppliers fault or negligence and not foreseeable. Such events may include but are not limited to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, floods, epidemics, quarantine restrictions and freight embargoes.
- 25.3 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the purchaser in writing the supplier shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

## **26. Termination for Insolvency.**

- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier, if the supplier becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

## **27. Termination for convenience.**



- 27.1 The purchaser may by written notice sent to the supplier terminate the contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the purchasers convenience the extent to which performance of work under the contract is terminated and the date upon which such termination becomes effective.
- 27.2 The goods that are complete and ready for shipment within 30 days after the suppliers receipt for notice of termination shall be purchased by the purchaser and the contract terms and prices. For the remaining goods the purchaser may elect.
- (a) to have completed and delivered at the contract terms and prices; and / or
  - (b) to cancel the remainder and pay to the supplier and agreed amount for partially completed goods and for materials and parts previously procured by the supplier.

## **28. Resolution of Disputes**

- 28.1 The purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the contract.
- 28.2 If after thirty (30) days from the commencement of such informal negotiations the purchaser and the supplier have been unable to resolve amicably contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the special conditions of contract. These mechanisms may include but are not limited to conciliation, mediation by third party justification in an agreed national or international forum and / or international arbitration. The mechanism shall be specified in the special conditions of contract.

## **29. Governing Language**

- 29.1 The contract shall be written in English language, as specified by the purchaser in the instructions to bidders. Subject to clause 30, English language version of the contract shall govern

## **30. Applicable law**

- 30.1 The contract shall be interpreted in accordance with the laws of the union of India and the legal jurisdiction is Hyderabad

## **31. Notices**

- 31.1 Any notices given by one party to the other pursuant to the contract shall be sent in writing and confirmed in writing to the address specified for that purpose in the special conditions of the contract. A notice shall be effective when delivered or on the notices effective date, whichever is later.

## **32. Taxes and duties**

- 32.1 The rates quoted by the bidder shall be deemed to be inclusive of the sales and other taxes that the bidder will have to pay for the performance of this contract, at the prevailing rates notified by the Government. The purchaser will perform such duties in regard to the deduction of such taxes at source as per applicable law.

## **SECTION - IV: SPECIAL CONDITIONS OF CONTRACT**

### **TABLE OF CLAUSES**

(The corresponding clause number of the General condition is in parenthesis)

<b><u>Item. No.</u></b>	<b><u>Topic.</u></b>
2.	Definitions (Clause - 1)
3.	Country of Origin (Clause -3)
4.	Performance security (Clause 7)
5.	Inspection and Tests (Clause 8)
6.	Packing (Clause-9)
7.	Delivery and Documents (Clause 10)
8.	Insurance (Clause 11)
9.	Incidental services (Clauses 13)
10.	Spare Parts (Clause 14)
11.	Warranty (Clause 15)
12.	Payment (Clause 16)
13.	Prices (Clause 17)
14.	sub-contracts (Clause 21)
15.	Liquidated Damages (Clauses 23)
16.	Resolution of Disputes (Clauses 28)
17.	Notices (Clauses 31)
18.	Comprehensive Maintenance Contract
19.	Actions against Misconduct of the Supplier
20.	Progress of Supplies

## Section IV: Special Conditions of the Contract

1. The following special conditions of contract shall supplement the general Conditions of contract. Whenever there is conflict, the provisions herein shall prevail over those of the general conditions of contract the corresponding clause number of the general conditions in parentheses.

### 2. Definitions (Clause I)

(a) The Purchaser is : The Managing Director, APMSIDC, Mangalagiri, Guntur.

(b) The Supplier is : -----

3. **Country of origin (Clause 3):** All goods and related services to be supplied under the contract / agreement shall have their origin in India or any other country with which India has not banned trade relations.

### 4. Performance security (Clause 7)

4.1 Performance security is 5% of the contract value and shall be valid up to 60 days after the date of completion of performance obligations including warrant obligations, as applicable.

4.2 Add clause 7.5 to the GCC as the following:

In the event of any contract amendment, the supplier shall within 7 days of receipt of such amendment furnish the amendment to the performance security rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter

### 5. Inspection and Tests (clause 8)

The following inspection procedures and tests are required by the Purchaser:

5.1 The Supplier shall get each equipment inspected by a competent authority in manufacturer's works and also provide a guarantee/warranty certificate that the instrument conforms to all specifications contained in the contract.

5.2 The *Purchaser* or its representative may inspect and/or test any or all the equipment to confirm their conformity to the Contract specifications, prior to dispatch from the manufacturer's premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the equipment on receipt at destination.

5.3 However, on arrival of the equipments at destinations, the purchaser or its representative shall have the right to inspect and/or test any or all the equipments to confirm their conformity to the contract.

5.4 If the equipment or its performance is not as per specified conditions, deficiency or replace the equipment (s) to the satisfaction of the purchaser's representative.

## **6. Packing (Clause 9)**

The Supplier will be required to mark separate packages for each consignee on three sides with proper paint/indelible ink, the following: i. Name of the contract, ii. Contract No., iii. Country of origin of Goods, iv. Supplier's Name and v. Packing of list reference number

## **7. Delivery and Documents (Clause 10)**

- (i) Three copies of the Supplier invoice showing Goods description, quantity, unit price, total amount;
- (ii) Railway receipt/acknowledgement of receipt of goods from the Consignee
- (iii) Manufacture's/Supplier's Warranty and Factory Test certificate;
- (iv) Acceptance Certificate issued by the End-User
- (v) Inspection Certificate issued by the nominated inspection agency, as applicable

## **8. Insurance (Clause 11)**

- i) **For delivery of goods at site, the insurance shall be obtained by the Supplier at his cost for an amount equal to 110% of the value of the goods from "warehouse to warehouse" on "All Risks" basis including war Risks and Strike clauses period in the name of consignee authorized by the purchaser i.e. M.D. APMSIDC. The supplier shall also provide insurance coverage against fire and theft in the name of consignee upto end of the warranty period.**
- ii) **To submit a copy of insurance document duly attested by the consignee to APMSIDC along with bills for making payment. Otherwise the bills may not be processed.**

## **9. Incidental Services (Clause 13)**

No additional services are required to be provided over the services already covered under clause 13 of GCC.

## **10. Spare parts: (Clause 14)**

Add as clause 14.2 to the GCC the following:

Supplier shall carry sufficient inventories to assure ex stock supply of consumables spares such as gaskets, plugs, washers, belts etc., other spare parts and components shall be promptly as possible but, in any case, within (3) days of placement of order.

## 11. Warranty (Clause 15)

11.1 In partial modification of the provisions, the warranty period shall be as specified at section V schedule of requirements against each equipment, or any portion thereof, as the case may be, have been delivered at site, installed, commissioned, successfully tested and accepted by the Purchaser or its authorized representative

11.2 Substitute Clause 15.4 of the GCC with the following:

Upon receipt of such notice, the Supplier shall within 3 days, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement.

11.3 If the supplier has not done repair/replacement within the time specified above the purchaser will assess the cost of having the repairs/replacements done and the supplier will pay this amount.

11.4 Overall an uptime guarantees of 95% shall be maintained out of total usage period of the equipment by the end users during the warranty period

11.5 All software updates, if any required, should be provided free of cost during Warranty period.

11.6 No conditional warranty like mishandling, manufacturing defects, etc. will be acceptable.

11.7 **Warranty as well as Comprehensive Maintenance contract** will be inclusive of all accessories and Turnkey work, and it will also cover the following wherever applicable:-

- Any kind of motor.
- Plastic & Glass Parts against any manufacturing defects.
- All kind of sensors.
- All kind of coils, probes and transducers.
- Printers and imagers including laser and thermal printers with all parts.
- UPS including the replacement of batteries.
- Air-conditioners, All kinds of painting, civil, HVAC and electrical work

## 12 Payment (Clause 16)

12.1 Payment for goods and services shall be made in Indian Rupees as follows:

- a) 60% of the contract value of the supply part after necessary deduction will be paid to the supplier on submission of copy of invoice with original Delivery Challan as proof of supply to destinations duly certified by the Head of the Institution and RTGS details

- b) 30% of payment will be paid on submission of original invoice with stock entries, delivery challan and Installation Certificates (Annexure 1), warranty certificate (Annexure III), copy of insurance document duly attested by the consignee to APMSIDC, calibration, quality assurance certificate test certificate if required as per technical specification after completion of all the performance obligations.
- c) The balance 10% will be paid after three months from the date of installation on submission of performance satisfactory report (Annexure-II), obtained from the Head of the institute or concerned authorities.
- d) In case any difficulty is experienced by the successful tenderer in obtaining three-month performance certificate from any of the User Institution after the installation of the equipment, the same shall be brought to the notice of the Tender Inviting Authority immediately in writing. In such event(s), if the Tender Inviting Authority is convinced, the reasons are beyond the control of the successful tenderer, the Tender Inviting Authority, in case of supply orders placed by it, shall release payments at its discretion. In such case the letter sent to the Tender Inviting Authority shall be submitted along with the invoices while claiming payment.

12.2 If there is a delay in installation of the equipment due to reasons not attributable to the supplier such as non readiness of site, 60% of the supply part of the contract value will be released against supply and a confirmation letter from the consignee / end user, on submission of original delivery challan & Invoice copy.

12.3 Cost of Comprehensive Maintenance Contract for each year will be paid, at the end of each year by the Purchaser's representatives/hospital authorities, upon submission of the service reports to the extent of the service delivered as per the contract terms.

### **13. Prices (Clause 17)**

Prices payable to the Supplier as stated in the Contract shall not be subject to adjustment during performance of the Contract.

### **14 Sub-contracts (Clause 21)**

Add at the end of sub-clause 21.1 of the GCC the following. "Sub-contract shall be only for bought-out items and sub-assemblies".

### **15 Liquidated Damages (Clause 23)**

#### **15.1 For delays**

Substitute Clause 23.1 of the GCC by the following:

Subject to clause 25 of GCC, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as

liquidated damages, a sum equivalent to 0.5 percent of the delivered price of the delayed Goods or unperformed Services for each week of delay or part thereof until actual delivery or performance, up to a maximum deduction of **10% of the total Contract value**. Once the maximum deduction is reached, the Purchaser may consider termination of the Contract.

15.2 For Short fall in Equipment Maintenance services

Any major repair intimated by the *Purchaser or the end-user* shall be rectified by the Supplier from the date of intimation within a period of 3 calendar days and repair the equipment to the satisfaction of the Purchaser or the End User. Failing which the Purchaser has a right to levy a penalty on the Supplier a sum of Rs.10,000/- per day of delay, until the equipment is repaired and brought to the normal working condition to the satisfaction of the Purchaser.

16 **Resolution of Disputes (Clause 28)**

Add as Clauses 28.3 and 28.4 of the GCC the following:

28.3 The dispute resolution mechanism to be applied pursuant to clause 28 of the General Conditions shall be as follows:

- (a) In the case of dispute or difference arising between the Purchaser and a Domestic Supplier relating to any matter arising out of or connected with this agreement, such dispute or difference shall be referred to the award of two Arbitrators, one Arbitrator to be nominated by the Purchaser and the other to be nominated by the Supplier or in the case of the said Arbitrators not agreeing, then at the award of an Umpire to be appointed by the Arbitrators in writing before proceeding with the reference, and in case the Arbitrators cannot agree to the Umpire, he may be nominated by the Arbitration committee of the Indian Council of Arbitration, India. The award of the Arbitrators, and in the event of their not agreeing, of the Umpire appointed by them or by the Arbitration Council of India, India, shall be final and binding on the parties.
- (b) The Indian Arbitration Act 1996, the rules thereunder and any statutory modification or re-enactments thereof, shall apply to the arbitration proceedings.

28.4 The venue of arbitration shall be the place from where the Contract is issued.

17 **Notices (Clause 31)**

For the purpose of all notices, the following shall be the address of the purchaser and supplier.



Purchaser: The Managing Director, APMSIDC, 2<sup>nd</sup> Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri, Guntur District- 522503

Supplier: (To be filled in at the time of Contract Signature)

## **18 Comprehensive Maintenance Contract (CMC)**

- a) The Comprehensive Maintenance Contract includes 4 visits in a year preventive maintenance visits and all the distress calls during the year and also include the probable cost of spares required towards the repairs carried out to bring a not working equipment to its normal working condition, during the year.
- b) The supplier shall under take at least one half-yearly preventive maintenance visit and attend to all the break down calls during the year. The payment for the maintenance services will be made at the end of each half-year, upon submission of necessary service reports signed by the end-users.
- c) The Comprehensive Maintenance Contract agreement will be done by APMSIDC/ Hospital authority/ Any Authorized service provider nominated by Govt AP , as per rates given by the vendor in the tender.

## **19 Actions Against the Misconduct of the Supplier**

- 19.1 A Supplier found being supplied similar items with similar tender conditions to any other agency in the country during the validity of the contract with the APMSIDC, at a rate lower than the rate at which they supplied under this tender, the difference amount is liable to be recovered apart from blacklisting the firm for a minimum period of 3 years. The Supplier should furnish undertaking (Annexure-XIII) that they will remit the differential cost, if they quote lower rate than the rate quoted to the APMSIDC to any other agency or department or state, during the period of contract.
- 19.2 Any substandard supplies without meeting the quality specifications made under the contract shall also entail blacklisting of the firm for a minimum period of three years for that particular product.
- 19.3 If the bidder fails to demonstrate on asked to do so, of the products quoted with their bid, without any valid or convincing reason to the satisfaction of the Purchaser, the bids for other items offered against the bid notice will not be considered and he may be debarred for a certain period as decided by the Purchaser.

## **20 Progress of Supply**

Supplier shall intimate progress of supply, in writing, to the Purchaser as under:

- Qty offered for inspection and date;
- Qty. accepted/rejected by inspecting agency and date;
- Qty. dispatched/delivered to consignees and date;
- Qty. where incidental services have been satisfactorily completed with date;
- Quantity where rectification/repair/replacement effected/completed, on receipt of any communication from consignee/Purchaser with date;
- Date of completion of entire Contract including incidental services, if any; and
- Date of receipt of entire payments under the Contract.

## SECTION V

### SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

Sl. No	Name of the Item	Qty	Warranty (Years)	CMC (Years)	EMD	Average Annual turnover of the bidder in last three years i.e. 2021-22, 2022-23 and 2023-24
1	Food laboratory equipment for Visakhapatnam including CMC (Group-1)	1	2	3	4,50,000	4,50,00,000
2	Food laboratory equipment for Visakhapatnam including CMC (Group-2)	1	2	3	7,50,000	7,50,00,000

**Processing fee:** The participating bidders will have to pay tender processing fee (non-refundable) of **Rs. 11,800/-** in the form of online only.

**Note: Bidders who are having any pending court cases / legal disputes against the APMSIDC before any court of law / authority, are not eligible to participate in the tender. In this regard If any ambiguity arise, the decision of tender inviting authority (APMSIDC) is final**

**All tender unit price will be rounded off to next nearest whole number (if price is Rs. 100.40 it will be 100 Rs. and 100.75 then it will be Rs. 101)**

- 1. To allow the authorized distributors duly obtaining an agreement/ MOU from the Manufacturer for binding on Post Supply Services i.e. Warranty, CMC, AMC etc., and on agreement executed by the authorized distributor with the Corporation. Further an undertaking from Manufacturer to take responsibility in case of authorized distributor's failure in performing the Contractual Obligations also may be obtained.**

**Proforma will be provided.**

2. EMD shall be furnished in the form of Demand Draft/BG/Online drawn in favour of Managing Director, APMSIDC, Guntur.
3. **If the bidder quotes more than one group, then the bidder must have an average annual turnover equal to the sum of the average annual turnovers mentioned against each equipment. However, a bidder having an average turnover of 10 Crores in the last three financial years and EMD 10 lakhs shall be eligible to bid for any number of equipment for the above list.**
4. **All the bidders are requested to quote the total value of the each group as a single unit (Total items X Total Quantity = Total Value)**

Note:

All the bidders noted that each grouping items should be quoted individual prices in financial bid of attached document compulsory.

## **Technical Specifications**

### **General Information**

1. Bidders are requested to offer the equipment as per the specifications attached.
2. For each item of equipment the bidder should include all the cost associated with fixing, cables, connectors, accessories and ancillary items necessary for the satisfactory operation of that item of equipment. Bidders should make the provisions of starter packs for consumables for demonstration and three months of operation period for the supplied equipment.
3. Spare parts list, listing spare likely to be required for (7) years operations shall be attached with the Bid
4. (i) Bidders are requested to provide, referenced by given equipment code and item name, with their tender offer, the following information for all the items of equipment offered.
  - Name of the Manufacturer
  - Brand Name & Model Number
  - Country of Origin(ii) Catalogue, Pamphlet, descriptive literature, spare parts list and technical specifications for each unit of item must be forwarded with the offer.
5. Operating Environment:

Electrical Supply: The Equipment supplied shall be suitable in all respect for use on the local electricity supply of 200- 270 Volts, 50 Cycles. A suitable stabilizer/CVT to be offered as an optional accessory in case of specific Voltage requirement for the supplied Equipment. Resettable over current breaker shall be fitted for protection wherever applicable.

Humidity: The unit shall be capable of operating continuously in ambient temperature of 30<sup>0</sup>C and relative humidity of around 80%.
7. After Sales Service:

Bidders are requested to confirm in writing in their bid offer the after sales service they would provide, after the expiry of three-year warranty period, for four more years including an estimated cost an annual servicing contract. The maintenance capability of the bidders currently existing in Hyderabad and Andhra Pradesh should also be clearly stated.
8. All items should be of high quality, durable, and suitable for use in a Hospital. The technical specification and standards of each item delivered shall be that currently in use at the time of delivery.

- a) Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450.
- b) Radiation safety: Safety aspects of Radiation dosage leakage should be spelt out and all the X-ray related products should comply with AERB Guidelines for radiation leakage.

10 The Manufacturer, must have necessary quality certifications for processes such as ISO 9001 Quality Management System for Organization / ISO 13485 Quality Management System for Medical Device.

b) Full Quality Assurance System Approval certificate Management System Certification for Medical Devices and their equivalent International Standards certificates as BIS/CE/USFDA etc.

11. If the bidder fails to demonstrate any of the products quoted, the bid for that product would be considered as withdrawn and suitable action will be taken as per the Clause 15 of ITB. i.e., forfeiture of the Bid security and also the bidder may be debarred for a certain period as decided by the Managing Director.

**Note:**

1. **The bidder should submit the details of spares which are covered or not covered under warranty.**
2. **The bidder should also submit the detailed price list for all spares.**
3. **The above items has to supply to Food Safety Labs at Visakhapatnam in Andhra Pradesh**
4. **The bidder should submit the prices in e-procurement platform inclusive of machine price and CMC prices.**
5. **The bidder should submit the detailed price break up as a attachment option.**

**Table A : Group-1**

S. No	Equipment	Qty
1	Automated Fat analyzer	1
2	Automated Fibre analyzer	1
3	Automated Protein analyzer	1
4	Centrifuge Refrigerated	1
5	Nitrogen Evaporator (Bench top)	1
6	Nitrogen generator	1
7	<b>Centrifuges (floor model) with refrigeration</b>	1
8	Automated Solid phase extraction System	1
9	FTIR with ATR and liquid cell	1

**Specifications:**

<b>1. AUTOMATIC FAT ANALYZER</b>	
<b>Application:</b> It is used for analysis of total fat content of food samples. It is based on the Soxhlet extraction principle and all functions as soaking; extraction, leaching, heating, condensation and solvent recovery are automated for safe operation. Several samples can be analyzed at the same time.	
<b>Specification</b>	<b>Requirement</b>
Function	The system must be capable of quantitative separation of total fats from food, feed etc.
Sample Positions	≥ 6
Measuring Range	0.1 – 100 % fat
Sample Volume (Size)	0.5 to 15 gm or more
Accuracy	± 1%
Solvent Recovery	≥75%
Temperature	100°C– 280°C or better
Other Features	<ul style="list-style-type: none"> <li>• Shall be completely microprocessor based, fully automatic boiling, rinsing, drying, recovery, lifting of thimbles to cooling position and shut-down</li> <li>• User interface for upgradation of software</li> <li>• Shall be based on official 'RANDALL' method accepted by AOAC;</li> <li>• System must have capability to perform un-attended operation and must be programmable;</li> <li>• Should be provided with suitable solvent recovery system.</li> </ul>

Safety Features and alarms	<ul style="list-style-type: none"> <li>• Automatic door lock and sealing during extraction.</li> <li>• Automatic over- temp. Control/protection facility.</li> <li>• Equivalent or ATEX classified components for internal exposed valves, IP 65 for other internal electronics, IP55 for Liquid and Dust protection, Pressurized electronics cabinet.</li> </ul>
Material	<p>All material in contact with solvents should be PTFE or suitable high-grade material</p> <p>The material of construction of equipment should be Epoxy painted stainless-steel structure to prevent corrosion or other corrosion free material</p>
Accessories to be supplied	<p>The system should be supplied with at least</p> <p>12 glass/aluminium extraction cups (preferably <math>\geq 150</math> ml.),</p> <p>24 dozen of suitable cellulose thimbles (preferably 33 <math>\varnothing</math> x 80 mm) or Filter Bags, at least 6 viton seals,</p> <p>1 sample tray,</p> <p>1 boiling stones, 1 cup stand and 1 recovery flask</p>
Operating manuals, servicemanuals, 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>
Recommendations or Warnings	Any warning signs would be adequately displayed
Warranty	2 years after satisfactory installation and working excluding consumable parts and accessories. Provision should be there to extend the warranty upto 3 years (at least) or CAMC
Training	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 till customer satisfaction
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
Quality Requirement	<p>Should be compliant with the requirements of FDA/CE/BIS Electrical safety conforms to the standards for electrical safety IEC60601- General requirements (or equivalent BIS Standard)</p> <p>Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for</p>



	safetyShould 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
After sales service/ Postwarranty	Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number; Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail. Should carry out yearly PM with at least one PM kit Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified
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.
Outage conditions	After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include: <ul style="list-style-type: none"> <li>a. Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>b. Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> <li>d. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</li> <li>e. Maximum repair turnaround time for equipment/system would be 3</li> </ul>

	days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system.
Payment	Payment only after installation, validation and performance demonstration

<b>2. AUTOMATIC FIBRE ANALYZER</b>	
<b>Application:</b> It is used for analysis of crude fiber content of food through acidic or alkaline hydrolysis. It eliminates chemical and hot water handling and requires less bench space.	
<b>Specification</b>	<b>Requirement</b>
Features	<ul style="list-style-type: none"> <li>• The system must be closed and microprocessor controlled, capable of performing all operations, extraction, rinsing &amp; filtration of samples for analysis of crude fiber, acid detergent fiber, neutral detergent fiber, etc.</li> <li>• Should have agitate/heat Switch &amp; temperature/timer/clock controller for process parameter input and results readout.</li> <li>• System should be based on either crucibles or filter bag technology</li> </ul>
Analysis of sample	Should have possibility of analyzing 6/12/24 samples at a time
Sample size	≤ 1 gm
Measuring range	0.1 to 100%
Reproducibility	± 1 % relative at 5 % - 30 % fibre level
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
Warranty	2 years after satisfactory installation and working excluding consumable parts and accessories. Provision should be there to extend the warranty up to 3 years (at least)
Training	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 till

	customer satisfaction
Accessories to be supplied	<ul style="list-style-type: none"> <li>• In case of fiber bag system 1000 filter bags should be quoted along with the system</li> <li>• In case of crucible-based system, the following accessories must be essentially quoted for <ul style="list-style-type: none"> <li>a. Cold extractor</li> <li>b. 24 Crucibles of P2 porosity</li> <li>c. Crucible stand for 6/12 crucibles</li> <li>d. 2 crucible holders</li> <li>e. 2 nos. each of acid tank, alkali tank, NDS tank, ADStank</li> </ul> </li> <li>• In case of filter bag system, the following accessories must be essentially quoted for <ul style="list-style-type: none"> <li>a. Heat sealer for filter bags; marker acetone resistant block.</li> <li>b. 12 nos. of glass spacer; drip tray; complete fiber bag incineration module along with 12 nos. of quartz crucible; tubing connection set; automatic alpha amylase dosing unit; and 12 place sample carousels.</li> </ul> </li> <li>• Should be supplied with Certified Reference Material. Enzymes and all other reagents for 100 analysis.</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
Quality Requirement	Should be compliant with the requirements of FDA/CE/BIS Electrical safety conforms to the standards for electrical safety IEC60601- 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
After sales service/ Post warranty	Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number; Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail. Should carry out yearly PM with at least one PM kit

	Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified
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.
Outage conditions	After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include: <ul style="list-style-type: none"> <li>a. Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>b. Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> <li>d. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</li> <li>e. Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system</li> </ul>
Payment	Payment only after installation, validation and performance demonstration

### 3. AUTOMATIC PROTEIN ANALYSER

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

<b>Specification</b>	<b>Requirement</b>
Digestion and distillation unit	Should be combined unit with all units from the same manufacturer and consist of <ol style="list-style-type: none"> <li>1. Digestion unit</li> <li>2. Distillation unit</li> <li>3. Scrubber</li> <li>4. Auto titrator</li> </ol>
Digester	<ol style="list-style-type: none"> <li>1. Tube holding capacity: <math>\geq 20</math></li> <li>1. Temperature: ambient to <math>450^{\circ}\text{C}</math></li> <li>2. Temperature Stability: <math>+ 1^{\circ}\text{C}</math></li> <li>3. Digestion Time range: 1 - 999 minutes</li> <li>4. Should have programmable time &amp; temperature ramping and audible alarms.</li> <li>5. Should be provided with automatic motorized lifting of tubes from the heating unit.</li> </ol>
Accessories for digester	<ol style="list-style-type: none"> <li>1. Exhaust unit,</li> <li>2. Rack, stand, lid,</li> <li>3. 40 nos. of digestion tubes <math>\geq 250</math> ml.</li> <li>4. and all other required accessories for standalone operation of the digester</li> </ol>
Scrubber system	<ol style="list-style-type: none"> <li>1. The material of construction of the scrubber should be of high endurance materials like borosilicate glass or high-quality stainless steel.</li> <li>2. Cleaning shall include condensation, neutralization, adsorption and redox reactions to maintain efficiency of the equipment</li> <li>3. Suction should be regulated/adjustable to achieve efficient digestion.</li> <li>4. All supplied reagent containers must be <math>\geq 2</math> L. capacity and must be made of high-quality borosilicate glass</li> </ol>
Automated Distillation and Titration Unit	<ol style="list-style-type: none"> <li>1. Should be completely programmable for all controls like cooling water, dilution water, sodium hydroxide, receiver solution, automatic calculation, automatic emptying of tube, titration vessel, etc.</li> <li>2. Should have built-in colorimetric titration system and allow use of a wide range of indicators.</li> <li>3. Should have possibility for bypassing automatic titration system to allow manual titration</li> <li>4. Should have <math>\geq 7''</math> color touch screen LED/LCD/VFD display</li> <li>5. Nitrogen measurement range: 0.1 - 200 mg or more</li> <li>6. Recovery: <math>\geq 99.5\%</math>.</li> </ol>

	<ol style="list-style-type: none"> <li>7. Should be provided with burette having <math>\geq 30</math> ml volume and must have possibility of automatic refilling during analysis.</li> <li>8. Minimum dispensing volume: 2 - 3 <math>\mu</math>l</li> <li>9. Reproducibility: <math>\cdot</math> 1% of RSD</li> <li>10. Automatic waste removal via tube drainage after distillation</li> <li>11. The system should be able to store the recorded data and must have facility for downloading the same using an USB port or through Wi-Fi or connectivity for LIMS</li> <li>12. Additionally, it should be possible for transferring weights and retrieving data using suitable software which is compliant to traceability.</li> <li>13. The system should have safety sensors and audible warning systems</li> <li>14. Should be provided with exchangeable splash head to reduce carry-over effects</li> <li>15. The system should be provided with suitable password protection to prevent tampering of programmes and data.</li> <li>16. The system must be compliant to ISO 17025:2017</li> <li>17. The system shall have the possibility to track performance of the system and warns if analysis results changes over time. It is desirable to have component traceability feature in the system for effective maintenance of the system.</li> <li>18. The instrument shall be delivered with a Verification Test document that certifies that instrument has been performance tested in factory (confirming analysis performance).</li> <li>19. The systems should be supplied with Kjeltabs (5000 nos.) or equivalent, 4 tanks of <math>\geq 20</math> L along with level sensors for each of them</li> </ol>
Spares and Accessories	All chemicals and reagents for 200 runs
Reference standard	Certified Ammonium sulfate (100g)
Operating manuals, servicemanuals, 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> </ul> <p>Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.</p>
Recommendation or Warnings	Any warning signs would be adequately displayed
Warranty	2 year after satisfactory installation and working excluding consumable parts and accessories. Provision should be there to extend the warranty up to 3 years (at least)

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
Training	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 till customer satisfaction
Quality	Should be compliant with the requirements of FDA/CE/BIS
Requirement	<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> Should have necessary certification for safety and quality standards from national/ international bodies
IQ/PQ/OQ	<ul style="list-style-type: none"> <li>On site IQ, OQ of instrument along with document to be provided &amp; supplier to assist till satisfactory PQ of instrument</li> </ul>
After sales service/ Post warranty	Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number; Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail. <ul style="list-style-type: none"> <li>Should carry out yearly PM with at least one PM kit Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified</li> </ul>
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.
Outage conditions	After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include: <ol style="list-style-type: none"> <li>Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the</li> </ol>

	<p>equipment/system serviceable.</p> <p>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</p> <p>d. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</p> <p>Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system.</p>
Payment	Payment only after installation, validation and performance demonstration

<b>4. CENTRIFUGE (REFRIGERATED)</b>	
<b>Application:</b> A Multi-functional, general purpose High speed refrigerated bench top centrifuge used for separation of supernatants (liquid portion) from pellets (solid portion)	
<b>Specification</b>	<b>Requirement</b>
Base Unit	<ul style="list-style-type: none"> <li>• Table top centrifuge with maintenance free brushless motor and have low access height</li> <li>• CFC free refrigerant</li> <li>• LCD Digital Display of time, speed and Temperature and run conditions</li> <li>• Compatible with all fixed angle and swinging bucket rotors</li> <li>• Automatic rotor recognition facility</li> <li>• Automatic imbalance detection and cut-off</li> <li>• Should be programmable with easy preset programs for fast temperature for pre-cooling and short spin.</li> <li>• Should have motorized lid lock system</li> </ul>
Temperature Range	0 °C to 30 °C
Speed	Maximum speed: 20000 RPM (with no load)



Rotors	<ul style="list-style-type: none"> <li>• <b>Fixed Angle Rotor</b> for <ul style="list-style-type: none"> <li>• 50 ml bottles</li> <li>• 15 ml Falcon tube</li> <li>• 1.5-2.0 mL Eppendorf tubes and adaptors for 0.2- and 0.5-mL tubes/ Eppendorf</li> </ul> </li> <li>• <b>Rotor for 2.0 mL</b> Eppendorf tubes (12 places or better) with RPM20000</li> <li>• <b>Deep-well micro plates rotor</b> Two 96 well plates for swing out type with RPM 3500</li> <li>• <b>Swing out rotor:</b></li> </ul>
Accessories	Bottles, falcon tubes, adapters etc One set of Other items (rotors/adapters) required for improving the applicability/system performance should to be quoted as optional
Power Requirement	220 v to 240 v -50 Hz If a voltage stabilizer is required, it should be supplied along with the unit
Voltage stabilizer	Suitable voltage stabilizer to be provided
Certificates Performance and Safety Standards	Should have necessary certification for safety and quality standards from national/ international bodies Optimum safety according to national and international regulations (IEC 1010)
Supplier/ Manufacturer	Must be ISO and CE certified for quality
Operating manuals, servicemanuals, other	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</li> </ul>
manuals	routine maintenance <ul style="list-style-type: none"> <li>• Service and operation manuals to be provided</li> </ul> Advanced maintenance tasks documentation, if any.
Recommendations or Warnings	Any warning signs should be adequately displayed
Warranty	Warranted for 2 years, extendable up to 3 years, after satisfactory installation and working excluding consumable parts and accessories.
Training	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 till customer satisfaction
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
Quality Requirement	<ul style="list-style-type: none"> <li>• Should be in compliance with the requirements of FDA/CE/BIS.</li> <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> <p>Should have necessary certification for safety and quality standards from national/ international bodies</p>
IQ/PQ/OQ	<ul style="list-style-type: none"> <li>• On site IQ, OQ of instrument along with document to be provided &amp; supplier to assist till satisfactory PQ of instrument</li> </ul>
After sales service/ Postwarranty	<p>Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number;</p> <p>Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail.</p> <p>Should carry out yearly PM with at least one PM kit</p> <ul style="list-style-type: none"> <li>• Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified</li> </ul>
Compliance statement	<p>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.</p>
Outage conditions	<p>After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include:</p> <ol style="list-style-type: none"> <li>Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> </ol>

	<p>Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</p> <p>e. Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a</p> <p>d. serviceable condition to avoid complete breakdown of the equipment/system</p>
Payment	Payment only after installation, validation and performance demonstration

## 5. NITROGEN EVAPORATOR (Bench Top)

**Application:** The evaporator is used for evaporating solvents from extracts for concentration prior to chromatographic and other analysis

Specifications	Requirements
<b>General</b>	<p>A bench top work station</p> <p>Microprocessor based, High speed, small volume workstation to accommodate 50 tubes of different capacity (1.5 mL to 30 mL), through Gas vortex shearing action for evaporation.</p> <p>Each 10- position row can work independently Closed system with exhaust facility</p> <p>All racks to be supplied</p>
<b>Operation</b>	Simultaneous automated concentration of multiple samples and unattended operation, automatic gas shut off and operational diagnostics
Display	LED/LCD
Pressure display	Bar/PSI/KPA unit selection
Keypad	Feather touch operation
Thermostatic water bath	Temperature range ambient to 90°C or better Temperature Accuracy: +/-2 °C
Gas Regulator and Gauge Range	0 to 30 psi.
Nitrogen gas generator	Technical specifications as specified under Nitrogen generator

Accessories	<ul style="list-style-type: none"> <li>• Evaporation tubes- 500 Nos</li> <li>• Gas connection tubes – 20 m.</li> <li>• Power cable – 1No</li> <li>• Fuse -10 Nos</li> </ul>
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</li> </ul> <p>Advanced maintenance tasks documentation, if any.</p>
Recommendations or Warnings	Any warning signs would be adequately displayed
Calibration certificate	Calibration certificate from ISO17025 for Temperature and Relative humidity.
Warranty	2 years after satisfactory installation and working excluding consumable parts and accessories.
After sales service/ Post warranty	<ol style="list-style-type: none"> <li>1. Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number;</li> <li>2. Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail.</li> <li>3. Should carry out yearly PM with at least one PM kit.</li> <li>4. Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified.</li> </ol>
Training	The supplier should provide comprehensive training to users on operation of the instrument and application support on site as per specifications
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
Battery backup	Suitable rechargeable battery
Quality Requirement	<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> </ul> <p>Certified to be compliant with IEC 61010-1, IEC61010-2-40</p>

	for safety
IQ/PQ/OQ	On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument
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.
Outage conditions	<p>After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include:</p> <ol style="list-style-type: none"> <li>a. Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>b. Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> <li>d. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</li> <li>e. Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system.</li> </ol>
Payment	Payment only after installation, validation and performance demonstration

## 6. NITROGEN GENERATOR

<b>Application:</b> Nitrogen is used as a gas in several applications especially as an evaporating gas and Gas chromatography.	
<b>Specifications</b>	<b>Requirements</b>
General	The system should be, PLC Controlled Bench Top of modular design, compact in size, <b>LCD Touch Screen user interface</b> automatic operation, minimum noise level, low operational cost. Nitrogen should be generated from the atmospheric air. Whole system should be compact and properly assembled without any leakage with operating voltage 230v50 Hz <b>It should have a Hydrocarbon removal unit.</b> The equipment should be capable of running for 24 hrs. round the year
Installation	Indoor or benchtop Should work in temperature range of 15 to 30 °C in humidity range of 60-90%
Flow rate	1,250 ml/min
Purity	Better than 99.999%, :< 0.05 ppm Total Hydrocarbons
Delivery pressure	85 PSI or above
Method of Purification	Pressure Swing Adsorption Technology
External Air Compressor	Suitable air compressor for inlet of feed air with necessary drier & filters & 5 m pipeline between air compressor & generator should be included. Air quality of the external air compressor - ISO8573 - 1:2010 Class 1.4.1 (clean dry air to enhance the life of the nitrogen generator). Automatic on off modes depending on pressure side the compressor
Sound level	Nitrogen generator should have silent operations with max 25 dB and compressors sound level should be less than <80dB. so that it can be kept inside the laboratory
Fittings	1/4" Swagelok for outlet N2 and Inlet Air (if compressor is not installed)
Power consumptions (watt):	<ul style="list-style-type: none"> <li>• ≤ 500 W</li> </ul>
Safety-	It should have safety system with safe alarms Automatic on off modes depending on pressure side the compressor
Power requirements	230 V / 50 Hz – 230V/60Hz
Accessories	Provide all the accessories

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 certificate	Calibration certificate from ISO17025 for sound level and evidence for N2 purity
Warranty	2 years after satisfactory installation and working excluding consumable parts and accessories.
After sales service/ Post warranty	Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number; Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail. Should carry out yearly PM with at least one PM kit Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensiveAMC, after the warranty period has to be specified
Training	The supplier should provide comprehensive training to users on operation of the instrument and application support onsite as per specifications
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
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
IQ/PQ/OQ	On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument
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.
Outage conditions	<p>After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include:</p> <ol style="list-style-type: none"> <li>a. Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>b. Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unserviceability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</li> <li>e. Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be</li> <li>d. maintained in a serviceable condition to avoid complete breakdown of the equipment/system.</li> </ol>
Payment	Payment only after installation, validation and performance demonstration

<b>7. Centrifuges (floor model) with refrigeration</b>	
<b>Specifications</b>	<b>Requirements</b>
<b>Maximum Speed</b>	<b>20000 rpm</b>
<b>Maximum RCF</b>	<b>37570 g</b>
<b>Maximum tube size</b>	<b>250 ml</b>
<b>Maximum Capacity</b>	<b>1200 ml</b>
<b>Lowest Temperature</b>	<b>-8 °C</b>
<b>General</b>	<ul style="list-style-type: none"> <li>• <b>Programable compensation for true sample temperature</b></li> <li>• <b>Pre Cooling</b></li> <li>• <b>Acceleration Profiles must be 9</b></li> <li>• <b>Deceleration Profiles may be 9 &amp; coasting</b></li> <li>• <b>Fast Spin</b></li> </ul>



	<ul style="list-style-type: none"> <li>• Calibration window on lind for speed</li> <li>• LCD Display</li> <li>• Digital Control Communication</li> <li>• Self-Diagnostic of error</li> <li>• Bi-Directional encoder Parameters setting switches</li> <li>• Brushless motor with frequency drive</li> <li>• Inverter fault detection with auto shut down</li> <li>• CFC free refrigeration system</li> <li>• No. of Programs must be 99</li> <li>• Last set parameters recall</li> <li>• Choice of rpm / ref setting</li> <li>• Temperature display have both C/F</li> <li>• Digital countdown timer 0-99 min &amp; Continuous run</li> <li>• Log of cumulative run time</li> <li>• Automatic Rotor Identification</li> <li>• Motor overload protection</li> <li>• Emergency lid lock release</li> <li>• Imbalance detection with centrifugation cut off</li> <li>• Password Protection</li> <li>• Gas Hinge to prevent door falling</li> </ul>
<b>Dimension (W x D x H)</b>	<b>(660 x 765 x 945) mm</b>
<b>Noise</b>	<b>≤ 60 dB</b>
<b>Voltage Stabilizer</b>	<b>Model: VS- 03</b>

## 8. AUTOMATED SOLID PHASE EXTRACTION SYSTEM

**Application:** The Solid Phase Extraction (SPE) performs automated rugged and reliable extraction and clean-up of large volume liquid samples for further analysis by LC-MS/MS, GC-MS/MS with positive pressure loading and elution of sample and solvents with parallel evaporation. Provides a high through put system for processing samples simultaneously

### Specifications

### Requirements

General

It should be configured as module on x-y movement headline/rail/platform of Main Unit. Automated Solid Phase Extraction module should to carry out automated SPE steps: cartridge condition, sample loading, cartridge drying, and elution, elute evaporation and concentrating, reconstitutions and solvent exchange.

SPE cartridge station	<p>The SPE process should be performed in a highly reproducible and reliable manner: It should have</p> <ol style="list-style-type: none"> <li>1. Positive liquid displacement</li> <li>2. SPE cartridges station for 1, 2, 3 and 6 ml</li> <li>3. 1-3 ml and 6 ml SPE cartridge tray with more than 25 positions</li> <li>4. Tray holder for more than 3 sample trays of various size SPE cartridges</li> <li>5. Gripper for plastic transport adaptors</li> <li>6. Preparation syringes modules and 2.0 to 2.45 ml syringes 2 numbers</li> <li>7. Supplied with more than 20 cartridges of 6 ml with adaptors</li> <li>8. Solvent reservoirs 4 numbers of 1 L solvent bottles</li> <li>9. Solvent filling station for four solvent positions of 1 L solvent reservoirs of each and two waste position</li> <li>10. Sample vials of 2 ml, 4 ml and 10 ml</li> <li>11. Elution collection vials 2 ml, 4 ml and 10 ml</li> <li>12. SPE cartridge drying for complete solvent change</li> <li>13. Evaporative concentration of the eluate, with or without adding keeper solvent</li> </ol>
Solvent Evaporation module	<p>It should be configured as module on x-y movement headline/rail/platform of Main Unit. It must be multi-position evaporation station to perform solvent evaporation and sample concentration. Samples in standard vials can be evaporated /concentrated Controlled evaporation through user defined</p> <ol style="list-style-type: none"> <li>1. temperature (ambient to 100°C),</li> <li>2. agitation (from 300 to 700 rpm) and</li> <li>3. defined vacuum (up to 60 mbar) levels with vacuum pump</li> </ol> <p>and condense enabling to flexible operation. Evaporation simultaneous 6 samples or more Evaporation vial / tube capacity 10 ml vial (8ml volume), 4ml vial (3ml volume), 2 ml vial (1.2 ml volume)</p>
Software	<p>System license software to control and programming all function and device/module under one software. Software should be able to operate independently and should be able to control and functions. Software should have sample preparation Builder function for Solid Phase Extraction, Washing, Evaporation Software should have built-in maintenance function, simplifying maintenance planning and improving the overall operation</p>

Data processor	Windows based workstation with latest configuration: Monitor-20" or large display LCD based monitor with 4K-UHD resolution for software installation and instrument operation, data storage and analysis Should be along with latest licensed Window OS and other necessary software.
Accessories	Syringes 1000 µl compatible to system 5 no Syringes 10 ml compatible to system 5 nos Tray for 50 vials of 2ml 3 nos Sample Tray for 60 vials of 10 ml and 20 ml or 30 ml each 3nos QuEChERS Cartridges for Food <ul style="list-style-type: none"> <li>• Matrices with high fat (500 No.)</li> <li>• Matrices with high Water content and (500 No.)</li> <li>• Matrices with high pigmented (500 No.)</li> </ul> Tubing, adaptors, frits, joints, and any replaceable item for operation of system 5 sets
Power requirements	230 V / 50 Hz – 230V/60Hz
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>
Recommendations or Warnings	Any warning signs would be adequately displayed
Performance certificate	From at least two institution where same model has been installed in the previous 2 years
Warranty	2 years after satisfactory installation and working excluding consumable parts and accessories.
After sales service/ Post warranty	Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number; Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail. Should carry out yearly PM with at least one PM kit Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified
Training	The supplier should provide comprehensive training to users on operation of the instrument and application support onsite as per specifications

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
UPS	Suitable rating UPS (60 min back-up)
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
IQ/PQ/OQ	On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument.
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.
Outage conditions	After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include: <ul style="list-style-type: none"> <li>a. Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>b. Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> <li>d. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also, unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</li> <li>e. Maximum repair turnaround time for</li> </ul>

	equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system.
Payment	Payment only after installation, validation and performance demonstration

## 9. FT-IR WITH ATR & LIQUID CELL

**Application:** Fourier Transform Infrared (FTIR) analysis is a spectroscopic technique that uses wavelengths between 2,500nm and 25,000nm (Infra-Red region). It is particularly useful for testing liquid samples, such as oil, milk and wine and it requires little or no sample preparation.

Specifications	Requirements
General	Fully Computer Controlled Compact FT-IR system with universal sample compartment. System must incorporate an automated internal NIST Traceable Polystyrene film Sample module must be automatically identified • Should have latest digital signal processor • Indicator for operational source and laser
Wave number measurement range	at least 7,800 to 500 $\text{cm}^{-1}$
Wave number accuracy	within $\pm 0.01 \text{ cm}^{-1}$
Resolution	$\leq 0.5 \text{ cm}^{-1}$
Signal to noise ratio	( $\leq 5 \text{ cm}^{-1}$ , $\leq 1 \text{ min scan}$ ) $\geq 30,000: 1$
Optical system	Single / Double beam Sealed and desiccated optics Temperature controlled and moisture / humidity resistant KBr optics
Light	High intensity long life ceramic source Standard interferometers and detectors
Instrument alignment	Instrument alignment and performance to be immune to minor mechanical disturbances Reliable calibration mechanism Auto subtraction of $\text{CO}_2$ and $\text{H}_2\text{O}$ absorptions
Sample analysis	Provision for investigation of both solid and liquid samples
Sample holder	Standard sample cell holders for both liquid and solid samples

Accessories	<ol style="list-style-type: none"> <li>1. Variable temperature Sample cells / Jackets for solidsamples – 2 nos</li> <li>2. Variable temperature Sample Cells / Jackets (KBr windows) for liquid samples – 5 nos</li> <li>3. Variable path length accessories (spacers) for liquid samples – 0.02 mm, 0.05 mm, 0.1 mm, 0.5 mm, 1 mm (2sets of accessories for each path length)</li> <li>4. Hydraulic Press with KBr die and Pellet Holder</li> <li>5. Suitable Mortar Pestle (dia 5-6 cm)</li> <li>6. Suitable Portable De Humidifier to maintain 30- 60% RH</li> <li>7. Temperature and Relative Humidity Digital Indicator with calibration certificate from ISO 17025 accredited lab.</li> <li>8. Reference NIST Standard Polystyrene film (0.3 mm) over the range of 3800 <math>\text{cm}^{-1}</math> to 650 <math>\text{cm}^{-1}</math>.</li> </ol>
Attenuated Total Reflectance	<ul style="list-style-type: none"> <li>• Single / multiple (horizontal) reflection Attenuated Total Reflectance (ATR) with ZnSe prism – as a demountableintegrated unit (minimum range of 7800 – 550 <math>\text{cm}^{-1}</math>)</li> </ul> <p>Variable temperature Cell Holder with temperature controller with one NaCl external window and one KBr</p> <ul style="list-style-type: none"> <li>• external window – for studying both solids and liquid samples</li> </ul>
Temperature range	<p>Heatable with temperature range: minimum 90 to +150 °C</p> <p>Heatable cells with KBr windows for liquid samples – 2 nos</p> <p>Heatable Spacers (2 sets as mentioned above) for variable pathlength</p> <p>Heatable cells with KBr windows for solid samples – 2 nos</p>
Vacuum pump	Suitable high-quality vacuum pump (preferably oil free) for variable temperature cell
Data processor and software	<p>Licensed software should have real time data collection andshould have the facility to continuously monitor the performance of source, detector, power supply and laser.</p> <p>Software applications: Auto calibration, Compare Software,Spectral Search; Quantitative Analysis, Automatic atmospheric suppression; Spectral interpretation for unknowns; Quality checks programs</p> <p>Built-in libraries for edible oils and any other foods</p> <p>Compatible Computer + Monitor + accessories – with latest RAM, suitable software and with Licensed Windows installed with Laser printer</p>
Power requirements	230 V / 50 Hz – 230V/60Hz
Operating manuals, service manuals, othermanuals	<p>Should provide: -</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals in Englishlanguage</li> <li>• List of equipment and procedures required for</li> </ul>

	local calibration and routine maintenance Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.
Recommendations or Warnings	Any warning signs would be adequately displayed
Calibration certificate	Polystyrene film over the range of 3800 cm <sup>-1</sup> to 650 cm <sup>-1</sup> from ISO17025 laboratory
Warranty	2 years after satisfactory installation and working excluding consumable parts and accessories.
After sales service/ Postwarranty	Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number; Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail. Should carry out yearly PM with at least one PM kit Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified
Training	The supplier should provide comprehensive training to users on operation of the instrument and application support on site as per specifications
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
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
IQ/PQ/OQ	On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument
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.
Outage conditions	After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include: a. Preventive maintenance service: The seller will provide

	<p>a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</p> <ul style="list-style-type: none"> <li>b. Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> <li>d. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</li> <li>e. Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system</li> </ul>
Payment	Payment only after installation, validation and performance demonstration



**Table B: Group-2**

S. No	Equipment	Qty
1	MICRO FILTRATION UNIT	1
2	UV-VISIBLE SPECTROPHOTOMETER	1
3	MICROWAVE DIGESTION SYSTEM	1
4	GLASSWARE WASHER/DRYER	1
5	ATOMIC ABSORPTION SPECTROPHOTMETER	1
6	UPLC with PDA, RID, and FLD	1
7	30 KVA UPS	2

**Specifications:**

<b>1. MICRO FILTRATION UNIT</b>	
<b>Application:</b> Used for the collection and preparation of samples, mobile phases, and buffers to obtain the highest quality results from downstream analysis	
<b>Specification</b>	<b>Requirement</b>
All-Glass Filter Holder	With borosilicate glass funnel and base, anodized aluminum spring clamp, silicone stopper, coarse-frit glassfilter support and PTFE-faced funnel and base for <ol style="list-style-type: none"> <li>1. 47 mm disc filters</li> <li>2. 90 mm disc filters</li> <li>3. 25 mm filters</li> </ol>
Stainless Steel Vacuum Filter Holders	Analytical Filter Holders For 25- and 47-mm disc filter.
Filtering Flasks	Side arm connects to vacuum source with 3/8in. I.D. hose. 1 L and 4 L flasks accept no. 8 perforated stopper. 125 mL flask accepts no. 5 stopper.
Filter Forceps	Highly polished stainless-steel forceps blades with beveled, un-serrated tips to prevent damaging the membrane filter.
Oil less vacuum pump	Flow rates of up to 37 L/min
Membrane Filters	Filters 47mm, 90 mm and 25 mm for <ol style="list-style-type: none"> <li>a) Aqueous solvents</li> <li>b) Hydrophobic solvents</li> </ol>
Warranty	2 years after successful installation and demonstration

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.
Payment	Payment only after installation, validation and performance demonstration

## 2. UV-VISIBLE SPECTROPHOTOMETER

**Application** UV-VIS spectrophotometer is the workhorse of the laboratory used in spectrophotometric and colorimetric analysis of analytes, food colors, enzyme assay, hydroxymethyl furfural, coloring and bitter principles of saffron etc.

Specifications	Requirement
System	A fully automated PC Controlled spectrophotometer with double beam optics with pre-programmed applications using conventional quartz / glass cuvettes with all the required accessories.
Operation keys	<ol style="list-style-type: none"> <li>1. Instrument should operate immediately after switch on with no warming up time</li> <li>2. Should be automatically programmed with <b>from PC keyboard</b></li> <li>3. Capable to store method with analysis: &gt; 100 method programs on the instrument or PC &gt; 1000 results with data, evaluation results and used parameters</li> </ol>
Optical Design	<ul style="list-style-type: none"> <li>• Double Beam with sample and reference cuvette positions; Czerny-Turner equivalent Monochromatic /Holographic OR equivalent grating with sealed optics</li> <li>• Reference Compartment Should accommodate cells up to 10 mm path length as standard feature</li> </ul>
Light Source	<ol style="list-style-type: none"> <li>(1) Halogen lamp for Visible range</li> <li>(2) Deuterium Lamp for UV range, light source should be auto automatically selected as per wavelength required.</li> </ol>
Detector	Silicon Photodiode dual detector/PMT
Scan Ordinate Modes	Absorbance, % Transmittance, % Reflectance
Resolution	0.1nm or better.
Wavelength Range	185 –1100 nm
Wavelength Accuracy	± 0.3nm or better for entire range
Wavelength Repeatability	± 0.1nm or better

Scanning Speed	Selectable Variable wavelength scan rate 10nm/min to 2500 nm/min or
Spectral Bandwidth	Variable (0.2/0.5/1/2/4 or 5) nm
Photometric Range	Absorbance = -3.0 to 3.0 Abs or better.
Photometric Accuracy	With Neutral Glass filter @ 546nm : $\pm 0.003A$
Stray Light	Max. 0.05% (220 nm NaI) or better, Max. 0.05% (340,370nm NaNO <sub>2</sub> ) or better Max. 1% (198 nm KCl) or better.
Noise	0.00005 Abs RMS (500nm) or better
Drift	< 0.0005 A/hr (500 nm, 1-hour warm-up)
Baseline flatness	$\pm 0.0005$ Abs or better
Application Software	<p>Compatible Software should be user friendly &amp; simple for data handling with feature like easy to use report publisher, online help and answer wizard, GLP &amp; audit trail and fully compatible with Windows.</p> <p>System built in features such as real time display of concentration, time scan, photometric mode, single/multi-wavelength, capability for event recording (e.g., addition of reagents)</p> <p>Software should have built in</p> <ol style="list-style-type: none"> <li>a. Methods: <ul style="list-style-type: none"> <li>• Absorbance with one or more wavelengths,</li> <li>• Scans, Nucleic acids, Proteins, OD 600,</li> <li>• Evaluation: via factor, standard and calibration curve</li> <li>• Dual wavelength with subtraction and division evaluation</li> </ul> </li> <li>b. Method dependent evaluation: <ul style="list-style-type: none"> <li>• Absorbance, concentration via factor and standard</li> <li>• Concentration via standard series using Linear regression, Nonlinear regression with 2nd and 3rd degree polynomials</li> <li>• Spline analysis,</li> <li>• Linear interpolation (point to point evaluation)</li> <li>• Absorbance allocation via subtraction and division</li> <li>• Ratio 260/280, 260/230, Molar concentration and total yield for nucleic acids.</li> </ul> </li> </ol> <p>The software should be 21CFR part 11 compliant.</p>
Accessories and spares	<ul style="list-style-type: none"> <li>• One pair each of 0.5, 1 and 3-ml quartz cuvettes 10mm path length</li> <li>• One pair each of 0.5, 1, and 3 ml glass cuvettes 10mm path length</li> <li>• Cuvette holder</li> <li>• Deuterium Lamp</li> <li>• Halogen lamp</li> </ul>

	<ul style="list-style-type: none"> <li>Suitable Certified Standards for Validation including Holmium oxide glass filters for wavelength calibration &amp; NIST traceable NIST traceable</li> </ul> <p>NIST traceable Potassium dichromate</p>
Computer and printer	<p>Latest configuration factory set branded PC system with 22-23" Full HD Monitor with printer –B/W – duplex-laser-</p> <ul style="list-style-type: none"> <li>legal, A4 - 1200dpi-up to 21 ppm –capacity with networkCard</li> </ul>
Calibration	<p>Certificate from an ISO 17025 accredited lab spectral calibration. Wavelength check and absorbance check for the calibration of equipment should be performed</p>
Compliance	<p>IQ/OQ/PQ of instrument and Software should be provided along with document</p>
Operation and training component	<p>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 till customer satisfaction</p>
Certificates Performance and safety standards (specific to the device type); Local and/or international	<ul style="list-style-type: none"> <li>Should be FDA/CE/BIS approved product.</li> </ul> <p>Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</p>
Quality requirement	<p>Should be compliant with the requirements of FDA/CE/BIS</p> <ul style="list-style-type: none"> <li>Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>
Supplier/ Manufacturer	<p>Must be ISO certified for quality</p>
Recommendations or warnings	<p>Any warning signs would be adequately displayed</p>
Warranty	<p>Warranted for 3 years after satisfactory installation and working excluding consumable parts and accessories.</p>
Service contract clauses, including prices	<p>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;</p>
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 (original and copy) to be provided;</li> <li>Advanced maintenance tasks documentation, if any.;</li> </ul> <p>Certificate of calibration and inspection</p>
After sales service/ Postwarranty	<p>Contact details of manufacturer, supplier and local</p>

	<p>service agent to be provided, including toll free/ Landline Number; Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail.</p> <p>Should carry out yearly PM with at least one PM kit</p> <p>Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified</p>
<p>Compliance statement</p>	<p>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.</p>
<p>Outage conditions</p>	<p>After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include:</p> <ol style="list-style-type: none"> <li>a. Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>b. Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> <li>d. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</li> <li>e. Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system</li> </ol>

Payment	Payment only after installation, validation and performance demonstration
---------	---

<b>3. MICROWAVE DIGESTION SYSTEM</b>	
<b>Application:</b> Microwave digestion is a common technique used for elemental analysis. It is used to digest the food samples for their quantification using instruments like ICP-MS.	
<b>Requirement</b>	<b>Specification</b>
General	The instrument should have a superior pressure venting which is not temperature dependent so as to prevent any loss of volatile metals and should have homogeneous microwave field to avoid sample burning
System	Microwave digestion system should have temperature and pressure control mechanism. The system should be software controlled. Different types of rotors available for the digestion of the different type samples should also be quoted. Necessary consumables and maintenance parts should also be quoted to run instrument trouble free
Instrument Design	The system should be a standalone work station and should have <ul style="list-style-type: none"> <li>• The System should have the feature of simply choose a method and it automatically recognizes the vessel type, counts the vessels and determines all of the parameters necessary for a fast, completed digestion</li> <li>• Should have provision that user can set the desired parameters for digestion</li> <li>• Should have Automatic Microwave power application depending on the load</li> <li>• Auto sensing of temperature and pressure inside the vessel</li> <li>• Be capable of processing different amounts of samples (from 0.3 g up to 2 g per vessel/) in the same run assuring the same conditions of temperature and pressure</li> </ul>
Display	The Instrument should have the high-resolution, colour touch screen, acid resistant, LED/LCD screen should serve as controller and display Should provide training videos for sample preparation vessel assembly, system use, and maintenance Should have Data management – Easy access to stored methods, real-time data and results of past runs Should be able to display the detailed methods, graphs of

	temperature and power against time and temperature of individual vessels.
Interlocks	The system should have good interlocking system for safety and cavity door.
Rotor & Vessel Assembly	<p>High pressure and high temperature rotor with at least 12-20 PTFE vessels, work station &amp; torque wrench.</p> <p>Vessels on the rotor should be segmented for easy use. Maximum Temperature capacity of vessel up to 300 °C Pressure capacity of vessel up to 100 bar (1500 psi) or more</p> <p>Vessel volume: offered vessels should be able to handle volumes as minimum as 3 ml, 10 ml, 15 ml &amp; 25ml</p> <p>Vessel Material- PTFE-TFM</p> <p>Every vessel must have a vent-and-reseal spring to safely release the pressure in case of overpressure.</p> <p>Burst-disk membrane or self-releasing / continuous venting device are</p>
	<p>not suitable due to very low performance.</p> <p>Additional twelve numbers of vessels (of both sizes) as specified above should be supplied along with the system</p>
Magnetron	<p>Single/ Dual Magnetron system with rotating microwave diffuser for homogenous microwave power distribution in the cavity.</p> <p>Microwave frequency should be 2450MHz and installed power should be between 1400-1900W and should provide the temperature needed (300 °C) for difficult samples.</p>
Microwave Cavity	<p>The cavity should be made of non-magnetic Rugged high-grade 316 solid steel cavity/ stainless-steel housing with PTFE plasma coating applied at 350 °C for corrosion resistance.</p> <p>Also, all hardware should have 5-layer protective coating for the resistance from acid, alkali and corrosive gases.</p> <p>The Cavity should be constructed with</p> <p>The vessel assembly during a run should be visible from outside</p>
Hardware & Safety	<ol style="list-style-type: none"> <li>a. Instrument should have adequate safety coatings on housing to prevent any corrosion in the cavity. Additional multiple ports on the side walls of the microwave cavity</li> <li>b. Protected against acids and solvents with polymer</li> </ol>

	<p>coating on both inner and outer surfaces</p> <p>c. Self-sealing pressure responsive and explosion resistant door to ensure</p> <p>d. maximum safety even in case of overpressure release</p> <p><b>e.</b> Door completely made of 18/8 stainless steel with <b>glasswindow.</b></p> <p>f. Independent door safety interlocks to prevent microwave emission</p> <p>g. Built-in exhaust system located above the microwave cavity and separated from the electronics to prevent corrosion</p> <p>h. Magnetron protection from reflected microwave power</p> <p>Continuous and PID-controlled microwave emission at all power levels</p>
Sensors	<ol style="list-style-type: none"> <li>1. Temp sensor should be integrated in the system for monitoring &amp; controlling each vessel and cavity temp. Temperature of each vessel should be displayed</li> <li>2. The software should automatically reduce the microwave power in case of over temperature avoiding sample loss</li> <li>3. Automatic Pressure control: should have a pressure sensor which has a total capability of up to 500psi automatically control the pressure. It should be possible to remove the <ol style="list-style-type: none"> <li>a) pressure device at a high pressure. The Vessels should act as self-regulators of pressure</li> </ol> </li> </ol>
Control: User interface	<p>Software must allow the user to edit, save and run multistep unlimited number of methods (minimum 2000) with at least 20GB on board / built in memory for storage of data</p> <p>The software must control all parameter online and display temperature, time and power directly on the terminal/computer. The control terminal should have high resolution LED/LCD Acid Resistant display (minimum 18 cm (7 inch)). Touch screen Should have provision for manual programming storage apart from pre-installed program</p> <ul style="list-style-type: none"> <li>• Continuous display of temperature and power inside the reaction vessels is required</li> </ul>
Output	<ol style="list-style-type: none"> <li>1. One (1) parallel for external printer (HP Deskjet series)</li> <li>2. Minimum two RS-232 serial ports for connecting PC balance and service check</li> </ol>
Computing	<p>PC with most recent processor), 22" Full HD LED Monitor, Laser Printer dual side printing</p>



Certificates Performance and safety standards (specific to the device type); Local and/or international	Should be compliant with the requirements of FDA/CE/BIS Electrical safety conforms to the standards for electrical safety IEC60601- General requirements (or equivalent BIS Standard) Certified to be compliant EN 61326, EN 61000 GLP-validated software for controlling the system
Supplier/ Manufacturer	Must be ISO certified for quality
Operating manuals, service manuals, other manuals	Should provide <ul style="list-style-type: none"> <li>• Hard copy of User, technical and maintenance manuals in English language and. should be available on the system also</li> <li>• List of equipment and procedures required for local calibration and routine maintenance</li> </ul> Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.
Recommendations or Warnings	Any warning signs should be adequately displayed
Warranty	Warranty for 2 years, extendable up to 3 years, after satisfactory installation and working excluding consumable parts and accessories.
Service Support	Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer
Training	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 till customer satisfaction
IQ/PQ/OQ	On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument
After sales service/ Post warranty	<ol style="list-style-type: none"> <li>1. Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number;</li> <li>2. Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail.</li> <li>3. Should carry out yearly PM with at least one PM kit</li> <li>4. Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified.</li> </ol>

	5. Should provide calibration certificates from NABL accredited agency every year during warranty & CMC period. Calibration cost will have to be borne by the supplier.
Compliance statement	<p>The quote should also include a compliance statement vis-à-vis specifications in a "tabular form" clearly stating the compliance</p> <p>2. and giving justification, if any supported by technical literature. This statement must be signed, with the company seal, for its</p>
	authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification.
Outage conditions	<p>After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include:</p> <ul style="list-style-type: none"> <li>a. Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>b. Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>c. Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> <li>d. Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</li> <li>e. Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system</li> </ul>
Payment	Payment only after installation, validation and performance demonstration

#### 4. GLASSWARE WASHER/DRYER

**Application:** Glassware washer and dryer is an automated equipment designed to wash and dry laboratory glassware such as beakers, flasks, and test tubes.

Specifications	Requirements
Chamber volume of Washer/ Dryer	Option 1: 150 – 200 L capacity Option 2: 200 – 275 L capacity. Please quote for both the above options
Internal chamber type	Inner chamber, washing arms and tank filters made of high quality AISI 316 L stainless steel. Spray arms made of AISI 316L stainless steel (DIN 1.4404)
Front Glass Door	Glass Door version – Inside chamber must be visible, while in washing/drying run.
Control System	Soft touch LCD display. Microprocessor controlled.
Cleaning Liquid Dispenser	<ul style="list-style-type: none"> <li>• Minimum two automatic internal liquid dispenser</li> <li>• Standard pre-programmed cycle</li> <li>• At least 10 pre-programmed standard cycles.</li> </ul>
Internal wash temperature control	Fully adjustable wash temp. up to 90 ° C
Circulation pump	For Option 1: 150 – 200 L capacity: Should have heavy washing pump feeding washing chamber spray arms and wash cart direct injection circuit: 550W power (290 L/min) For Option 2: 200 - 275 L capacity: Should have heavy washing pump feeding washing chamber spray arms and wash cart direct injection circuit: 750W power 184.92 gal.US/min (700 L/min)
Steam condenser	Should have Standard steam condenser which prevents vapors from entering into the washing area
External tap water filtering system	Must include all external tap water filtering system, preferably from local supplier
Internal Baskets for placement of glassware inside	Must include basic 3 or 4 multipurpose baskets for storing test tubes, beakers, conical flasks, round bottom flasks, pipettes and petri dishes.
Built in Dryer Unit	Built in forced air dryer unit for drying entire glassware content after the wash/rinse cycle.
Consumables required for washing/ drying cycle	<ul style="list-style-type: none"> <li>• Must provide all necessary washing chemicals for 100 wash run cycle.</li> <li>• All quality washing chemicals must be easily available in Indian market at reasonable price (Indian Rupees).</li> <li>• Imported washing chemicals/ consumables are discouraged.</li> </ul>
Installation and Commissioning	The vendor must carry out the installation and commissioning at site, including the installation of tap water filter system.

	The tap water inlet and drain will be provided at site.
End User Training at site	Necessary end user training and instructions must be provided to all users at site.
List of present users in India	Must provide the list of users/ customers of this equipment in India.
Desirable Specification:	<ul style="list-style-type: none"> <li>• Telescopic bearing railing for loading the basket.</li> <li>• Operator and Service manual with all spare parts list.</li> </ul>
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> </ul> <p>Service and operation manuals to be provided Advanced maintenance tasks documentation, if any.</p>
Recommendations or Warnings	Any warning signs would be adequately displayed
Warranty	2 years after satisfactory installation and working excluding consumable parts and accessories. Provision should be there to extend the warranty up to 3 years (at least).
After sales service/Post warranty	<ol style="list-style-type: none"> <li>1. Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number;</li> <li>2. Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail.</li> <li>3. Should carry out yearly PM with at least one PM kit</li> </ol> <p>Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified</p>
Training	<p>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</p> <ul style="list-style-type: none"> <li>• minimum of two scientific personnel operating the system till customer satisfaction.</li> </ul>
List of Spares and Accessories	List of all spares and accessories with part numbers
Quality Requirement	<ul style="list-style-type: none"> <li>• Should be in compliance with the requirement of FDA/CE/BIS</li> <li>• Electrical safety conforms to the standards for</li> </ul>

	<p>electrical safety IEC 60601- General requirements (orequivalent BIS Standard)</p> <p>Certified to be compliant with IEC 61010-1, IEC61010-2-40 for safety</p>
IQ/PQ/OQ	<ul style="list-style-type: none"> <li>On site IQ, OQ of instrument along with document to be provided &amp; supplier to assist till satisfactory PQ of instrument</li> </ul>
Compliance statement	<p>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</p> <ul style="list-style-type: none"> <li>result in disqualification.</li> </ul>
Outage conditions	<p>After two years of warranty period, 3 years of CAMC shall beundertaken by the supplier. This would also include:</p> <ol style="list-style-type: none"> <li>Preventive maintenance service: The seller will providea minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required.</li> <li>Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a callfrom the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.</li> <li>Response time: The response time of the seller shouldnot exceed 48 hours from the time the breakdown intimation is provided by the Buyer.</li> <li>Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unserviceability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable forthe delayed period.</li> <li>Maximum repair turnaround time for equipment/systemwould be 3 days. However, the spares should be maintained in a serviceable condition to avoid completebreakdown of the equipment/system.</li> </ol>
Payment	<p>Payment only after installation, validation and performedemonstration</p>

## 5. ATOMIC ABSORPTION SPECTROPHOTMETER

**Application:** Atomic Absorption Spectroscopy (AAS) is used for quantitative and qualitative analysis of various metals in variety of food and water samples at the picogram level. It measures the amount of particular wavelength of light absorbed by the element to promote electrons from one energy level to another, higher, energy level. It typically consists of a 'light source' which emits specific wavelengths of light that are ideally only absorbable by the analyte; an 'atom cell or atomizer' which convert the samples into gaseous atoms; a 'detection system' that serves to isolate and quantify the wavelengths of interest and a computer system to control instrument operation and collect and process data

Specification	Requirement
General	Atomic Absorption Spectrophotometer (GTA/FLAME/VGA), Computer Controlled with built-in flame emission mode, Unit for Flame (Air Acetylene and nitrous oxide- acetylene), Graphite Tube Atomizer (GTA), Chiller / Water circulating unit, with dedicated Auto samplers for GTA and Flame with 100 or more vial positions.
Wave length range	185-900 nm or better
Sensitivity	At least 0.9 A for 5µg/ml aqueous copper standard solution with air – acetylene flame
Optics	<ul style="list-style-type: none"> <li>• Dual Beam dual-blazed / holographic Czerny turner Monochromator or equivalent               <ul style="list-style-type: none"> <li>• Focal length: at least 250 mm focal length</li> <li>• Resolution: 1800 lines / mm</li> <li>• Width: Automatic bandwidth of 0.2 to 1.0 nm</li> </ul> </li> </ul>
Flame Atomizer	<ul style="list-style-type: none"> <li>• All coded titanium or equivalent burner with impact bead /Flow spoiler, premix Design</li> <li>• Movement: Permanently aligned or Automatic movement into the sample compartment</li> <li>• Affect from Acids /Organic solvent: Unaffected from attacks by acid solution or organic solvents</li> <li>• Flame Alignment in liquid beam Fully automatic, optimized with motorized burner mount for vertical and/or horizontal burner adjustment</li> </ul>
Nebulizer	High precision able to provide manually adjustable uptake rates material of the nebulizer and related Venturi should be inert to acid solutions and organic solvents.

Flame and Gas Controls	<p>Flame Control: Fully Computer controlled ignition/3 stage safety control ignition.</p> <p>Gas Control: Fully Computer controlled with oxidant and fuel gases monitoring to monitor constant fuel / oxidant ration ignition Safety Function Interlocking system to prevent ignition Essential Interlock Monitor Burner type as well as its presence in position, air selector, flame sensor, liquid trap level, gas supply pressure and air supply anywhere in the network of gas tubing in the system.</p> <p>Automatic Lamp Selection Function Computer controlled Hollow Cathode Lamp selection and alignment</p>
Lamp Holder	<p>At least 8 lamp holders with built in power supplies for Hollow Cathode lamps/ Boosted Hollow Cathode lamps/ Super Lamps/ Ultra Lamps and Electrode – less discharge lamps or equivalent, integrated RFID tool or provision for</p> <p>Lamps recognition, Time of operation, Operation Current etc</p>
Autosamplers	<p>Dedicated &amp; Permanently aligned Auto sampler for GTA, Dedicated Auto sampler for Flame and VGA Units with 100 or more vial positions each.</p> <p>Should have Sample rack for vials &amp; supplied with two sets of sample vials</p>
Operating Parameter setting	Automatic Setting
Read Out /Display	For absorbance as well as concentration, Display of errors or error codes, absorbance range at least upto 2.0 Abs.
Scale Expansion	Scale expansion at least up to 100x
Integration time	Integration time should cover at least 3 to 50 seconds range
Measurement	Measurements of mean, RSD and CV, Background only mode, Integration of peak height and peak areas
Accessories/ Spares	All accessories with Flame AA System
Vapour Generation Assembly:	Should be continuous flow-based hydride / mercury vapour generator to be used with a programmable auto sampler
Precision	Better than or at least 1% at ppb levels of mercury, arsenic etc.
Mercury amalgamation	Mercury amalgamation unit
Absorption Cell	The absorption cell's material should have no effect of the high heat of the flame and the cell for the analysis of mercury should be of a closed cell design

Flame Arrester	Flame arrester should be provided, if applicable in the tubewhich connects the assembly to the absorption cell
Cell Design holder	The design of the cell holder should give a firm and easilyadjustable (for alignment) mounting on the burner head.
System accessories	Complete with necessary reagent bottles, connectors etc.
Hollow Cathode lamps	Hollow cathode lamps. One lamp each for the elements: Arsenic, Antimony, Boron, Calcium, Chromium, Cobalt, Copper, Iron, 19 Nickel, Lead, Manganese, Mercury, Selenium, Tin, Vanadium and Zinc. All lamps should be coded lamps only. Non coded lamps will not be acceptable. Equivalent coded lamps will also be acceptable.
Air Compressor	With Air Filter or equivalent Air Service Unit Complete with pressure regulator quite in operation, necessary tubing and connectors and should meet the air supply requirements of AAS operation
Oil Free Pump	Oil- free pump and moisture trap Corrosion Resistant to acidic vapour and the drain value (if any) should be made ofstainless steel of equivalent corrosion resistant material
Nitrous oxide gasregulator	Nitrous oxide gas regulator (two stage) with heater, with necessary tubing and connectors. Transformer if necessary should be provided to transformthis supply to the requirements of the heater. The heater should work on 230±10volts 50 Hz AC power supply
Acetylene Gas regulator	Acetylene gas regulator (two stage) with necessary tubingand connectors
Nitrogen and ArgonGas regulator	Nitrogen and Argon regulator (two stage) with necessary tubing and connectors
Graphite FurnaceSystem	Graphite Tube: Atomizer Should be computer controlled fully enclosed graphite tube system consisting of stabilized temperature / total pyrolytic graphite plate form/wall atomization. The system should also be equipped with an integrated graphite furnace camera for easy autosampler tip alignment and real time viewing of the process happening in graphite furnace.
Background correction technology	The system should be fitted with D2 background correction for flame technique and Zeeman background correction for furnacetechnique.



Gas Supplies	Provision of two gas supplies (program selectable) with independent control over the gas supply through the furnace
Heating Rate	Heating rate of at least 2000°C per second
Temperature Range	Temperature range ambient to 2600°C or more in 10°C Increments
Feedback system	Feedback system for furnace temperature control, interlocks for water, gas, temperature, furnace door, graphite tube damage and mains power
Temperature Programming	At least 8-10 steps temperature programming facility with flexibility of program selection, ramp time, gases, gas flow and read trigger for 20 each temperature step
Furnace Control:	Computer controlled with appropriate provision for print out of the furnace and sample parameters
Display	Calibration data / graphs, temperature profiles, signal graphics and the instrument status onscreen
Memory:	Memory should be able to store at least ten nonvolatile Programs
Cooling Water Re-circulation Unit	Water circulation unit of appropriate capacity. No discharge of water from this water circulation unit
Data work station	<p>Application Software:</p> <ul style="list-style-type: none"> <li>• Program facility with multitasking software</li> <li>• Should provide complete control of instrument with instrument status display and its various accessories.</li> <li>• Provide accurate and reproducible time averaged, integration, non – averaged integration, multi-level calibration.</li> <li>• Software should handle instrument linear absorbance reading, concentration, or emission intensity, integration time, built-in statistics, calibration equation control, slope of analytical curve using operator selective calibration standard</li> <li>• Built-in interface for computer connection and use of optional accessories.</li> </ul> <p>Comprehensive quality control protocols facility including blank, multiple quality control standards, QA/QC audit trail and calibration failure.</p>
Standards	AAS standard reference materials 100 ml, 1000 ppm from NIST one each for all metals
Computer system:	<ul style="list-style-type: none"> <li>• Make: Reputed brand such as HP/Compaq/IBM/ Dell</li> <li>• Processor: Intel core 2 duo processor 3.00 GHz or highest version</li> <li>• RAM: 4 GB (upgradable up to 8 GB) HDD 500 GB ultra DMA or higher HDD (7200 RMP)</li> </ul>

	<ul style="list-style-type: none"> <li>• Monitor: 21" TFT – LCD Flat Colour</li> <li>• CD ROM: 52X CD- ROM</li> <li>• DVD-CDRW: 32X DVD-ROM and CDRW – combo Drive Max speed 48x24x48</li> <li>• Ports: 2 serial, 1 parallel and 2 USB front 6 rear USB2 PS/2 Port, 1 VGA integrated Port 1line in/out port</li> <li>• Key Board: 104 keys</li> <li>• Mouse: Optical mouse with pad</li> <li>• Ethernet: 32 bits auto selectable 10/100 MBPS</li> <li>• Graphics: Internet ready with integrated graphics</li> <li>• Sound: Integrated sound card and inbuilt stereo speakers</li> </ul> Printer HP Laser jet Printer 1200 x 1200 dpi 12 PPMblack.
Operation software	<ul style="list-style-type: none"> <li>• Preloaded Windows of most recent version of operating system with License</li> <li>• MS Office Most recent licensed version with media, manual</li> <li>• Preloaded Antivirus with latest version along with License</li> </ul>
Additional items	<ul style="list-style-type: none"> <li>• Operation Kit: Manufacturers Standard Operation Kit including all required items, tubing, fittings for startup / regular operation of instrument.</li> <li>• Operation / maintenance: Manual Operation / maintenance Manual for each unit Analytical manual</li> <li>• Analytical manual: including applications for flame, VGA and graphite system Service Manual</li> <li>• Service manual: with one set of required tools for each system / unit</li> <li>• Trouble Shooting Charts, Spare parts Catalogue, Application Notes for trace metal analysis in food and water samples</li> <li>• Dust Cover One for each unit</li> </ul> Consumables for 5000 analyses for each of the following units for each of the following units: Flame AAS (basic unit, burner system) Vapor generation assembly Graphite Furnace Atomizer and Auto samplers
Supplier/ Manufacturer	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>
Recommendations or Warnings	<ul style="list-style-type: none"> <li>• Any warning signs would be adequately displayed</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>• 2 years after satisfactory installation and working excluding consumable parts and accessories. Provision should be there to extend the warranty up to 3 years (at least)</li> </ul>
Training	<p>The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed)</p> <ul style="list-style-type: none"> <li>• and provide on-site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</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
Quality Requirement	Should be compliant with the requirements of FDA/CE/BIS Electrical safety conforms to the standards for electrical safety IEC60601- General requirements (or equivalent BIS Standard) Electrical Safety conforms to EN 61010-1:2016/61101-1/IEC61010-2-40 Should have necessary certification for safety and quality standards from national/ international bodies Electromagnetic compatibility as per 61326-1:2013
IQ/PQ/OQ	On site IQ, OQ of instrument along with document to be provided & supplier to assist till satisfactory PQ of instrument
After sales service/Post warranty	Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number; Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail. Should carry out yearly PM with at least one PM kit Comprehensive AMC cost/rate for 3 years after warranty shall be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified
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.
Outage conditions	After two years of warranty period, 3 years of CAMC shall be undertaken by the supplier. This would also include: (i) Preventive maintenance service: The seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional checkups and minor adjustments/tuning as may be required. (ii) Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable. (b) Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer. (c) Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unavailability should not exceed 2 working days at one

	<p>time. Required spares to attain this serviceability may be stored at site by the seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime 'Liquidated Damages' would be applicable for the delayed period.</p> <p>(d) Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system.</p>
Payment	Payment only after installation, validation and performance demonstration

<b>6. UPLC with PDA, RID, and FLD</b>	
<b>General</b>	<ul style="list-style-type: none"> <li>• Quaternary solvent system with degasser, Auto sampler, Column oven included</li> <li>• The system has the capability to operate the column range from sub 2µm particle size</li> <li>• Total system (including pump, detector and auto sampler) should be capable of operation ranging upto 15000 psi</li> </ul>
<b>Pump</b>	<ul style="list-style-type: none"> <li>• Quaternary Gradient pump is capable of switching between four solvents channels capable of operation ranging upto 15000 psi</li> <li>• Online Vacuum Degassing have 4 Lines</li> <li>• Automatic Purging facility</li> <li>• Operating flow range: 0.0010 ml/min to 5.000 ml/min with 1µl increments</li> <li>• Plunger seal wash Integral, active included</li> <li>• Programmable Gradient profiles available</li> <li>• Flow rate accuracy is be ±1.0%</li> <li>• Flow rate precision is &lt;0.07% RSD</li> <li>• The complete eluent flow path is made of material TFE/PDD copolymer, FEP, PEEK, PPS, stainless steel, polyimide for the analysis of biomolecules at demanding eluent conditions (pH 2-12.5, max. 1 mol/L chloride concentration, no buffer additive limitation).for polar analytes.</li> <li>• compressibility compensation is automatic using software</li> </ul>

	<ul style="list-style-type: none"> <li>• The default gradient delay volume is upto 350uL</li> <li>• The pump has automatic purge function with valve included</li> <li>• The gradient/Composition accuracy is than±0.4%</li> <li>• The gradient/Composition precision is &lt; 0.15% SD</li> </ul>
<b>Auto sampler with SampleCooler</b>	<ul style="list-style-type: none"> <li>• The Auto sampler must accommodate not less than 100 vials</li> <li>• Injection/Precision accuracy less than ±0.25% RSD</li> <li>• Vial capacity – 2ml</li> <li>• Injection range: From 0.01– 20 µL .</li> <li>• Needle washing facility –has needle washing facility from internal and external side programmable</li> <li>• The complete eluent flow path is made of material TFE/PDD copolymer, FEP, PEEK, PPS, stainless steel, polyimide for the analysis of biomolecules at demanding eluent conditions (pH 2-12.5, max. 1 mol/L chloride concentration, no buffer additive limitation).</li> <li>• Precision - &lt; 0.25% RSD</li> <li>• Sample carryover - &lt;0.0007% with caffeine/standard supported by Lab generated data.</li> <li>• It has the facility of keeping the sample in a cooling condition (temperature range from 4 to 40° C.</li> </ul> <p><b>Auto Sample has capability like dilution, addition and load ahead</b></p>
<b>Column oven</b>	<ul style="list-style-type: none"> <li>• Temperature range ambient + 5 to 80 C in programmable 0.10 C increments</li> <li>• Column oven to accommodate 5-30 cm column length/dimension.</li> <li>• Column oven should have suitable technology with uniform heating technology.</li> <li>• Temperature accuracy ±0.5 °C with calibration</li> </ul> <p><b>Temperature stability ±0.1 °C or better</b></p>
<b>High Sensitivity Fluorescence Detector (FLD)</b>	<p><b>Excitation Range : 200-1200nm</b></p> <p><b>Emission Range : 200-1200nm</b></p> <p><b>Light source: Xenon Flash Lamp lifetime 4000 hours</b></p> <p>Sensitivity : S/N &gt; 500</p> <p><b>Bandwidth : 20 nm</b></p> <p>Sampling Speed : 74 Hz,148Hz</p> <p><b>Wavelength accuracy: ± 3 nm</b></p> <p>Flow cell having <b>8 µL</b> volume &amp; Pressure tolerance of 20bar (2 MPa) pressure should be offered.</p> <p><b>Simultaneous measurement of 4 wavelength and Wavelength</b></p>

	<b>Scanning features should be built-in.</b>
<b>Photo Diode Array (PDA) Detector:</b>	<ul style="list-style-type: none"> <li>• <b>Light Source: Deuterium</b></li> <li>• Long Life Deuterium lamp with 2000 hrs operation.</li> <li>• Diode width: 0.5 nm</li> <li>• Number of Photo diodes Elements: 1024</li> <li>• Wave length range: 190- 640 nm</li> <li>• The detector should be capable to simultaneously acquire 8 channels of single-wavelength data along with 3D data</li> <li>• Wave length accuracy: <math>\pm 1</math> nm</li> <li>• Noise: <math>0.3 \times 10^{-5}</math> AU or better -</li> <li>• Linear Range: &lt;5% at 2.5AU</li> <li>• Calibration of Optics: Auto calibration for GLP compliance</li> <li>• Flow Cell volume : 1 <math>\mu</math>L</li> </ul> <p><b>Safety: Liquid leakage detection and auto put off of pump. Easy cleanable flow cell.-</b></p>
<b>Refractive Index Detector</b>	<ul style="list-style-type: none"> <li>• Refractive index measurement range is 1 to 1.75 RIU</li> <li>• Noise: <math>1.25 \times 10^{-9}</math> RIU</li> <li>• Drift: <math>2 \times 10^{-7}</math> RIU/h</li> <li>• Zero adjustment: Autozero, Optical Zero, Fine Zero supported by lab generated data.</li> </ul> <p><b>Cell: Volume 8<math>\mu</math>L</b></p>
<b>Post Column Photochemical Derivatization unit (if required for the analysis of mycotoxins)</b>	<b>Should supply Post column photochemical Derivatization unit for The analysis of mycotoxins. Derivatization is done photochemically with the UVE under UV light radiation at 254 nm</b>

<p><b>Computer platform and Software</b></p>	<ul style="list-style-type: none"> <li>• Suitable branded computer, i7 or equivalent Advanced processor with 16 GB DDR3Memory, Up to 1 TB SATA hard drive (7200 RPM) or better for software requirements of HPLC DVD-RW 22" LED Monitor with suitable authorized operating system, 4 USB Port or higher configuration.</li> <li>• <b>Licensed MS Office to be included along with the system</b></li> <li>• Software is Multitasking type. It must acquire and process the data simultaneously.</li> <li>• Workstation is able to control the UHPLC with FLD and PDA &amp; acquire, store, process and reproduce the data by the same computer.</li> <li>• Software has automated calibration and Quantitative optimization.</li> <li>• Automated Quantitation and reporting of acquired samples.</li> <li>• <b>Chromatography software with integrated Oracle/SQL database for the easy retrieval of data in case of disaster.</b></li> <li>• Suitable Laserjet B/W Printer will be supplied.</li> <li>• Software Open Lab comply with 21 CFR Part 11 regulations and Support GLP operations -</li> </ul>
<p><b>Instrument Performance Verification/IPV (IQ,OQ,PQ)</b></p>	<ul style="list-style-type: none"> <li>• Automated system generated OQ and PQ report should be submitted</li> <li>• To be done free of cost with traceable calibration standards for the first 2 years (at installation &amp; at every maintenance visit of each year) with PM kits for UHPLC including detectors with lamp, Post column derivatiser unit, UPS with its accessories and all associated supply of UHPLC</li> <li>• Duration of PM visit with all standards with supply of PM kit is minimum two (02) per year.</li> <li>• Documents, PM Kits &amp; calibration standards etc to be supplied along with instrument at every two PM visit per year free of cost during warranty period.</li> <li>• OQ/IPV with report should be done free of cost with supply of PM Kits and calibration standards during warranty period.</li> <li>• Satisfactory performance certificate should submit to the laboratory after calibration of UHPLC including detectors with lamp, Post column derivatiser unit, UPS with its accessories and all associated supply of UHPLC before one month of warranty period expired with supply and fixation of PM kits of UHPLC system. UPS with its accessories and all associated supply of HPLC before one month of warranty period expired with supply and fixation of PM kits of HPLC system.</li> </ul>
<p><b>Warranty</b></p>	<ul style="list-style-type: none"> <li>• Minimum 3 years from the date of completion of IQ, OQ and PQ of UHPLC to the user satisfaction including PDA, FLD Detectors, POST COLUMN DERIVATISER and UPS all</li> </ul>

	<p>associated accessories of UHPLC.</p> <ul style="list-style-type: none"> <li>• The date of warranty period for UHPLC including detectors with lamp, POST COLUMN DERIVATISER unit, UPS and all associated supply of UHPLC will start from the date completion of IQ, OQ and PQ of UHPLC.</li> <li>• It should cover hardware, software as well as wear and tear consumables (except column and sample preparation), prompt service (within 24 hours on-call), training and application support during the period.</li> <li>• In case of breakdown of the system, the servicing to be done immediately by the supplier during the warranty period and maximum down time period is 24 hrs, if it's not attended the warranty will extends accordingly.</li> </ul>
<p><b>After sales service/Post Warranty</b></p>	<ul style="list-style-type: none"> <li>• Should have a good after sales service/technical support capable of reaching at short notice the places where UHPLC is proposed to be installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail for UHPLC including PDA, FLD with POST COLUMN DERIVATISER unit and UPS</li> <li>• Comprehensive AMC cost/rate for HPLC including PDA, &amp; FLD with POST COLUMN DERIVATISER unit for 5 years to be quoted. Terms and conditions for the comprehensive AMC, after the warranty period has to be specified.</li> </ul>
<p><b>Spares and accessories</b></p>	<p>The following consumables, but not limited to should be supplied along with instrument.</p> <ul style="list-style-type: none"> <li>• C18 (100 x 4 mm BDS, 3 <math>\mu</math>m ) column or similar column suitable for analysis of Natural and synthetic antioxidants like vitamin C, vitamin E, BHT butylated hydroxytoluene, BHA butylated hydroxyanisole, TBHQ mono-tert-butylhydroquinone, THBP 2,4,5-trihydroxybutyrophenone, PG propyl gallate, OG octyl gallate, DG dodecyl gallate, Ionox-100 4-hydroxymethyl-2,6-di(tert-butyl)phenol, NDGA nordihydroguaiaretic acid, TDPA 3,3'-thiodipropionic acid, ACP ascorbyl-palmitate</li> <li>• C18, (125 x 4 mm Hypersil BDS, 3 <math>\mu</math>m) column or similar column suitable for analysis of Preservatives like benzoic acid, sorbic acid, propionic acid, methyl-, ethyl-, and propylesters of p-hydroxy benzoic acid (PHB-methyl, PHB-ethyl, and PHB-propyl).</li> <li>• HILIC [Analytical Mixed mode column [WAX/SCXHILIC] (4.6X100/150 mm, 3<math>\mu</math>m) (1 nos) or equivalent column</li> <li>• C30 HPLC/UHPLC [(4.6X100/150 mm, 3<math>\mu</math>m) (1 nos)] or equivalent column.</li> </ul>



	<ul style="list-style-type: none"> <li>• C18 ODS, 100 × 2.1 mm id, 3-µm or suitable for analysis of aflatoxin like B1, B2, G1, G2.</li> <li>• Amide-HILIC [4.6 mm id , 25 CM length and 3u size ] or equivalent column.</li> </ul> <p>Each column should be supplied with individual and suitable guard column holder (1 each) and guard column (5 each).</p> <ul style="list-style-type: none"> <li>• No of Coils for Post Column photochemical Derivatization unit should supply along with system : 2 no's (if Quoted)</li> <li>• certified Vials (1.5 mL) with cap and septa 1000 Nos each-</li> <li>• Poly Spring inserts 150uL 1000 nos each</li> <li>• High Recovery Vials (1.5 mL) with septa cap 1000 nos each</li> <li>• Amber Vials (1.5 mL) with septa cap 1000 nos each</li> <li>• PM kit for UHPLC for trouble free operation during warranty period should be provided along with instrument free of cost every year.</li> <li>• Injection Loop of 50ul, 100uL for the auto sampler should be offered. Qty-1.</li> <li>• UPLC Columns Method Development Kit 2.1 mm x 100 mm, 4/pk sub to micron (different chemistry columns).</li> </ul> <p>Peak tubing (5 meter), (ferrule 20 Pcs)</p>
<b>Experience</b>	The supplier should have experience of at least 5 installations of quoted model with feedback having no adverse remark and operating UHPLC with PDA, FLD in India. Performance Certificates should be enclosed.
<b>Delivery</b>	The instrument supplied to the site of address provided. If any permit such as road permit/way bill, customs/excise duty, octroi or any taxes should be borne by the supplier. If any documents required for the above purpose, the office may consider to provide on request prior intimation.

#### S.No.7 UPS

MODEL	AHX
RATING	5KVA-30KVA
TECHNOLOGY	True Online Double Conversion PWM IGBT Based
INPUT	
Input Phase	1 ph/3ph
Input Voltage Range	
Single Phase	160V-280VAC
Three Phase	400 VAC 3 Phase ±20%
Frequency	50 HZ ± 10%
Power Factor	>0.9
OUTPUT	
Output Phase	1 ph

Output Voltage Range	
Single Phase	220/230 VAC $\pm$ 1 %
Three Phase	400/415 VAC $\pm$ 1 % - 3 phase & Neutral
Power Factor	> 0.8
Efficiency	>90%
Crest Factor	3:1
Wave Form	Sinewave
Overload	100% Continuous, 125-150%-30 Sec, > 150%-10 Sec
Static / Manual Bypass	Static Bypass Available/Manual Bypass Optional
<b>BATTERIES</b>	
DC Voltage	192-384V
Charger Capacity	10 Amp
Extended Charger	Available
<b>INTERFACE COMMUNICATION</b>	
Standard	Rs232
Optional	SNMP
ISOLATION TRANSFORMER	Yes Available
REDUNDANCY	-
<b>OTHERS</b>	
Display (Imp. Parameters)	LCD
Operation with DG	Compatible with DG Power Source
Operating Temp/Humidity	0 - 40 °C - 95% (Non condensing)
Remote Operation	Remote on/off control panel (optional)
<b>OPTIONAL</b>	
IGBT Rectifier	Available
High Input Power factor	Upto 0.99 Available
High Output Power factor	Unity
Wide Input Range	Upto $\pm$ 30%
3 Phase Output	200/220 VAC Phase to phase

**Location Details :**

**Director, IPM, Public Health Laboratories & Food (Health) Administration, Food Laboratory, Visakhapatnam in Andhra Pradesh**

## SECTION – VI

### PRE - QUALIFICATION CRITERIA

(Referred to in clause 13.3 of ITB)

#### I. Terms of Qualification for Equipment:

The Authorized Distributor or manufacturer should have supplied similar equipment as specified in the schedule of requirements to any Indian Institutions, up to the following quantity in any one of the last three calendar/financial years and completed the supplies within the stipulated delivery period. The Supplied units should be in working condition without any adverse remarks for the last two years as on the date of bid notification.

- (a). at least equal of the quantity offered or 25, whichever is lowest, if the tender quantity is  $\leq 49$  (or)
- (b). at least 50% of the quantity offered or 70, whichever is lowest, if the tender quantity is between 50 and 199
- (c). at least 35% of the quantity offered or 125, whichever is lowest, if the tender quantity is between 200 and 499
- (d). at least 25% of the quantity offered, if the tender quantity is  $> 500$

- The bidder should furnish the information on past supplies and satisfactory performance in the proforma given under Section XI- Format B1, duly attested by the Bid signatory.

- **Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate Section XI. The documentary proof will be a certificate from the consignee/end user with cross-reference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished.**

- Bidders shall invariably furnish documentary evidence (End-user Certificate) in support of the satisfactory operation of the equipment as specified or a CA/Statutory auditor Certificate to that extent as per the format provided in the Section XI- Format B2

- The Bidder shall have an Avg. annual turnover in the last three financial years of not less than the amount specified against each item in the Schedule of the Requirements and also to have a positive net worth as per the latest Annual Accounts.

- Towards the above, the bidder should furnish data as per the Format (B3) given in Section- XI, to support that he has the financial capacity to perform the contract. Further the bidder as to submit the corresponding Balance Sheets and Profit and Loss Accounts for verification

- a) The Manufacturer, must have necessary quality certifications for processes such as ISO 9001 Quality Management System for Organization / ISO 13485 Quality Management System for Medical Device.
- b) Full Quality Assurance System Approval certificate Management System Certification for Medical Devices and their equivalent International Standards certificates as BIS/CE/USFDA etc.

## **II. Terms of Disqualification:**

1. The Bidders who has withdrawn their bids in any of the previous tenders of APMSIDC
2. A bidder who is placed on the black-list by either APMSIDC or by any other State /Central government's department or organization for the product offered with his bid in the last 3 years
3. A bidder who is placed on the black-list by either APMSIDC or by any other State / Central government's department or organization in the last 3 years
4. A bidder who is currently blacklisted / debarred either by APMSIDC or by any State Government or Central Government Department or Organization
5. The bidder who has been declared as 'undependable supplier' for two (2) items or in two (2) instances in the last one year by the APMSIDC and
6. The bidders against whom there have been reports of substandard Equipment and/or service are liable for disqualification.
7. **In past performance documents related to Trading will not be considered.**

Note: In all the above cases, the disqualification cut-off date will be till the contract is signed

- III. Not with standing anything stated above, the purchaser reserves the right to assess the Bidders capabilities and capacity to perform the contract should circumstances warrant such an assessment in the overall interest of the purchaser deciding on award.

**SECTION – VII (A): BID FORM**

(Name and Address of Purchaser)

Date \_\_\_\_\_

To  
The Managing Director,  
APMSIDC, Mangalagiri, Guntur.

Contract No. \_\_\_\_\_

Gentlemen:

Having examined the Bidding Documents including Addenda No. \_\_\_\_\_ the receipt of which is hereby duly acknowledged, we, the under-signed, offer to supply and deliver \_\_\_\_\_ (Description of Goods and Services) in conformity with the said Bidding Documents for the sum as given in the Price Bid (electronically) or such other sums as may be ascertained in accordance with the schedule of prices furnished and made part of this bid.

We undertake, if our bid is accepted, to commence delivery within 60 (Number) days and to complete delivery of all the items and perform incidental services as specified in the contract within 60 (Number) days calculated from the date of receipt of your Notification of Award/Letter of credit.

If our bid is accepted we will obtain the guarantee of a bank in a sum not exceeding 5% of the Contract price for the due performance of the Contract

We agree to abide by this bid for a period of 90 (Number) days from the date fixed for bid opening under Clause 22 of the Instruction to Bidders and shall remain binding upon us and may be accepted at any time before the expiration of that period.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in India like “The Prevention of Corruption Act 1988”

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this \_\_\_\_\_ day of \_\_\_\_\_

Signature: \_\_\_\_\_

(in the Capacity of) : \_\_\_\_\_

Duly Authorized to sign bid for and on behalf of

**Section VII (B) - Model PRICE Schedules (available on e-procurement Platform)**

Information Technology Electro. (P) | <https://tender.apcprocurement.gov.in/ViewItemFormatX.html#>

Current Tender Details		Tender Details	
Tender ID: 1136	Tender Category: PRODUCTS	IFB Number / Tender Notice Number: 1/14/MSIDC/2016-17, Dated: 07.05.2016	Tender Evaluation Type: L1+UW
Tender Type: OPE	Tender Opening Date: 17/05/2016 05:15 PM	Estimated Contract Value: 0	Bid Submission Closing Date: 01/06/2016 05:15 PM

Schedule Details	
Schedule Name: Miscellaneous	Schedule Description: Different items

Item Details	
Item Code: Surg001	Item Name: GRAM STAINING KIT
Item Description: As per tender document	Item Specification: As per tender document

Add / Edit Cost Component Details			
ID	Component Name	Type	Percentage / Amount
B001	CST	--SELECT--	
B002	Customs Duty	--SELECT--	
B003	Discount	--SELECT--	
B004	Entry Tax	--SELECT--	
B005	Excise Duty Including Cess	--SELECT--	
B006	Freight Charges	--SELECT--	
B007	Insurance Charges	--SELECT--	
B008	Other Charges, if any	--SELECT--	
B009	Packaging & Forwarding Charges	--SELECT--	
B010	VAT	--SELECT--	

Remarks:

Total KIT Quantity	Offered Quantity (A)	Brand/Make/Model	Basic price Unit (INR) (B)	Basic price Unit/10 Words	Total Cost Component Unit (INR) (C)	Landed Price Per Unit (B+C)
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**SECTION – VIII**  
**Bid Security Form**

To

The Managing Director  
APMSIDC, Mangalagiri, Guntur.

Whereas \_\_\_\_\_  
(hereinafter called "the Bidder" has submitted its bid dated \_\_\_\_\_ for  
the supply of \_\_\_\_\_ (hereinafter called "the  
Bid")

KNOW ALL MEN by these presents that WE \_\_\_\_\_  
of \_\_\_\_\_ having our registered office  
at \_\_\_\_\_ (hereinafter called the Bank") are bound unto  
\_\_\_\_\_ (hereinafter called "the purchaser") in the sum of \_\_\_\_\_ for which  
payment will and truly to be made to the said purchaser, the Bank binds itself, its  
successors and assigns by these presents. Sealed with the common Seal of the  
said Bank this \_\_\_\_\_ day of \_\_\_\_\_.

THE CONDITIONS of this obligation are:

If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder  
on the Bid form; or

If the Bidder, having been notified of the acceptance of its bid by the Purchaser  
during the  
period of bid validity:

- Fails or refuses to execute the contract form if required
- Fails or refuses to furnish the performance security, in accordance with the  
Instruction to Bidders
- Does not accept the correction of the bid price pursuant to Clause 15.7(c).

We undertake to pay the purchaser up to the above amount upon receipt of its first  
written demand, without the purchaser having to substantiate its demand, provided  
that in its demand the purchaser will note that the amount claimed by it is due to  
owing to the occurrence of one or both of the two conditions, specifying the occurred  
condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of  
the bid validity, and any demand in respect thereof should reach the Bank not later  
than the above date i.e., upto \_\_\_\_\_.

.....(Signature of the Bank)

## SECTION – IX : CONTRACT FORM

THIS AGREEMENT made the \_\_\_\_\_ day of \_\_\_\_\_ between \_\_\_\_\_ (Name of Purchaser) of \_\_\_\_\_ (Country of Purchaser) (hereinafter "the Purchaser") of one part and \_\_\_\_\_ (Name of the Supplier) of \_\_\_\_\_ (City and Country of Supplier) (hereinafter "the Supplier") of the other part.

WHEREAS the Purchaser is desirous that certain Goods and ancillary services should be provided by the supplier, viz, \_\_\_\_\_ (Brief description of Goods and Services) and has accepted a bid by the supply of Goods and services in the sum of \_\_\_\_\_ (Contract price in Words and Figures) (hereinafter "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of Contract referred to;
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
  - (a) The Technical and Price bid of the Supplier
  - (b) The approved Technical Specifications,
  - (c) The General Conditions of Contract,
  - (d) The Special Conditions of Contract, and
  - (e) The Purchaser's Notification of Award.
3. In consideration of the payments to be made by the purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provision of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
5. Brief particulars of goods and services which shall be supplied/provided by the Supplier are as under.



SL NO.	BRIEF DESCRIPTION TO GOODS & SERVICES	QUANTITY TO BE SUPPLIED	UNIT PRICE	DELIVERY TERMS

**TOTAL VALUE:**

**DELIVERY SCHEDULE:**

IN WITNESS whereof the parties here to 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 \_\_\_\_\_ (For the Purchaser)

in the presence of \_\_\_\_\_

Signed, sealed and Delivered by the

Said \_\_\_\_\_ (For the supplier)

In the presence of \_\_\_\_\_

**SECTION- X: PERFORMANCE SECURITY FORM**

To

The Managing Director  
APMSIDC,  
Mangalagiri, Guntur.

WHEREAS \_\_\_\_\_ (Name of the Supplier)  
hereinafter called "the Supplier" has undertaken, in pursuance of Contract No.  
\_\_\_\_\_ dated \_\_\_\_\_ to supply \_\_\_\_\_  
(Description of Goods and Services) hereinafter called "the Contract".

AND WHEREAS it has been stipulated by you in the said contract that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of \_\_\_\_\_  
(Amount of the Guarantee in Words and Figures) and we under take to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limit of \_\_\_\_\_ (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the \_\_\_\_\_ day of \_\_\_\_\_.

Signature and seal of Guarantors

\_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

**SECTION XI**

**FORMAT B1: PROFORMA FOR PERFORMANCE (for a period of last three years)**

(Please see Section VI: Qualification Criteria)

Bid No. \_\_\_\_\_ Date of Opening \_\_\_\_\_ Time \_\_\_\_\_ Hours

Name of the Firm \_\_\_\_\_

Order placed by _____ - (Full address of Purchaser)	Order No	Date	Description of Item	Quantity of ordered Items.	Value of order	Date of completion of delivery		Remarks indicating reasons for late delivery, if any	Has the Supplier received full payment towards the supplies made
						Purchase terms	Actual		
1	2	3	4	5	6	7	8	9	10

**Signature and seal of the Bid Signatory**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SECTION XI**

**FORMAT B2**

**CA (STATUTORY AUDITOR) CERTIFICATE**

**(Please see Section VI: Qualification Criteria)**

**Certificate from the Statutory Auditor**

This is to certify that ..... (name of the Bidder) is a “**Manufacturer/Authorized Distributor**” of the required items offered under the Bid. The Bidder had supplied the quantities shown in the past performance statement and also completed the respective supplies within the stipulated delivery period/s.

Further it is certified that the previously supplied equipment are reported to be in working condition without any adverse remarks from the respective users and some are working for more than two year as per the records as on the date of this Tender notification.

The bidder has previous experience in maintenance and repairs of equipment for \_\_\_\_\_ years and has qualified service staff working with him”.

**Name of Authorized Signatory:**

**Designation:**

**Name of firm:**

**(Signature of the Authorized Signatory)**

**Seal of the Firm**

## SECTION XI

### B3- FINANCIAL CAPACITY OF THE MANUFACTURER

A. Details of Annual Turnover for Preceding 3 Years.

	Year 1 (2021-22)	Year 2 (2022-23)	Year 3 (2023-24)	Average Annual Turnover
Turn Over (In Rs. Crores)				

B. Details of Net Worth

	Year1 (Last Financial Year i.e. as on 31 <sup>st</sup> March 2024)
Paid up Capital (Rs. Cr)	
(Add) Free Reserves (Rs. Cr)	
Total Net Worth (Rs. Cr)	
<hr/> <b>(Signature of Bid Signatory)</b> <b>Seal of the Firm</b>	
Certificate from the Statutory Auditor	
This is to certify that .....(name of the Bidder) has an average annual turnover (in the last three financial years) and Net Worth (in the last financial year) as shown above	
Name of Authorized Signatory:	
Designation:	
Name of firm:	
(Signature of the Authorized Signatory) Seal of the Firm	

**SECTION XI**

**B3-A FINANCIAL CAPACITY OF THE DISTRIBUTOR**

A. Details of Annual Turnover for Preceding 3 Years.

	Year 1 (2021-22)	Year 2 (2022-23)	Year 3 (2023-24)	Average Annual Turnover
Turn Over (In Rs. Crores)				

B. Details of Net Worth

	Year1 (Last Financial Year i.e. as on 31 <sup>st</sup> March 2024)
Paid up Capital (Rs. Cr)	
(Add) Free Reserves (Rs. Cr)	
Total Net Worth (Rs. Cr)	

\_\_\_\_\_  
**(Signature of Bid Signatory)**  
**Seal of the Firm**

Certificate from the Statutory Auditor

This is to certify that .....(name of the Bidder) has an average annual turnover (in the last three financial years) and Net Worth (in the last financial year) as shown above

Name of Authorized Signatory:

Designation:

Name of firm:

(Signature of the Authorized Signatory)  
Seal of the Firm

**SECTION – XII -A**

(Please see Clause 13.3(a) of Instructions to Bidders)  
(to be submitted by manufacturers)

**MANUFACTURER'S AUTHORIZATION FORM**  
No. \_\_\_\_\_ dated \_\_\_\_\_

To  
The Managing Director  
APMSIDC, Mangalagiri, Guntur.  
Dear Sir,

Tender Notice No. \_\_\_\_\_

We \_\_\_\_\_ who are established and reputable manufacturers of \_\_\_\_\_ having factories at \_\_\_\_\_ and \_\_\_\_\_ do hereby authorize M/s. \_\_\_\_\_ (Name and address of Agents) to bid, negotiate and conclude the contract with you against Tender Notice No. \_\_\_\_\_ for the above goods manufactured by us. No company or firm or individual other than M/s. \_\_\_\_\_ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific Tender Notice. We hereby declare that we are willing to provide guarantee/warranty and after sales service during the period of comprehensive warranty/CMC/AMC as per the above tender. We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments tendered within the stipulated time. We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and read with the Clause 10 of Special Conditions of Contract, for the Goods offered for supply against this invitation for bid by the above firm.

Yours faithfully,

(Name) for and on behalf of M/s.

\_\_\_\_\_  
(Name of manufacturers)

Note: This letter of authority is on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer.

**SECTION – XII -B**

(Please see Clause 13.3(a) of Instructions to Bidders)  
(to be submitted by Authorized Distributors)

**MANUFACTURER'S AUTHORIZATION FORM**  
No. \_\_\_\_\_ dated \_\_\_\_\_

To  
The Managing Director  
APMSIDC, Mangalagiri, Guntur.  
Dear Sir,

Tender Notice No. \_\_\_\_\_

We \_\_\_\_\_ who are established and reputable manufacturers of \_\_\_\_\_ having factories at \_\_\_\_\_ and \_\_\_\_\_ do hereby authorize M/s. \_\_\_\_\_ (Name and address of Agents) to bid, negotiate and conclude the contract with you against Tender Notice No. \_\_\_\_\_ for the above goods manufactured by us. No company or firm or individual other than M/s. \_\_\_\_\_ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific Tender Notice. We also hereby undertake to provide full guarantee/warranty/CMC/AMC as agreed by the tenderer in the event the tenderer is changed as the dealers or the tenderer fails to provide satisfactory after sales and service during such period of comprehensive warranty/CMC/AMC and to supply all the spares/reagents during the said period. We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments tendered within the stipulated time. We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and read with the Clause 10 of Special Conditions of Contract, for the Goods offered for supply against this invitation for bid by the above firm.

Yours faithfully,  
(Name) for and on behalf of M/s.

\_\_\_\_\_  
(Name of manufacturers)

Note: This letter of authority is on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer.



**SECTION - XIII**

**DECLARATION FORM**

I / We ..... having Our  
..... office at ..... read and  
understood the terms and conditions contained in the bidding documents under this  
notification for bid and offer our bids unconditional, to the extent not stated at any  
other part of our bid.

We will not quote or supply the equipment/furniture similar to the ones offered  
under this bid notification to any agency or organization in the country, at the rate  
lower than the rate quoted in this present tender.

If we found quoting lower rate than the rate quoted to the APMSIDC, to any  
other agency in the country during the validity of the present contract, we will remit  
the differential cost to the APMSIDC, unconditionally.

Signature :

Date :

Name of the  
Firm and address :

## SECTION XIV

### Check List of Documents to be Uploaded as part of the Bid and Notes to Bidders

#### I. Documents with the Technical Bid

Sl. No	Document Description	Documents to be submitted
1	Process Fee 11,800/-	Online
2	EMD	Online & Offline
3	Bid Form Section VII-A	Online & Offline
4	List of items offered with Make and Model details without prices	Online & Offline
5	Manufacturers Authorization	Online & Offline
6	Past Performance Details Format B1 along with supporting documents	Online & Offline
7	End-User Certificates or CA Certificate as per Format B2	Online & Offline
8	Financial Capability Details Format B3 for Manufacturer	Online & Offline
9	Financial Capability Details Format B3-A Distributor	Online & Offline
10	Details and proof of After-Sales Service facilities	Online & Offline
11	Letter of authorization to sign the bids	Online & Offline
12	Clause-by-clause commentary on technical specifications	Online & Offline
13	Technical and Commercial deviations statements	Online & Offline
14	Copy of the GST Certificate and Details of IT Returns- (Last 3 years), PAN and GST copies.	Online & Offline
15	The Manufacturer, must have necessary quality certification i.e. ISO 9001 & 13485 (Quality Management System for Medical Devices), (wherever required)	Online & Offline
16	Full Quality Assurance System Approval Certificate Management System Certification for Medical Devices and their equivalent International Standards certificates (BIS/CE/USFDA)	Online & Offline
17	Memorandum of Articles	Online & Offline
18	All the uploaded Technical bid, to be attested by a Gazette Officer or properly notarized or self attested	Online & Offline
19	General Information about the Tender	Online & Offline
20	Declaration form	Online & Offline

<b>Sl. No</b>	<b>Document Description</b>	<b>Documents to be submitted</b>
21	DPIIT Certificate (If applicable)	Online & Offline

## **II. Financial (Price) Bid in the format available with the e-procurement platform**

- Please note that the Bidder runs the risk of his bid being rejected if the price schedule contains any conditions.

### **Notes to Bidders**

1. Upload the documents in ZIP format with suitable description as defined above.
2. The scanned documents shall be legible failing which they will not be considered.
3. Sign on all statements, documents, certificates uploaded owning responsibility for their correctness / authenticity.
4. All the statements copies of the certificates, documents etc., enclosed to the Technical bid shall be given page numbers on the right corner of each certificate
5. The tenderer is subjected to be blacklisted and the EMD forfeited if he is found to have mislead or furnished false information in the forms / statements / certificates submitted in proof of qualification requirements or record of performance (Please see Corrupt and Fraudulent Practices Clause)
6. All the Bidders are requested to quote with single option only, for the each item offered and please note that bids with multiple options, for any one or all of the items offered, will be rejected by the purchaser as Non-responsive.

(On Firm letter Head)

Annexure - I

**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE  
DEVELOPMENT CORPORATION (APMSIDC)**

**INSTALLATION CERTIFICATE**

*(to be filled jointly by the Tenderer, head of user institution &  
Representative of the Tender Inviting Authority  
individually for every equipment)*

HOSP CODE/ Hospital Name:				
<b>Equipment Details</b>				
EQPT CODE/ Name of the equipment:		Purchase Order No:		
Make / Manufacturer		Purchase Order Date:		
Model		Purchase Amount		
Serial no.		Project Name		
Location / Department				
Installation Start Date		Completed Date.		
Comprehensive Warranty Start Date		Comprehensive Warranty End Date:		
<b>Preventive Maintenance Schedule (Specify Year &amp; Month)</b>				
YEAR	Visit 1	Visit 2	Visit 3	Visit 4
<b>Contact Details</b>				
SUP.CODE / Name of the Supplier				
Name of Service Engineer		Mobile No.		
Service Centre Manager's name		Mobile No.		
Service center address				
<b>Accessories supplied</b>				
Sl. No.	Item	Qty.	Serial No.	Remarks
<b>To be filled by Institution</b>				
Whether the sticker affixed on all the key components of the equipment or on a conspicuous place in the installed room/storage area?				YES / NO <i>(tick one)</i>
Whether a digital Photograph of the installed equipment taken after				YES / NO

affixing the sticker in the presence of the hospital personnel?			
Whether the Demonstration of the equipment with accessories on the technical specification/key features was conducted to the satisfaction at the time of installation?		YES / NO	
Whether training was conducted to the satisfaction at the time of installation?		YES / NO	
Short supply items, if any			
Remarks of hospital authorities			
Recommend to release payment YES <input type="checkbox"/> NO <input type="checkbox"/>		The equipment is working satisfactorily YES <input type="checkbox"/> NO <input type="checkbox"/>	
The equipment was installed and handed over on <i>(Installation date to be filled in by the Head of the institution or by the end user)</i>			
Name of Service Engr.		Sign.	
Name of End User & Department Mobile No.		Sign.	
Name of Bio Medical Engr. & Organization		Sign.	
Signature of the Superintendent. Mobile No.		Sign. & Seal	
Date: Seal of supplier:	Date: Hospital Seal:		

**Note: The installation report shall be submitted in a single sheet printed back to back and shall be submitted individually for each equipment installed.**

## On Consignee letter Head

Dt: \_\_\_\_\_

**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE  
DEVELOPMENT CORPORATION (APMSIDC)**

**THREE MONTHS PERFORMANCE CERTIFICATE**

*(to be filed by the head of user institution individually for every equipment)*

HOSP CODE / Hospital Name:				
SUP.CODE / Name of the Supplier				
Equipment Details				
EQPT CODE /Name of the equipment:		Purchase Order No:		
Make / Manufacturer		Purchase Order Date:		
Model		Purchase Amount		
Serial no.		Project Name		
Date of Installation		Location / Department		
Whether Equipment working satisfactorily without any problem for one month?			YES <input type="checkbox"/>	NO <input type="checkbox"/>
If No, provide details of equipment failure in the first month <i>(attach additional details if any in a separate sheet)</i>				
BREAK DOWN DETAILS				
Break down Reported Date	Attended date	Rectified date	Attended by	Details of beak down / service
Present status of the equipment		Working satisfactorily <input type="checkbox"/> Not working satisfactorily <input type="checkbox"/>		
Recommended to settle the final payment			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Recommend for trial run for one more month			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Performance of accessories supplied				
Further Training		Required <input type="checkbox"/> Not required <input type="checkbox"/>		
Remarks of hospital authorities				
Three month performance certificate was issued on <i>(date to be filed in by the Head of the institution or by the end user)</i>				
Name of End User & Department			Sign.	
Signature of the Superintendent.			Sign. & Seal	
Date: Seal of supplier:			Date: Hospital Seal :	

**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE  
DEVELOPMENT CORPORATION (APMSIDC)**

**WARRANTY CERTIFICATE**

*(to be filed jointly by the Tenderer, head of user institution & Representative of the Tender Inviting Authority individually for every equipment)*

Date:

APMSIDC Supply order No: .....dated.....

The equipment ..... (*Equipment Name*)

Model No..... bearing serial no .....

was installed successfully at ..... (*Institution*

*Name*) is offered with a comprehensive warranty for a period of..... Years

starting from ..... to ..... including all the

following accessories;

Sl. No	Name of the accessory	Manufacturer's name	Equipment Serial No.	Qty

Name of the Supplier: Signature: Seal:	Name of the Supdt. / End User: Signature: Seal:
--	---

**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE  
DEVELOPMENT CORPORATION (APMSIDC)****PREVENTIVE MAINTENANCE CHECK LIST****Equipment Name.**

Sl. No.	Activities carried out during Preventive Maintenance visit	Visit 1	Visit 2	Visit 3	Visit 4
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					



**Annexure-V**

**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE  
DEVELOPMENT CORPORATION (APMSIDC)**

**CALIBRATION CHECK LIST**

Equipment Name

Model.

Sl. No.	Parameters to be calibrated	Frequency of calibration required
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

**Annexure-VI**

**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE  
DEVELOPMENT CORPORATION (APMSIDC)**

**List of Spare Part**

Equipment Name :

Make:

Model

Sl. No.	Spare name	Cost (inclusive of all charges)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Signature :

Date :

Name of the  
Firm and address :

**Annexure-VII**

**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE  
DEVELOPMENT CORPORATION (APMSIDC)**

**GENERAL INFORMATION ABOUT THE TENDERER**

Name of the Tenderer

Registered  
address of the firm

State:

District

Telephone. No.

Fax. No.

Email.

3	Address			
	State		District	
	Telephone No.		Fax	
	Email		Website	

Type of Firm ( Please  relevant box)

4	Private Ltd.	<input type="checkbox"/>	Public Ltd.	<input type="checkbox"/>	Proprietorship	<input type="checkbox"/>
	Partnership	<input type="checkbox"/>	Society	<input type="checkbox"/>	Others, specify	<input type="checkbox"/>
	Registration No. & Date of Registration.					
	Nature of Bussiness (			-lease <input type="checkbox"/> relevant box)		
5	Original Equipment Manufacturer	<input type="checkbox"/>	Authorized Dealer /Representative	<input type="checkbox"/>		
	Direct Importer	<input type="checkbox"/>	Others, specify.	<input type="checkbox"/>		

**Annexure-VIII**

**SERVICE CENTRE DETAILS**

TOLL FREE NUMBER, IF ANY			
Sl. No	Name and address of the service center (s)	Contact Details	
1		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	
2		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	
3		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	