

Tender No. SURE/KVK/DANTA/2022-23/5865    Date-27/05/2022

Tender Document  
for

Supply, Installation and Commissioning of Machinery and Equipment for Common Incubation  
Centre on a Turnkey basis at KRISHI VIGYAN KENDRA, DANTA BARMER-I  
RAJASTHAN 344001

Name of the Host Institution: KRISHI VIGYAN KENDRA, DANTA BARMER-I

Place: BARMER, RAJASTHAN

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**Krishi Vigyan Kendra**  
**Danta Barmer-I, (Raj.)**  
 Village- Danta, post -Marudi, Gardra Road,  
 Barmer 344001 (Raj.)



**Tender No.** SURE/KVK/DANTA/2022-23/ 5865  
 Date-27/05/2022

**NOTICE INVITING TENDER (NIT)**

**Tender for Supply, Installation, Commissioning of Machines And Equipment for Common Incubation Centre on Turnkey basis at** KRISHI VIGYAN KENDRA, DANTA, BARMER, RAJASTHAN  
 (Name Location, District, State of Common Incubation Centre)

The Host Institute Krishi Vigyan Kendra, Danta, Barmer Rajasthan **Intends to establish Common Incubation Centre (CIC)** for processing of pomegranate, cumin pearl millet, Millets Flaking line, Extrusion line, bakery products and Food testing laboratory. The project is being funded by Ministry of Food Processing Industries under Prime Minister Formalization of Micro Food Processing Enterprises Scheme (PMFME). After the Incubation Centre is fully commissioned, it will be handed over to third party/ private Operation & Management (O&M) agency for operation of Common Incubation Centre (CIC) for processing of pomegranate, cumin pearl millet, Millets Flaking line, Extrusion line, bakery products and Food testing laboratory.

The processing facilities of CIC will be made available to existing and aspiring micro entrepreneurs, SHGs, Co-operative and Groups etc. to manufacture their products with the use of plant and machinery of the Centre. In addition, these Incubation Centers will be utilized for imparting trainings, demonstration and skill upgradation of the beneficiaries of the scheme.

**For and on behalf of** Krishi Vigyan Kendra, Barmer-I Rajasthan  
**Tenders (Two bid systems) are invited at** [www.barmer1.kvk2.in](http://www.barmer1.kvk2.in) , in kvk website.

**1. CRITICAL DATE SHEET**

| S. No. | Particulars                               | Important Dates | Time     | Tender Processing Fee                                       | EMD  |
|--------|---|-----------------|----------|---|--|
| 1      | Re-Issue of Tender documents              | 27-05-2022      | 02:00 PM | 1000/- (DD in favour of Krishi Vigyan Kendra, SURE, Barmer. | Processing Line I (Pomegranate:- 1.69 lakh     |
| 2      | Start date for submission of bids         | 27-06-2022      | 05:00 PM |   | Processing Line II(Cumin) 0.84 lakh            |
| 3      | Last date & time for submission of tender | 29-06-2022      | 05:00 PM |   | Processing Line (bakery products) III 0.43lakh |
| 4      | Date & time of opening of Technical Bids  | 30-06-2022      | 11:00 AM |   |  |

|   |   |  |  |  |  |
|---|---|--|--|--|--|
|   |   |  |  |  |  |
|   |   |  |  |  | Processing Line IV(pearl millet Flaking line)<br>0.62 lakh |
|   |   |  |  |  | Processing LineV (Extrusion line )<br>0.24 lakh            |
|   |   |  |  |  | Processing Line VI(Food testing lab.)<br>0.50lakh          |
| 6 | Date & time of presentation                 | Date & Time will be intimated through Email who qualify in the technical bid. The same will also be displayed in the website of the (Krishi Vigyan Kendra, Barmer-I) <a href="http://www.kvk2.in">http:// www.</a> |  |  |  |
| 7 | Publishing of technically qualified Bidders | Intimated through email/ <a href="http://www.barmer1.kvk2.in">www.barmer1.kvk2.in</a>  |  |  |  |
| 8 | Date & Time of Financial Bid opening        |  |  |  |  |

## 2. SCOPE OF WORK

The agency shall be responsible for supply, installation and commissioning of various machines and equipment for CIC at Krishi Vigyan Kendra, Barmer-I Rajasthan on Turn-key Basis, and extend 2 years onsite Guarantee/Warranty for their supplies. The list of machines & equipment is given in **Annexure –III** of this tender document.

## 3. PERIOD FOR SUPPLY OF ITEMS

- i. The supply of item shall be required to be made to this Institute within 30-45 days for indigenous equipment from the issue of Purchase Order/Supply order and 90 days for imported equipment. The schedule of supplies, installations, commissioning of all equipment should be given in the technical bid.
- ii. The supplied material should be numbered by using good quality paint in the following format: (Tender No SURE/KVK/DANTA/2022-23/5769)
- iii. After the supply of machine as mentioned in the Annexure-II and III, the bidder has to execute its installation & commissioning including necessary civil work, electrical work, plumbing work (water, gas, air etc. as applicable), at the designated site in the location(s). The cost of the same shall not be paid extra and it should be included in price of the respective equipment.
- iv. After the installation & commissioning of machine, the supplier has to provide practical training to Host Institute employees/ O &M Agency Employee as nominated by Host Institute at CIC for minimum period of fifteen working days wherein the training about the machine's operations, maintenance, information about Do's & Don'ts as well as trouble shooting & all other areas which are necessary for smooth functioning of machine

shall be provided. No extra cost shall be paid to the successful bidder for imparting this training.

- v. After the installation & commissioning of machines, minimum three trials are mandatory on minimum capacity and two trials on maximum capacity on suitable intervals of each machine to check smooth functioning of all the machines. In case, unsuccessful trials, the supplier has to extend further trials until satisfaction. No extra cost shall be paid for the raw materials etc., for these trials. Expenditure towards electricity & water shall be borne by the Host Institute.

#### **4. PRE-QUALIFYING ELIGIBILITY CRITERIA**

The tenderers must fulfill the following eligibility criteria: -

- i. The bidder should be an established Manufacturer of Food Processing Equipment or Authorized Supplier/ Dealer, Turnkey Solution Provider or EPC (engineering, procurement and commissioning) contractor for food processing lines.
- ii. The bidder's firm must be registered with the appropriate authority and shall be engaged in manufacturing and/ or supply of similar machines or turnkey execution of for the last three (3) years. The bidder has to enclose Registration Certificate or any other documentary proof.
- iii. The average annual financial turnover during the last 3 financial years ending on 31<sup>st</sup> March of the previous financial year (2020-21) should be at least 1.00 Cr. Copies of audited balance sheet of 2019-20, 2020-21 & 2021-22 to be attached as documentary proof.
- iv. The bidder also required to enclose at least 02 successful satisfactory supply/ work order and installation Certificate/Completion Certificate/Performance Certificate for work in of Food Processing Lines of Rs.50 lakh or more for last 03 years ending 2020-21.
- v. The bidder should have PAN, GST Registration, Udhog Aadhar/ Udyam registration and Import License, as applicable in their case and should submit a copy of each of these documents along with acknowledgement copies of the IT Returns for the last 3 financial years.
- vi. Supplier or Authorized Dealer/distributor of a reputed foreign or Indian manufacturing company. The bidder has to enclosed appropriate registration and OEM/dealership letter/certificate.

#### **5. BIDDER(S) BELONGING TO COUNTRY(S) SHARING LAND BORDER WITH INDIA**

- a. "Bidder" (including the term 'tenderer', 'consultant', 'agency' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

b. "Bidder from a country which shares a land border with India" means: -

- i. An entity incorporated, established or registered in such a country; or
- ii. A subsidiary of an entity incorporated, established or registered in such a country; or
- iii. An entity substantially controlled through entities incorporated, established or registered in such a country; or
- iv. An entity whose beneficial owner is situated in such a country; or
- v. An Indian (or other) agent of such an entity; or
- vi. A natural person who is a citizen of such a country; or
- vii. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

c. The beneficial owner for the purpose of (iv) above will be as under:

- i) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation

a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company.

b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements;

i) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

ii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

iii) Where no natural person is identified under 5.1 (c)(i) or 5.2 (b)(i) or 5.2 (b)(ii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

iv) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

v) An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

Competent Authority and Procedure for Registration

- a. The Competent Authority as stated under clause 5.1 of this Tender Document, for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).
- b. Any Bidder, participating in this Tender Document and belonging to country(s) sharing land border with India, is urged to check the website of DPIIT regarding the registration process.
- c. Bids of the bidders, belonging to country sharing land border with India, and not registered with the competent authority, shall be summarily rejected.

Bidders are required to submit an undertaking (on company's letterhead) regarding their compliance with the OM of Ministry of Finance mentioned under clause 5.1 and the conditions stated under clause 5 of this Tender Document.

If the undertaking submitted by the bidder(s), whose bid is accepted, is found to be false, this would be ground for immediate termination of the contract and further legal action in accordance with law.

If the bidders belonging to countries sharing land border with India, are registered with the competent authority, they are required to submit the copy of their registration as part of their bid document. The registration must be valid at the time of submission of bids and at the time of acceptance of bids. If the bidder was validly registered at the time of acceptance, placement of order, registration shall not be a relevant consideration during contract execution.

## 6. BIDDING PROCEDURE

**6.1 Site Visit:** The interested parties may request for a site visit to the project site of Host Institute. The Host Institute will facilitate such visit on a date mutually convenient. Bids shall be submitted in e-procurement of state government/ as per the standard procedure adopted by the Host Institution.

Bidder is advised to follow the instructions "Instructions to Bidder for offline Bid Submission" at **Annexure - VII**

Bidding Application must be accompanied by the following: -

### **A. Technical Bid**

The following documents, duly signed and stamped, are to be scanned and uploaded furnished by the Bidder along with Technical Bid as per the tender document:

- i. Proof for payment of Tender Document Cost (Tender Fee (Non-refundable and permanent address of the Firm/Agency/Person).

Earnest Money deposit amount Rs. 1.69 lakh for Processing Line-1, 0.84 lakh for cumin processing line-II, 0.43 lakh for processing line (bakery products) –III, 0.62 lakh for pearl millet Flaking line processing line IV, Processing Line v (Extrusion line) amount is 0.24 lakh and 0.52 lakh for Processing Line v (Food testing lab.)

Tender processing Fee Rs.1000/- (Rupees one thousand only) in the form of Demand Drafts, drawn separately in favour of Krishi Vigyan Kendra, SURE, Barmer Rajasthan payable at Barmer, Fees of Rs. 1000/- (Rupees one thousand only) in the form of Demand Draft drawn separately are to be enclosed with the Technical Bid, failing which the tender will be summarily rejected. The tender processing Fee is not

refundable.

The bidders are required to submit **“Bid Security Declaration”** as per the format attached at **Annexure- VI**, accepting that if they withdraw or modify their bids during of validity etc., they will be suspended for next one year.

- ii. The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period as Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or with National Small Industries Corporation, New Delhi shall be eligible for exemption from EMD. In case the tenderer falls in this category, it should furnish copy of its valid registration details (with MSME or NSIC, as the case may be)
  - A) The MSE’s Bidder to note and ensure that nature of services and goods/items manufactured mentioned in MSE’s certificate matches with the nature of the services and goods/items to be supplied as per Tender. Such bidders will upload proper Udyog Adhar Certificate from both side with specified validity and relevant service category.
  - B) Traders/resellers/distributors/authorized agents will not be considered for availing benefits under PP policy 2012 for MSEs as per MSE guidelines issued by Ministry of MSME.
- iii. **A complete list of clients, whom Food Processing equipment were supplied in past including clients from Govt. /Semi Govt. /Autonomous Bodies/PSUs Institutions/ Private Entity/ MSME/ served during last three years with Name, Telephone No, etc. along with copies of supply order, may be enclosed.**
- iv. **Copies of supply order, completion certificate, as per eligibility criteria.**
- v. Details of Bank Account of Bidder i.e. Account No., IFSC Code, MICR No., Bank Name and address, PAN/TAN/TIN/GST, Registration number, if any.
- vi. Copies of Income Tax Return of last 3 financial years (2018-19, 2019-20 and 2020-21).
- vii. Copies of audited balance sheet for the 3 financial years (2018-19, 2019-20 and 2020-21).
- viii. An authorization letter from the firm in favor of the person signing the tender documents.
- ix. An attested copy of the certificate of registration/incorporation pertaining to the legal status of the Bidder/Firm/Agency, and Annexure I, II, III, IV and V
- x. An undertaking to the effect that the Agency/Firm has not been black listed in India and Abroad (Annexure-V).
- xi. The bidder will be required to give an undertaking or undertaking on Non-Judicial Stamp Paper (Rs 100/-) that he will supply the goods in accordance with specifications of the supply/work order. At any stage, if it is found that the substandard/deviation from the specifications/ design/ quality has been made by him, he is liable for penalty and legal action.
- xii. Tender document with Annexure – I to Annexure V duly signed and stamped on each page as acceptance of the terms and condition laid down by the host institute’s authority.
- xiii. **Caution:** All the bidders are specifically informed that while submitting tender, must ensure that signed documents as indicated in the tender documents are mandatory, otherwise tender will be similarly rejected and no second opportunity will be given to submit shortfall

documents. In case of less bids, Institute has liberty to invite shortfall documents.

## **B. Financial Bid**

- i. **Price bid format in the form of BOQ<sup>4</sup>\_XXXXX.xls.**
- ii. Opening of tenders (Technical bids only) will take place as mentioned in critical date sheet offline at of the state and [www.barmer1.kvk2.in](http://www.barmer1.kvk2.in), in university website in the Krishi Vigyan Kendra, Barmer -I Rajasthan) in the presence of the representatives of the Firms/Tenderers, who may wish to be present at that time. At the time of tender opening Firms/Tenderers have to come with bid acknowledgement slip, which is generated by the system after successfully bid submission. Firms/Tenderers can view their live bid opening at their remote end also. No separate intimation will be sent to the firms/Tenderers in this regard.
- iii. The rates should be only in INR up to F.O.R (Freight on Road) destination basis up to Krishi Vigyan Kendra, Barmer-I including imported equipment.

6.6 The tender not submitted in the prescribed formats or incomplete in detail is liable for rejection. The Host Institute is not responsible for non-receipt of tender within the specified date and time due to any reasons.

## **7. EVALUATION PROCEDURE**

Tender will be evaluated in following manner:

- i. The tender will be evaluated on Pre-qualification criteria as laid down in the Tender documents.
- ii. With regard to the matching of technical specifications of individual equipment, a deviation up to  $\pm 10\%$  can be considered by the Technical Evaluation Committee (TEC)/ Host Institute on the recommendation of the user without compromising with the quality and its major functioning. In this regards, TEC/ Host Institute decision shall be final.
- iii. Those agencies who will be found eligible in the above two steps, will be called for presentation before duly constituted Technical Evaluation Committee on the date and time, as prescribed by the committee. The eligible agencies will be called through email only. The presentation round shall be of 25 marks. The presentation may contain equipment photo, design layout, specifications, imported or indigenous, methodology of working/supply, timeline schedule of supply, after sales service, etc. In case of manufacturer the actual photos of manufacturing unit may be enclosed. In case of importer, copy of dealership/distributor/authorization to supply in India, copy of Import License, etc. are to be enclosed. Any other aspect regarding agency profile, equipment, etc. The presentation round will be assessed on following parameters:

| <b>S. No.</b> | <b>Criteria</b>   | <b>Max. Marks</b> |
|---------------|---|-------------------|
| 1             | Registration of the Agency in Food Processing Equipment Manufacturing unit or similar business and registered as Pvt. Ltd or Public Limited.<br>(Enclosed Registration) | 5                 |
| 2             | Experience in Manufacturing/supply of Food Processing equipment*  | 10                |

|   |   |            |
|---|---|------------|
| 3 | Relevant ISO certification in manufacturing of Food Processing Equipment to the bidder or OEM   | 10         |
| 4 | Awards for technology or performance by Govt. or CII or any other reputed entity.   | 10         |
| 5 | 5 Marks for 1 Cr., 10 marks for 2Cr. to 5 Cr., 15 marks for 6 Cr., to 10Cr. 20 marks 11 Cr. to 15 Cr. (Max 20 marks) Enclose C.A. Certificate & Balance sheet   | 20         |
| 6 | Successfully completed assignment during last 3 years (FY 2018-19, 2019-20, 2020-21) where supply and installation involved with a cost of Rs.1.00 Cr. or above. (5 marks for each such completed project) (Max 20 marks) | 20         |
| 7 | Presentation  | 25         |
|   | <b>Total</b>  | <b>100</b> |

\* In processing line - (Cumin) successfully completed sortex plant in any govt. Organization on turnkey basis will be provided additional bonus marks (submit proof)

- iv. Marks other than presentation shall be given on the basis of documents submitted by the bidding agencies and shall be communicated to all the agencies either through email or uploaded at Host Institute's website. However, marks of presentation, will be assigned during the presentation round by Technical Bid Evaluation Committee and will also be uploaded or communicated through email to all the successful agencies. **The offline financial bids shall only be opened to those agencies, who will score minimum 60 marks, out of 100 marks** and fulfilling of other eligibility, terms and conditions of the tender, on the date and time, as published on the Institute's website/ CPP portal. Before, opening of financial bid, the result of presentation as well as technical evaluation will be either uploaded or communicated through mail.

## **8. THE AWARD OF WORK/SUPPLIES**

The bid of agency quoting lowest for the overall turnkey execution as per the scope of work in their financial bid i.e. L-1 bidder will be accepted as the successful bidder. Acceptance of tender will be intimated to the successful tenderer/ bidder signed by the authorized signatory of the institution. Contract, will be signed with the successful bidder after issue of Letter of Award and receipt of Letter of Acceptance from the successful bidder

## **9. GENERAL TERM & CONDITIONS**

- i. In case, after Pre-bid meeting (wherever applicable) any modification(s)/addition(s)/deletion(s) or any alternation in the requirement(s)/ specification(s) etc. is required, the same will be published on the [eproc.rajasthan.gov.in/](http://eproc.rajasthan.gov.in/) or KVK Barmer-I' website- [www.barmer1.kvk2.in](http://www.barmer1.kvk2.in). Therefore, all the bidders are advised to visit our website before filling/submitting their tenders. No separate advertisement/information will be published

in this regard in the Newspapers or any other location or any other mode of communication will be adopted.

- ii. The offered rates will be valid initially for a period of one year. During one year if any requirement arises, the host institute can procure the items on same rate & terms & conditions from the L1 agencies.
- iii. EMD/Performance Security of successful bidder may be forfeited, if the bidder withdraws or amends or derogates from the tender in any respect.
- iv. 10% will be retained during the entire period of Warrantee as performance security and will be returned after the satisfactory completion of the Warrantee period without interest within three months after expiry of warrantee period.
- v. This tender is valid up to 180 days from the issue of tender notification.
- vi. In case the item(s) are fabricated/ finished in the campus, the Contractor/Agency shall ensure the protection of their items at site from fire, floodwater, moisture etc. or any kind of damage at their cost.
- vii. The Host Institute will not compromise with the quality & standard of the material. At any stage, it is found that supplier has supplied inferior quality or different material or used inferior quality or different SS/MS material as specified in the supply order containing specification(s). Payment shall be made for such items after reasonable deduction(s)/rejection of the lot and forfeiting of Performance Security, as deemed fit, in the circumstances & decided by Institute.
- viii. The supplier will provide at least two years on-site guarantee, and under guarantee period all the damages shall be repaired/replaced by the supplier at their cost and risk. If equipment has any manufacturing defects, the same will be preferably replaced from another one, or repaired up to client satisfactions. No sub-standard steel will be accepted in equipment. It should be rust free grade.
- ix. Host Institute's/ MoFPI/ State Nodal Agency/ Mentor Institute's officials can visit the work place of successful bidder, inspect the progress of work and instruct regarding quality aspect.
- x. The rates quoted by the bidder shall be complete for supply and placing of the finished items as per the specification(s) and shall be inclusive of all applicable tax, duties loading, unloading, packing, transportation from works to CIC, installation etc and nothing extra/additional shall be payable on these rates.
- xi. In any case, if tenders are not opened due to any reason, the Tender documents, processing Fee and EMD shall be returned to all bidders.
- xii. Conditional Tender will not be accepted.
- xiii. Tender without EMD, tender Fees & Bid Security Declaration will be summarily rejected.
- xiv. The Institute can ask any clarifications & documents at any stage of the procurement depending upon the circumstances to ascertain quality of material used in manufacturing of items. All would/should be fully seasoned with no defect.
- xv. All the documents attached with the technical bid should be properly tagged, numbered, signed and stamped by the competent authority.
- xvi. EMD shall be forfeited in the following cases:-

- a. If the Bidder withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
  - b. If the bidder having been notified of the acceptance of his tender by the Buyer during the period of its validity,
  - c. If the Bidder fails to furnish the Performance Security for the due performance of the contract.
  - d. If the Bidder fails to sign the agreement.
  - e. Fails or refuse to execute the contract.
  - f. Fails to respond to queries by the Host Institute.
- xvii. If a tender, either the Indian agent on behalf of the Principal/ OEM (Original Equipment Manufacturer) or Principal/ OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - xviii. If an agent submits bid on behalf of Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product. While submitting the bids CVC guidelines may take due care.
  - xix. Two agents simultaneously shall not submit bid on behalf of same principal/OEM for same items/ products. Otherwise the EMD may be forfeited
  - xx. All the rights for the tenders are directly subjected to the Host institute. Further if any doubts and mistakes are found in bids, host institute can directly cancel the tender bids without any information.

#### **10. GENERAL TERMS AND CONDITION FOR EQUIPMENTS:**

- i. All machines/equipment should be compatible with proper voltage supply. Electrical wiring for interconnection of the machines upto main supply wherever necessary should be supplied along with machines.
- ii. Electrical section, pipe, valve should match the specification of the machine. All components of electrical fittings should be of standard make and as per the Indians standard/ ISO standards
- iii. To tolerate varying power supply condition there should be heavy duty motors, gear box and proper electric circuit design. All stainless steel should be welded with non- corrosive gauge.
- iv. In case of foundation of the machine is required for installation, necessary foundation bolts, pads, washers etc. should be supplied along with foundation drawing.
- v. All machine should be complete and ready for production of stated capacity and should be supplied with operation and maintenance manual.
- vi. Machineries and equipment shall consist all accessories, consumables and toolbox in all respects to be provided to run the machine smoothly.
- vii. All the contact parts should be made up of Stainless Steel 316/304 as applicable which is suitable for CIC.
- viii. All machines/equipment should be easy for cleaning and sanitary for food grade requirement.

- ix. All machine should match with the capacity of the oven and process line as applicable.
- x. The machines/equipment should suit all condition & can run continuously.
- xi. Finished products should have quality similar to norms of BIS/FSSAI/ AGMARK/ International standards, wherever applicable
- xii. All machines should be supplied and installed at site by the supplier. Any requirement of unloading, lifting etc. will be arranged by the suppliers.’
- xiii. All transport charges for shifting, fitting will be responsible of bidder.
- xiv. Any other necessary provisions required for satisfactory operation.
- xv. Utilities/Services:
  - a. All utilities and services should be supplied as per process requirement like:
  - b. Heating system, compressed air supply system, raw and soft water supply system, water drainage system, electrical control system, utilities pipes, valve and fitting system etc.

## **11. PAYMENT**

The payment will be made as under:-

- i. 40 % within weeks’ time on receipt of equipment at CIC. The claim will be considered on submission of challan & certified by concerned authority of Host Institute.
- ii. 30 % on installation of & commissioning at site and verification by concerned authority of Host Institute.
- iii. 20 % on successful trail run and handling over of plant and machinery to Host Institute
- iv. 10 % will be retained during the entire period of Warrantee as performance security and will be returned three months after the satisfactory completion of the Warrantee period without interest after expiry of warrantee period.

## **12. PRICES**

- i. The Price to be quoted F.O.R. (Freight on Road) Destination only and it’s should be inclusive of taxes, freight, Packing, Transit, Installation, Insurance, Inspection Charges etc.
- ii. Demurrage charges if any will be borne by the supplier only.
- iii. Prices charged by the supplier for goods delivered and services performed under the contract shall not be higher than the price quoted by the supplier in his bid.
- iv. Prices will be fixed at the time of issue of purchase order as per taxes and statutory duties applicable at that time.
- v. In case of reduction of taxes and other statutory duties during the scheduled delivery period, purchaser shall take into account there deduction in these taxes/duties for the supplies made from the date of enactment of revised duties/taxes.
- vi. In case of increase in duties/taxes during the scheduled delivery period, the purchaser shall revise the prices as per new duties/taxes for the supplies, to be made during the remaining delivery period as per terms and conditions of the purchase order.
- vii. Any increase in taxes and others statutory duties/levies after the expiry of scheduled delivery date or award of contract/work order shall be to the supplier account. However, benefit of any

decrease in these taxes/duties shall be passed on to the purchaser by the supplier.

- viii. The agency may quote rates of Imported Equipment in INR only.
- ix. The Host Institute reserves the right to accept or reject any/all tenders without assigning any reason(s).
- x. Tenders not on the prescribed Performa (attached), without requisite details, EMD and Processing Fee and received after the closing date/time of tenders and tenders with any rider will summarily be rejected. Canvassing in any form will be viewed seriously and if any tendered is found to be resorting to such practices the tender of such firm will be rejected.

### **13. ARBITRATION CLAUSE**

That in case of any dispute between party of first part (The Host Institute) and the part of other party (Agency) arising out of or in relation to the agreement, the dispute shall be referred to KVK Barmer-I for arbitration. The award of the said Arbitrator shall be binding upon both parties. The seat of the arbitration shall be at, Krishi Vigyan Kendra, Barmer-I.

### **14. WITHHOLDING OF PAYMENT**

This clause authorizes buyer to withhold payment till end when selected agency fails in its contractual obligation. The standard text of this clause is as under: "In the event of the Selected Agency's failure to submit the Bonds, Guarantees and Documents, supply the deliverables etc as specified in the Contract, the Buyer may at his discretion, withhold any payment until the completion of the Contract".

### **15. RIGHT OF ACCEPTANCE OF OFFER**

- i. The Buyer reserves the right to accept partly or reject any offer without assigning any reason thereof. The Buyer does not pledge itself to accept the lowest or any othertender and reserves to itself the right of acceptance of the whole or any part of the tenderor portion of the quantity offered and the seller shall supply the same at the rate quoted.
- ii. In respect of enquiries, which call for procurement of more than one item, the Buyer reserves the right to consider and accept the offer for any of the items in the enquiry reserving the right to utilize the offer for balance items at a later stage within the validity of offer.

### **16. NEGOTIATIONS**

Normally there will be no post tender opening negotiations and it would be only on exceptional circumstances, if considered necessary. This shall be held only with the Agency which is evaluated as L-1 bidder after evaluation of Financial bids, as indicated above. Under no circumstance, the financial negotiation shall result into an increase in the price originally quoted by the Agency.

### **17. COMPETENT AUTHORITY'S RIGHT TO VARY ITEMS/ACTIVITIES AT THE TIME OF AWARD**

The Competent Authority shall have the right to make any alterations, omissions, additions or subtractions in items/services at the time of award of contract. The Competent Authority will give such intimation to the successful Bidder, and additional cost/deduction in the Bid prices, based on the price schedule submitted by him, will be worked out with the Bidder. In case, the Bidder does not agree for such alterations, the Competent Authority will be free to award the contract to the nexteligible Bidder.

### **18. LABOUR LAWS AND SAFETY MEASURES**

- i. Agency shall comply with all the provisions of labour law related legislation/acts as enacted by

Government from time to time and in case of any prosecution / penalty, agency shall be liable for the same.

- ii. Agency shall be liable for payments of duties viz. P.F., E.S.I. etc. including any compensation payable under Workmen Compensation Act. Host Institute shall have no responsibility, financial or other liabilities towards professionals employed by the Agency.
- iii. Agency will take all safety measures / precautions during the work. For any accident due to negligence / any other reason during contract period, it shall be sole responsibility of the agency and Host Institute shall not be held responsible for the same.

## **19. APPLICABLE LAW AND JURISDICTION**

This contract, including all matters connected with this contract, shall be governed by the India laws, both substantive and procedural, for the time being in force and shall be subject to the exclusive jurisdiction of Barmer Court, if required.

## **20. INSURANCE AND MEDICAL**

- i. It shall be the responsibility of the agency to insure their staff and equipment against any exigency that may occur while carrying out the project activities. Agency will also take insurance cover for third party liability, which might occur due to damages caused to their manpower, equipment etc. The Host Institute shall not be responsible for any such damages.
- ii. Medical facilities (as per law) for professional including insurance of the professional related to the project will be provided by the Agency.

## **21. INDEMNIFICATION**

- i. The Seller shall indemnify and hold the Buyer harmless against all third party claims of infringement of patent, trade mark of industrial design rights arising from use of the stores supplied or any part thereof.
- ii. Agency shall at times indemnify and keep the Host Institute indemnified against all claims/ damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under this contract.
- iii. Agency shall at all times indemnify and keep Host Institute indemnified against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its (Agency) employees or caused by any action, omission or operation conducted by or on behalf of Agencies.
- iv. Agency shall at all times indemnify and keep Host Institute indemnified against any and all claims by employees, workman, suppliers, agent(s) employed engaged or otherwise working for Agency, in respect of their wages, salaries, remuneration, compensation or the hike.
- v. All claims regarding indemnity shall survive the termination or expiry of the contract.

## **22. FORCE MAJEURE**

- i. Should any force majeure circumstances arise, each of the contracting party shall be excused for the non-fulfillment or for the delayed fulfillment of any of its contractual obligations, if the affected party within 14 days of its occurrence in forms in a written form the other party.
- ii. Force majeure shall mean fires, floods, natural disasters or other acts such as war, turm oil,

strikes, sabotage, explosions, and quarantine restriction beyond the control of either party.

### **23. PENALTY FOR USE OF UNDUE INFLUENCE**

- i. The Seller undertakes that he has not given, offered or promised to give, directly or indirectly any gift, consideration, reward, commission, fees brokerage or inducement to any person in service of the Buyer or otherwise in procuring the Contracts or forbearing to do or for having done or for borne to do any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavor to any person in relation to the Contract or any other Contract with the Government.
- ii. Any breach of the aforesaid undertaking by the seller or any one employed by him or acting on his behalf (whether with or without the knowledge of the seller) or the commission of any offers by the seller or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1988 or any other Act enacted for the prevention of corruption shall entitle the Buyer to cancel the contract and all or any other contracts with the seller and recover from the seller the amount of any loss arising from such cancellation. A decision of the buyer or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Seller.
- iii. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the seller towards any officer/employee of the buyer or to any other person in a position to influence any officer/employee of the Buyer for showing any favour in relation to this or any other contract, shall render the Seller to such liability/ penalty as the Buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the Buyer.

### **24. RIGHT TO VARIATION CLAUSE**

To take care of any change in the requirement during the period between issue of Tender and conclusion of contract, Buyer reserves the right to increase or decrease the quantity of the required deliverables without any change in the terms & conditions and prices quoted by the Seller. While concluding the contract, the quantity can be accordingly increased or decreased at the same terms of conditions.

### **25. OPTION AND REPEAT ORDER CLAUSE**

- i. Option Clause: The BUYER shall have the right to place separate order on the SELLER during the original Delivery Period of Contract, limited to 50% of the main processing plant, spares, facilities or services as per the cost, terms and conditions set out in this contract. The price of the processing plant, system, spares etc. shall remain same till one year from the effective date of the contract. Commercial Negotiation Committee to verify that there is no downward trend in prices of the product offered.
- ii. Repeat Order Clause: The Buyer may order within six months from the date of successful completion of the supply against this contract and at the same cost, terms and conditions of the contract.
- iii. When exercising one or both of the “Option Clause” and “Repeat Order Clause” above, the overall ceiling of fifty percent of the original contracted quantity will not be exceeded.

## **26. MODIFICATION AND WITHDRAWAL OF BIDS**

The bidders may modify or withdraw his bid after submission provided that the written notice of modification or withdrawal is received by the Buyer prior to the deadline prescribed for submission of bids. A withdrawal notice may be sent by E-mail but is to be followed by a signed conformation copy by post not later than the deadline for submission of bids. No bid shall be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiry of the period of specified bid validity. Withdrawal and modification of bid during this period will result in forfeiture of Bidder's Bid Security.

## **27. LIQUIDATED DAMAGES (LD)**

In the event of the seller's failure to submit the Bonds/Guarantees/ Documents or/and supply/perform the items/services as per Delivery schedule specified in the contract, the Buyer may, at his discretion, withhold any payment until the completion of the contract. The buyer may also deduct LD to the sum of 0.5% of the contract price of the delayed/undelivered stores/services mentioned above for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than 5% of the value of delayed stores/services.

## **28. CANCELLATION OF THE CONTRACT**

The Host Institute shall have the right to terminate the Contract, arising out of finalization of this tender, in part or in full in any of the following cases:

- i. The delivery of the material or start of works is delayed for causes not attributable to Force Majeure for more than 10 days after the scheduled date of delivery.
- ii. When both parties mutually agree to terminate the contract. At any stage without assigning any reason thereon.

## **29. CLARIFICATION ON BID DOCUMENTS.**

Bidder requiring any clarification to this Tender Document shall attend the Pre-bid meeting on the date 29-04-2022. Also, the bidders may send their queries to the Buyer via email not later than 2 days prior to the Pre-bid meeting on the following email address: [kvkbarmer@yahoo.com](mailto:kvkbarmer@yahoo.com)

**(Vinay Kumar)**  
**Sr. Scientist & Head**  
**Krishi Vigyan Kendra, Barmer-I**

**Annexure- I****Tender Form (Technical Bid)**

(To be submitted by the renderer on their letter head. All Columns must be filled in. Relevant documents in relation to these must be closed with the technical bid. The bid will be examined on the same.)

| <b>S. No.</b> | <b>Particulars</b>   | <b>Details<br/>(to be filled by the<br/>renderer)</b> | <b>Enclosure<br/>Page no.</b> |
|---------------|--|---|-------------------------------|
| 1.            | Name of Firm with address, mobile/phone no.& e- mail.  |   |                               |
| 2.            | Tender fee details (Amount DD no., Bank Name, Amount date)   |   |                               |
| 3.            | EMD details (Amount, DD no., Date, Bank's Name a/c no. a/c holder name, Branch IFSC code)- (as per the mode of submission)   |   |                               |
| 4.            | Bid security declaration   |   |                               |
| 5.            | Type of Firm (Proprietor/ Partnership/ Pvt. Ltd./ Public Ltd.  |   |                               |
| 6.            | Registration Number (Copy to be enclosed)  |   |                               |
| 7.            | Year of Incorporation of the agency (copy to be enclosed) along with the latest registered address of corporate office.  |   |                               |
| 8.            | Length of relevant experience in years   |   |                               |
| 9.            | GST Registration (Copy to be enclosed)   |   |                               |
| 9.            | PAN No. (Copy to be enclosed)  |   |                               |
| 10.           | Please enclose list indicating ie. Name of organization, details of work, Quantity Amount, Contact/ Phone No., Email address. Please also enclose either PO or performance certificate for each details.                   |   |                               |
| 11.           | Annual Turnover of the company in Lakhs of Indian Rupees during last three years. (Copy to be enclosed or certificate issued by CA)<br>a) Financial Year 2018-19<br>b) Financial Year 2019-20<br>c) Financial Year 2020-21 |   |                               |

|     |  |  |  |
|-----|--|--|--|
| 12. | A complete list of clients including clients from Govt./Semi Govt./Autonomous Bodies/PSUs Institutions served during last five years with Name, Telephone No, etc. along with copies of supply order.  |  |  |
| 13. | The bidders should attach successful satisfactory completion certificates issued by the clients (during last 5 years) as documentary evidence in support to above eligibility criteria. The certificate should contain date of start, date of completion; value on completion etc. |  |  |
| 14. | Business Details   |  |  |
| 15. | PAN No.  |  |  |
| 16. | NISC Documents   |  |  |
| 17. | ISO details  |  |  |
| 18. | Copies of Income Tax Return of last 3 Financial Years ending FY 2020-21)   |  |  |
| 19. | An authorization letter of the firm in favor of the person signing the tender documents.   |  |  |
| 20. | Tender document with Annexure –I to Annexure V duly signed and stamped on each page as acceptance of the terms and condition aid down by Host Institute’s authority  |  |  |

The above documents must be enclosed with proper pagination.

Signature.....  
Name .....  
Address .....  
Mobile: .....  
Seal of firm.

Date:-  
.....

## Evaluation Sheet

**To be filled by the tender, which will be verified by the Bid Evaluation Committee/ Technical Evaluation Committee:**

| <b>S.No.</b> | <b>Criteria</b>   | <b>Max. Marks</b> | <b>Marks claimed by the Tenderer</b> | <b>Marks verified by the Committee</b> | <b>Page No. Proof</b> |
|--------------|---|-------------------|--------------------------------------|--|-----------------------|
| 1            | Registration of the Agency in Food Processing Equipment Manufacturing unit or similar business and registered as Pvt. Ltd or Public Limited.<br>(Enclosed Registration)   | 5                 |                                      |  |                       |
| 2            | Experience in Manufacturing/supply of Food Processing equipment   | 10                |                                      |  |                       |
| 3            | Relevant ISO certification in manufacturing of Food Processing Equipment to the bidder or OEM   | 10                |                                      |  |                       |
| 4            | Awards for technology or performance by Govt. or CII or any other reputed entity.   | 10                |                                      |  |                       |
| 5            | 5 Marks for 5 Cr., 10 marks for 6 Cr., to 10 Cr., 15 marks for 10 Cr., to 15 Cr., 20 marks 15 Cr. to 20 Cr.<br>(Max 20 marks) Enclose C.A. Certificate & Balance sheet  | 20                |                                      |  |                       |
| 6            | Successfully completed assignment during last 3 years (FY 2018-19, 2019-20, 2020-21) where supply and installation involved with a cost of Rs. 1.00 Cr. or above. (5 marks for each such completed project)<br>(Max 20 marks) | 20                |                                      |  |                       |
| 7            | Presentation  | 25                |                                      |  |                       |

**FINANCIAL BID****List of Equipment's**

1. Processing Line: Pomegranate juice/ RTS assembly line (capacity 500 kg/hr)

Estimated cost of processing line: 84.50 lakh

| S.No.        | Description of items  | Qty | Unit | Unit Rate | GST | Total Amount |
|--------------|---|-----|------|-----------|-----|--------------|
| 1            | Cold Room (9m3)   | 02  | Unit |           |     |              |
| 2            | Fruit washer  | 01  | Unit |           |     |              |
| 3            | Pomegranate aril extractor                                    | 01  | Unit |           |     |              |
| 4            | Juice press hydraulic/Screw                                   | 01  | Unit |           |     |              |
| 5            | Juice filtration unit   | 01  | Unit |           |     |              |
| 6            | Juice pasteurizer   | 01  | Unit |           |     |              |
| 7            | Semi-Automatic bottle filling and sealing Machine             | 01  | Unit |           |     |              |
| 8            | Hot water tank, Storage tank 4nos. Piping, valves, feed pumps | 01  | Unit |           |     |              |
| 9            | Electric panel and electrification.                           | 01  | Unit |           |     |              |
| 10           | Pomegranate seed oil extraction machine (capacity 5L/hour)    | 01  | Unit |           |     |              |
| <b>Total</b> |   |     |      |           |     |              |

**Note:** Tenderer are require to fill bids and EMD for each processing line separately. Evaluation of bid will be done on basis of total cost of equipment's of each processing line.

**2. Processing Line: Multipurpose Cleaning (Cleaning, Grading & Sortex) Plant (cumin seed)**

(Capacity 2 to 3 ton per hour)

Estimated cost of processing line: 50.00 lakh

| S.No.        | Description of items   | Qty | Unit | Unit Rate | GST | Total Amount |
|--------------|--|-----|------|-----------|-----|--------------|
| 1            | 1. Multipurpose Vibro Cleaning (cleaning, Grading & Sortex) Plant for cumin seed complete unit | 01  | Unit |           |     |              |
| 2            | Electric panel and electrification.  | 01  | Unit |           |     |              |
| 3            | Weight Machine (50gm. to100Kg.)  | 01  | Unit |           |     |              |
| 4            | Packing Machine  | 01  | Unit |           |     |              |
| 5            | Generator 65.5 KVA Koel Silent Diesel Generator, 3 Phase                                       | 01  | Unit |           |     |              |
| <b>Total</b> |  |     |      |           |     |              |

**Note:** Tenderer are require to fill bids and EMD for each processing line separately. Evaluation of bid will be done on basis of total cost of equipment's of each processing line.

**3. Processing Line: Bakery unit - pearl millet based cookies (capacity 25 kg/hr)**

Estimated cost of processing line: 21.40 lakh

| S.No.        | Description of items                 | Qty | Unit | Unit Rate | GST | Total Amount |
|--------------|--------------------------------------|-----|------|-----------|-----|--------------|
| 1            | Pearl millet Pearler                 | 01  | Unit |           |     |              |
| 2            | Dough Kneader                        | 01  | Unit |           |     |              |
| 3            | Bajra/ pearl Millet flour Mill Model | 01  | Unit |           |     |              |
| 4            | Oven                                 | 02  | Unit |           |     |              |
| 5            | Biscuit dough roller                 | 01  | Unit |           |     |              |
| 6            | Bajra Bread Maker machine            | 01  | Unit |           |     |              |
| 7            | Automatic Pillow Pouch Packing       | 01  | Unit |           |     |              |
| <b>Total</b> |                                      |     |      |           |     |              |

**Note:** Tenderer are require to fill bids and EMD for each processing line separately. Evaluation of bid will be done on basis of total cost of equipment's of each processing line.

**4. Processing Line: Pearl millet flaking line (capacity 100 kg/hr)**

Estimated cost of processing line: 31.00 lakh

| S.No.        | Description of items                      | Qty | Unit | Unit Rate | GST | Total Amount |
|--------------|---|-----|------|-----------|-----|--------------|
| 1            | Steamer/ soaking/drying oven - dehydrator | 01  | Unit |           |     |              |
| 2            | Millet Flaking Machine                    | 01  | Unit |           |     |              |
| 3            | Pouch packing machine                     | 01  | Unit |           |     |              |
| <b>Total</b> |   |     |      |           |     |              |

**Note:** Tenderer are require to fill bids and EMD for each processing line separately. Evaluation of bid will be done on basis of total cost of equipment's of each processing line.

**5. Pearl millet Extrusion line (capacity 100 kg/hour)**

Estimated cost of processing line: 12.00 lakh

| S.No.        | Description of items                        | Qty | Unit | Unit Rate | GST | Total Amount |
|--------------|---|-----|------|-----------|-----|--------------|
| 1            | Puff Extruder Machines (Bajra/Pearl millet) | 01  | Unit |           |     |              |
| 2            | Pop making machine                          | 01  | Unit |           |     |              |
| 3            | Hand sealer machine                         | 01  | Unit |           |     |              |
| <b>Total</b> |   |     |      |           |     |              |

**Note:** Tenderer are require to fill bids and EMD for each processing line separately. Evaluation of bid will be done on basis of total cost of equipment's of each processing line.

## 6. Food testing laboratory

Estimated cost of processing line: 25.00 lakh

| S.No.        | Description of items         | Qty | Unit | Unit Rate | GST | Total Amount |
|--------------|------------------------------|-----|------|-----------|-----|--------------|
| 1            | Analytical balance           | 01  | Unit |           |     |              |
| 2            | Automatic fibre analyzer     | 01  | Unit |           |     |              |
| 3            | Automatic fat analyzer       | 01  | Unit |           |     |              |
| 4            | Automatic protein analyser   | 01  | Unit |           |     |              |
| 5            | Lovibond tintometer          | 01  | Unit |           |     |              |
| 6            | Bomb calorimeter             | 01  | Unit |           |     |              |
| 7            | Conductivity and TDS meter   | 01  | Unit |           |     |              |
| 8            | Digital butyro refractometer | 01  | Unit |           |     |              |
| 9            | PH meter                     | 01  | Unit |           |     |              |
| 10           | Viscometer                   | 01  | Unit |           |     |              |
| 11           | Deep freezer (upright)       | 01  | Unit |           |     |              |
| 12           | Muffle furnace               | 01  | Unit |           |     |              |
| 13           | Water purification system    | 01  | Unit |           |     |              |
| 14           | Nitrogen generator           | 01  | Unit |           |     |              |
| 15           | Micropipettes                | 01  | Unit |           |     |              |
| 16           | Bottle-top dispenser         | 01  | Unit |           |     |              |
| 17           | Texture analyser             | 01  | Unit |           |     |              |
| 18           | Soxhlet apparatus            | 01  | Unit |           |     |              |
| 19           | Moisture analyzer            | 01  | Unit |           |     |              |
| <b>Total</b> |                              |     |      |           |     |              |

**Note:** Tenderer are require to fill bids and EMD for each processing line separately. Evaluation of bid will be done on basis of total cost of equipment's of each processing line.

**(Vinay Kumar)**  
**Sr. Scientist & Head**  
**Krishi Vigyan Kendra,**  
**Barmer-I**

**TECHNICAL BID****List of Equipment's with specification for common incubation centre****1. Processing Line: Pomegranate processing line (Capacity 500 litre per hour)**

| <b>S. No.</b> | <b>Equipment's &amp; No.</b>   | <b>Qty.</b> | <b>Specifications</b>  |
|---------------|--|-------------|--|
| <b>1</b>      | <b>Cold Room (9m3)</b><br>2 Nos. (For raw material and finished product storage) | 02          | <p><b>(For raw material and finished product storage)</b></p> <p>Ambient Temperature[in °C] -45 Deg. C<br/>           Designed Room Temp. [± 2 °C] : Up to +5 Deg. C<br/>           Pull down time [Hrs.] :- 24 Hrs<br/>           Product – Fruits<br/>           Cold Room Size [External] - <b>6 x 6 x 6 Ft</b><br/>           Ante Room Size [ External] - <b>N.A</b><br/>           Material of Insulation – RPUF<br/>           Thickness of Insulation [mm] -60mm<br/>           Wall Lamination [In/Out] - SS316 /SS304<br/>           Ceiling [In/Out] - SS316 /SS304<br/>           Type of floor insulation -60mm PuF Panels<br/>           Thickness of Floor insulation [mm]- 60mm<br/>           Door Size[mm]- 900 x 2000 mm<br/>           Door Type- Flush Type<br/>           Door Thickness [mm] -60 MM<br/>           PRV for Panel Protection – Yes<br/>           Light (Vapour Proof) [No.] – 1<br/>           No Type of refrigeration system - Split type<br/>           Type of Cooling - DX<br/>           Cooling Capacity of Refrigeration system [KW ] – 2 KW – 1 No<br/>           Type of Refrigerant - R22<br/>           Type of Compressor - Hermetic Type<br/>           Compressor Make - Emerson or Equivalent</p> |
| <b>2</b>      | <b>Fruit washer</b>  | 1           | <p>Soaking tank consists of perforated sheet and air piping. Air bubbles are created in the soaking tank through the turboblower.</p> <p>Turbulence action is created by the water jet to push the fruits on the Elevator.</p> <p>Take off elevator is of P.P food quality belt.</p> <p>Fresh water is sprayed on fruits from top and bottom of P.P belt to clean the Fruits.</p> <p>M.O.C.-SS 304.</p> <p>Electrical Power: -</p> <p>i) Elevator Drive: 0.5 HP<br/>           ii) Blower Motor: 0.5 HP<br/>           Water Pump: 0.5 HP</p>  |
| <b>3</b>      | <b>Pomegranate aril extractor</b>  | 1           | <p>1) Pomegranate arils are passed through fine pulping screen 0.8 mm perforation Pulp/Pure juice discharge through discharge chute outlet.</p> <p>2) Electrical Power – 2 HP</p> <p>Contact Parts: S.S 304.</p>   |

|   |   |   |  |
|---|---|---|--|
| 4 | <b>Juice press hydraulic/Screw</b>  | 1 | Electrical Power – 3 HP<br>Wooden rack s – 5 Nos<br>Filter cloth -5 Nos<br>With SS Tray<br>Auto pressure setting Structure is in MS dulypainted.   |
| 5 | <b>Juice filtration unit</b>  | 1 | The unit consists of a strong<br>Stainless steel tank with top cover, SS handle, Pressure<br>gauge and tightening bolt.<br>The set of SS filter plates with perforated screen, filter<br>pads & interlocking cups are fitted<br>in the center of the tank.<br>It is fitted with either SS gear pump or centrifugal pump.<br>The complete unit is mounted on S.S stand covered with<br>S.S sheet on top and provided<br>With castor wheels.<br>The unit is provided with bypass system, safety valve and<br>an arrangement to use the pump as transfer pump<br>depending upon model.<br>The unit is supplied with 1HP 2800 rpm motor 14” Dia x<br>8 plates with ¾”<br>Centrifugal pump, output @50 ltrs/hr (Syrup type) motor 0.5<br>HP/2900 rpm. |
| 6 | <b>Juice pasteurizer</b>  | 1 | To pasteurize the juice Plate heat exchanger pasteurizer<br>Juice is passed through plates of PHE & pasteurized.<br>Heating Media : - Steam<br>Contact Parts : - SS 304  |
| 7 | <b>Semi-Automatic bottle<br/>filling and sealing<br/>Machine.</b>                 | 1 | <b>Semiautomatic Bottle Filling Machine</b><br>For Product filling in bottles.<br>Pneumatically operated<br>Capacity :- Up To 1000ml<br>Contact Part :- S.S. 304<br>Out Put :- 12+ Fill/Minute/Head for 60 ml<br>depending upon product<br>Motor :- 1 HP, 3 Phase<br>Bottle Sealing Machine –<br>Semi-automatic Manually operated / <b>Automatic.</b>  |
| 8 | <b>Hot water tank, Storage<br/>tank 4 No., Piping,<br/>valves,<br/>feed pumps</b> | 1 | Hot water tank<br>Storage tank 4 No<br>Capacity – 50 or 100 Lit – 4<br>Nos<br>Vertical round in shape and without jacket.<br>Mounted on pipe legs. Product inlet and outlet of<br>SMS union.<br>CIP connection for cleaning purpose.<br>M.O.C.- S.S. 304<br>Pump - Sanitary mono coupled, open impeller type<br>centrifugal pump.<br>Suction & discharge connection – SMS union Head- 10<br>meter Electrical Power- 1 HP Capacity – 100 LPH<br>Storage tank (According Universal Engineers )<br>Tank is made up of S.S.305 without lid. Suitable for<br>storage liquid, Semi Liquide, Pickles and any other which<br>can be stored.  |

|    |   |   |  |
|----|---|---|--|
|    |   |   | Capacity : 5000 liters<br>Material Food Grade 14 swg. SS-304<br>Inlet at top and outlet at bottom.<br>Without Lid.<br>Drain cock at bottom.<br>Single jacketed   |
| 9  | <b>Electric panel and electrification.</b>                        | 1 | Weather proof, suitable to operate all the machines & accessories of Cleaning, Grading and Packing of whole Coriander Seeds and Powder. The panel shall be equipped with main on/off switch, voltmeter, ammeter, changeover switch, phase indicators, emergency switch, motor starters with protective relays, auto switch, MCB, fuses etc.<br>Any other necessary provisions for satisfactory operation |
| 10 | <b>Pomegranate seed oil extraction machine (capacity 5L/hour)</b> | 1 | <b>Pomegranate seed oil extraction machine (capacity 5L/hour)</b><br>Oil Expeller oil bath System  |

**2. Processing Line:** Multipurpose Cleaning (Cleaning, Grading & Sortex) Plant (cumin seed)

(Capacity 2 to 3 ton per hour)

| S. No. | Description of items   | Qty. | Specifications  |
|--------|--|------|---|
| 1      | <b>Multipurpose Vibro Cleaning (cleaning, Grading &amp; Sortex) Plant for cumin seed</b> |      | <ul style="list-style-type: none"> <li>• Multipurpose Cleaning (cleaning, Grading &amp; Sortex) Plant</li> <li>• <b>Capacity:-</b>2 to 3 ton per hour</li> <li>• Turn key</li> </ul>  |
| 2      | <b>Weight Machine (50gm. to100Kg.)</b>   | 01   | <p><b>Specification weight Machine</b></p> <p>Weighing Platform:</p> <ol style="list-style-type: none"> <li>1. Capacity: 0-300 Kg.</li> <li>2. Battery Charger included.</li> <li>3. The Indicator shall have a large LCD Display (25 mm font size) with backlight providing good readability under varying light conditions.</li> <li>4. Accuracy 10-50gms</li> <li>5. Platform size: 1000 mm x 1000 mm.</li> <li>6. Height of platform: 50 mm.</li> <li>7. Platform MOC: Stainless Steel.</li> <li>8. Load cell MOC : SS 304 and hermetically sealed.</li> <li>9. Protection: IP 68.</li> <li>10. Operating temperature: 40-500 C.</li> <li>11. Ramp: Stainless Steel for movement of drums on and off the Balance (foldable preferred).</li> </ol> |

|   |   |    |   |
|---|---|----|---|
| 3 | <b>Bag Packing Machen</b>                                       | 01 | <p>Bags packing / Sewing Machine</p> <ol style="list-style-type: none"> <li>Automation Grade: Semi-Automatic</li> <li>Type of Product: Bag Sewing Machine</li> <li>Sewing Speed : 2000-3000 stitches/min</li> <li>Dimensions : 44 x 29 x 36 cm</li> <li>Max Stitch Length: 2mm</li> <li>Needle Size : Double Needle (DB x 1 200/25 Groz-Beckert)</li> </ol>                                   |
| 4 | <b>Generator 65.5 KVA Koel Silent Diesel Generator, 3 Phase</b> | 01 | Generator 65.5 KVA Koel Silent Diesel Generator, 3 Phase  |
| 5 | <b>Control panel with electric works (suitable)</b>             | 01 | <p>Weather proof, suitable to operate all the machines &amp; accessories for bakery products manufacturing machines. The panel shall be equipped with main on/off switch, voltmeter, ammeter, changeover switch, phase indicators, emergency switch, motor starters with protective relays, auto switch, MCB, fuses etc.</p> <p>Any other necessary provisions for satisfactory operation</p> |

**3. Processing Line: Bakery unit - pearl millet-based cookies (capacity 50 kg/hour)**  
Function – To remove the hull/seed coat from pearl millet and other millets

| S. No. | Description of items        | Qty. | Specifications   |
|--------|-----------------------------|------|--|
| 1      | <b>Pearl millet Pearler</b> | 1    | <p>Capacity(kg): <b>50 kg/day</b></p> <p>Motor (HP): 1 hp electric motor</p> <p>Over all dimension L x B x H (m.m): 740 x 330 x 1140</p> <p>General information - This cycle of operation has to be repeated upon the extent of hull/seed coat to be removed.</p> <p>Salient features - Dry milling system to remove the seed coat. It has cylindrical abrasion disc types stones. Pearling efficiency is 80-85%</p> |
| 2      | <b>Dough Kneader</b>        | 1    | <p>Capacity(kg): <b>10 kg/day</b></p> <p>Motor (HP): 0.75 hp electric motor</p> <p>Over all dimension L x B x H (C.M.): 110 x 60 x 90</p> <p>Material: stainless steel (drum and arm)</p> <p>Utility: Kneads the pearl millet and other millets flour, Wheat Flour and Maida dough</p>   |

|          |   |          |  |
|----------|---|----------|--|
|          |   |          | <p>Salient features –</p> <ul style="list-style-type: none"> <li>• Rigidity</li> <li>• Robust construction</li> <li>• Easy to use</li> </ul> <p>This machine used to make dough for biscuits cakes etc.</p>  |
| <b>3</b> | <b>Bajra/ pearl Millet flour Mill Model</b>   | <b>1</b> | <p>Capacity - 30 kgs/H.<br/> Motor (HP): 1 Hp with Electrical Motor (2880 RPM)<br/> Chamber Size: - (12'X6')</p>   |
| <b>4</b> | <b>Oven</b>                                   | <b>1</b> | <p>Application: Biscuit</p> <p>Baking Capacity: 36 trays, 20,30,38,72,152 trays</p> <p>Type: Automatic</p> <p>Operation Mode: Automatic</p> <p>Machine Body Material: SS</p> <p>Design Type: Standard<br/> Power Source: Electric<br/> Drum Speed: DIGITAL<br/> Temperature (Degree Celsius): 300<br/> Body Material: Stainless Steel<br/> Chamber Size (Millimetre): 310<br/> Capacity: 10kgs/Hour<br/> Tray Size: 10X18,13X18,16X24<br/> Source Type: Diesel</p> |
| <b>5</b> | <b>OTG</b>                                    | <b>1</b> | <p>age Capacity: 60 L<br/> Dimension: 54.3 x 36.5 x 39.5 cm<br/> Power: 2000 W<br/> Timer: 60 mins<br/> Temperature: 100 – 250°C<br/> Cavity Material: Rust Proof Galvanized<br/> Accessories: Motorized Rotisserie, Convection Function, Crumbs Tray<br/> Weight: 13780 g</p>   |
| <b>6</b> | <b>Biscuit dough roller</b>                   | <b>1</b> | <p>Capacity – 60 kg/h.<br/> Sheath and cutter<br/> Thickness: 3 mm</p>   |
| <b>7</b> | <b>Bajra Bread Maker machine</b>              | <b>1</b> | <p>Power Consumption: 550 W<br/> Product Code: 16010<br/> Input Power Supply: Single Phase 220 V AC, 50 Hz.<br/> Product Dimensions (mm): 360 (L) X 245 (W) X 300 (H)</p>  |
| <b>8</b> | <b>Automatic Pillow Pouch Packing Machine</b> | <b>1</b> | <p>Packing Size: Bag Length: 25 mm to 60 mm. &amp; Bag Width: 15 mm to 30 mm</p> <p>Packing Speed: 250 to 600 pouches per minute depending on product and size.</p>  |

|  |  |  |   |
|--|--|--|---|
|  |  |  | <p>Packing Range: 5 gm to 20 gm or any irregular objects</p> <p>Net Weight: 450 Kgs.</p> <p>Power Required: 1.5 KW, 220 volt and 50/60 HZ.</p> <p>Optional Attachments: coding device, vibrator, counter, collator</p> <p>Packaging Material: Any heat sealable laminates.</p> <p>Machine Dimension: 800 mm. x 700 mm. x 1100 mm.</p> <p>Salient features – This machine automatically packs soft or hard boiled. Center seal type pouches for solid objects packing.</p> |
|--|--|--|---|

#### 4. Processing Line: Pearl millet flaking line (capacity 100 kg/hr)

| S. No. | Description of items  | Qty. | Specifications  |
|--------|---|------|---|
| 1      | HOT AIR TRAY DEHYDRATOR<br>6 TRAYS<br>Electrically operated | 1    | <p>Temperature range: 500C to 2500 C</p> <p>Temperature with an accuracy of +_ 10C</p> <p>To work on 220 Volts AC main</p> <p>Aluminium Tray</p> <p><b>Features :</b> Digital temperature controller-cum-indicator is used for controlling temperature</p> <p>Double walled inner and outer body made of mild steel beautifully painted</p> <p>Glass wool insulation</p>  |
| 2      | Pouch packing machine                                       | 1    | <p>Sealing width: - 8 – 12 mm</p> <p>Film Thickness: - 0.8 mm</p> <p>Power: - 220 V X 5001 W</p>  |
| 3      | Millet Flaking Machine                                      | 1    | <p>Automation Grade : Semi automatic</p> <p>Voltage: 220 -240V</p> <p>Motor speed – 1000-1500 RPM</p> <p>Capacity – 100 kg/hr.</p> <p>Motor power – 2-5 HP</p> <p><b>Salient features</b></p> <p>Specifications Power source: 0.37 kW single phase</p> <p>Flaking efficiency: 92% (approx.)</p> <p>Flake thickness(minimum): 0.5 mm</p> <p>Millet Flaking Machine: The machine for making flakes from pre-treated whole pearl millet grains The machine comprises of two set of stainless steel rolls. A polygonal teflon feeder for controlled feeding rate of the raw materials into the flaking rolls. It runs at 260 rpm.</p> |

#### 5. Processing Line: Pearl millet Extrusion line (capacity 100 kg/day)

| S. No. | Description of items   | Qty. | Specifications   |
|--------|--|------|--|
| 1      | Pop making machine   | 1    | Size: 18x20 inch, Bowl capacity: 200 GM & 39 s; Electric operated: 220 v   |
| 2      | Automatic Bajra/pearl millet Snacks Making Machine (Puff Extruder Machine) | 1    | Capacity - 100 kg Per Hour<br>Power Consumption - 40 HP<br>Main Motor Power - 30 HP<br>Material Grade - Stainless Steel 304<br>Production Capacity - 100 Kg Per Hour<br>Usage/Application - Bajra/pearl millet Puff Snacks |
| 3      | Hand sealer machine  | 1    | Length – 12 inch,<br>width – 1.5 mm,<br>220v,<br>alluminium body   |

#### 6. Processing Line: Food testing laboratory

| S. No.                             | Description of items   | Qty. | Specifications   |               |             |          |                    |             |                   |             |  |                                    |         |               |                  |                                  |   |              |  |                 |         |
|------------------------------------|--|------|--|---------------|-------------|----------|--------------------|-------------|-------------------|-------------|--|------------------------------------|---------|---------------|------------------|----------------------------------|---|--------------|--|-----------------|---------|
| 1                                  | Analytical balance   | 01   | <p><b>Application:</b> An analytical balance is used to measure mass to a high degree of precision and accuracy. It is most often found in a laboratory setting and is used for accurate weighing. Balances should be housed in a draft-free location and on a vibration free bench. Some modern balances have built-in calibration masses to maintain accuracy</p> <table border="1"> <thead> <tr> <th>Specification</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td>Capacity</td> <td>200 g/ 210 g/ 220g</td> </tr> <tr> <td>Least count</td> <td>0.00001 g (.01mg)</td> </tr> <tr> <td>Readability</td> <td>0.01mg (0.00001 gm) or 0.1 mg (0.0001 gm) the readability required</td> </tr> <tr> <td>Repeatability (Standard deviation)</td> <td>±0.1 mg</td> </tr> <tr> <td>Response time</td> <td>Less than 10 sec</td> </tr> <tr> <td>Stabilization (typical and fast)</td> <td>Approx. 4.0 sec (0.1mg) / 15 sec (0.01mg)</td> </tr> <tr> <td>Weighing pan</td> <td> <ul style="list-style-type: none"> <li>• Circular/square/rectangular</li> <li>• Single Pan Top Grid</li> <li>• type Eccentric load deviation</li> <li>• 0.2/0.25 mg</li> </ul> </td> </tr> <tr> <td>Minimum overall</td> <td>8-10 cm</td> </tr> </tbody> </table> | Specification | Requirement | Capacity | 200 g/ 210 g/ 220g | Least count | 0.00001 g (.01mg) | Readability | 0.01mg (0.00001 gm) or 0.1 mg (0.0001 gm) the readability required | Repeatability (Standard deviation) | ±0.1 mg | Response time | Less than 10 sec | Stabilization (typical and fast) | Approx. 4.0 sec (0.1mg) / 15 sec (0.01mg) | Weighing pan | <ul style="list-style-type: none"> <li>• Circular/square/rectangular</li> <li>• Single Pan Top Grid</li> <li>• type Eccentric load deviation</li> <li>• 0.2/0.25 mg</li> </ul> | Minimum overall | 8-10 cm |
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| Capacity                           | 200 g/ 210 g/ 220g   |      |  |               |             |          |                    |             |                   |             |  |                                    |         |               |                  |                                  |   |              |  |                 |         |
| Least count                        | 0.00001 g (.01mg)  |      |  |               |             |          |                    |             |                   |             |  |                                    |         |               |                  |                                  |   |              |  |                 |         |
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| Repeatability (Standard deviation) | ±0.1 mg  |      |  |               |             |          |                    |             |                   |             |  |                                    |         |               |                  |                                  |   |              |  |                 |         |
| Response time                      | Less than 10 sec   |      |  |               |             |          |                    |             |                   |             |  |                                    |         |               |                  |                                  |   |              |  |                 |         |
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| Minimum overall                    | 8-10 cm  |      |  |               |             |          |                    |             |                   |             |  |                                    |         |               |                  |                                  |   |              |  |                 |         |

|                      |   |   | diameter of pan  |               |             |          |   |                      |                      |             |                        |                |   |
|----------------------|---|---|--|---------------|-------------|----------|---|----------------------|----------------------|-------------|------------------------|----------------|---|
| 2                    | Automatic fibre Analyzer  | 1 | <p><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.</p> <table border="1"> <thead> <tr> <th>Specification</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td>Features</td> <td> <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> </td> </tr> </tbody> </table>   | Specification | Requirement | 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> |                      |                      |             |                        |                |   |
| Specification        | Requirement   |   |  |               |             |          |   |                      |                      |             |                        |                |   |
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| 3                    | Automatic Fat Analyzer  | 1 | <p><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.</p> <table border="1"> <thead> <tr> <th>Specification</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td>Function</td> <td>The system must be capable of quantitative separation of total fats from food, feed etc.</td> </tr> <tr> <td>Sample Volume (Size)</td> <td>0.5 to 15 gm or more</td> </tr> <tr> <td>Temperature</td> <td>100°C– 280°C or better</td> </tr> <tr> <td>Other Features</td> <td> <ul style="list-style-type: none"> <li>Shall be completely microprocessor based, fully automatic</li> <li>boiling, rinsing, drying, recovery, lifting of thimbles to cooling</li> <li>position and shut-down</li> </ul> </td> </tr> </tbody> </table> | Specification | Requirement | Function | The system must be capable of quantitative separation of total fats from food, feed etc.  | Sample Volume (Size) | 0.5 to 15 gm or more | Temperature | 100°C– 280°C or better | Other Features | <ul style="list-style-type: none"> <li>Shall be completely microprocessor based, fully automatic</li> <li>boiling, rinsing, drying, recovery, lifting of thimbles to cooling</li> <li>position and shut-down</li> </ul> |
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| Temperature          | 100°C– 280°C or better  |   |  |               |             |          |   |                      |                      |             |                        |                |   |
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|   |  |   | <ul style="list-style-type: none"> <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<br/>and must be programmable;</li> <li>• Should be provided with suitable solvent recovery system.</li> </ul>   |               |             |                                 |   |   |  |
|---|--|---|--|---------------|-------------|---------------------------------|---|---|--|
| 4   | Automatic Protein Analyzer   | 1 | <p><b>Application:</b> Kjeldhal method is used to determine organic nitrogen and protein contents in food samples. Automatic Kjeldhal protein analyzers are space saving and have distillation and digestion units combined together.</p> <table border="1"> <thead> <tr> <th>Specification</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td>Digestion and distillation unit</td> <td>Should be combined unit with all units from the same manufacturer<br/>and consist of Digestion unit, Distillation unit, Scrubber and Auto titrator</td> </tr> <tr> <td>Automated Distillation and Titration Unit</td> <td> <p>Should be completely programmable for</p> <ol style="list-style-type: none"> <li>1. all controls like<br/>cooling water, dilution water, sodium hydroxide, receiver<br/>solution automatic calculation, automatic emptying of tube,<br/>titration vessel, etc.</li> <li>2. Should have built-in colorimetric /Potentiometric titration<br/>system and allow use of a wide range of indicators.</li> <li>3. Should have possibility for bypassing automatic titration<br/>system to allow manual titration</li> <li>4. Should have <math>\geq 7''</math> color touch screen<br/>LED/LCD/VFD display</li> </ol> </td> </tr> </tbody> </table> | Specification | Requirement | Digestion and distillation unit | Should be combined unit with all units from the same manufacturer<br>and consist of Digestion unit, Distillation unit, Scrubber and Auto titrator | Automated Distillation and Titration Unit | <p>Should be completely programmable for</p> <ol style="list-style-type: none"> <li>1. all controls like<br/>cooling water, dilution water, sodium hydroxide, receiver<br/>solution automatic calculation, automatic emptying of tube,<br/>titration vessel, etc.</li> <li>2. Should have built-in colorimetric /Potentiometric titration<br/>system and allow use of a wide range of indicators.</li> <li>3. Should have possibility for bypassing automatic titration<br/>system to allow manual titration</li> <li>4. Should have <math>\geq 7''</math> color touch screen<br/>LED/LCD/VFD display</li> </ol> |
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|  |  |  |  |
|--|--|--|--|
|  |  |  | <p>Nitrogen measurement range: 0.1 - 200 mg or more</p> <p>5. more</p> <p>6. Recovery: <math>\geq 99.5\%</math>.</p> <p>Should be provided with burette having <math>\geq 30</math> ml volume and</p> <p>7. must have possibility of automatic refilling during analysis</p> <p>Minimum dispensing volume: 2 - 3 <math>\mu</math>l</p> <p>8. RSD</p> <p>Automatic waste removal via tube drainage</p> <p>9. after distillation</p> <p>The system should be able to store the</p> <p>10. recorded data and must have facility for downloading the same using an USB port or</p> <p>11. Additionally, it should be possible for transferring weights and retrieving data using suitable software which is compliant to traceability.</p> |
|  |  |  | <p>12. The system should have safety sensors and audible warning systems</p>   |
|  |  |  | <p>13. Should be provided with exchangeable splash head to reduce carry-over effects</p>   |
|  |  |  | <p>14. The system should be provided with suitable password protection to prevent tampering of programmes and data.</p>  |
|  |  |  | <p>15. The system must be compliant to ISO 17025:2017</p>  |
|  |  |  | <p>16. The system shall have the possibility to track performance of the system and warns if analysis results changes over time. It is desirable to have component traceability feature in the system for effective maintenance of the system.</p>   |

|                     |  |   | <p>17. The instrument shall be delivered with a Verification Test</p> <p>document that certifies that instrument has been performance tested in factory (confirming analysis performance).</p> <hr/> <p>18. 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</p>   |                |              |                     |  |             |   |            |                    |                |   |            |  |
|---------------------|--|---|---|----------------|--------------|---------------------|--|-------------|---|------------|--------------------|----------------|---|------------|--|
| 5                   | Lovibond Tintometer  | 1 | <p><b>Application:</b> It is a visual and automated color measuring instruments synonymous with accuracy in the measurement of color in edible oils, beverages &amp; foodstuffs</p> <table border="1"> <thead> <tr> <th>Specification</th> <th>Requirements</th> </tr> </thead> <tbody> <tr> <td>Measuring principle</td> <td>Visual, in terms of Lovibond® units</td> </tr> <tr> <td>Modes</td> <td>Transmittance, reflectance Range 0.1 - 79.9 Red, Yellow; 0.1 - 49.9 Blue; 0.1 - 3.9 Neutral</td> </tr> <tr> <td>Resolution</td> <td>0.1 Lovibond® unit</td> </tr> <tr> <td>Optical system</td> <td>11 glass-filled nylon racks containing a graduated range of Lovibond® color glasses</td> </tr> <tr> <td>Power pack</td> <td>12 Volt AC, switchable to suit 220/110 Volt supply Approvals<br/><br/>CE Instrument housing Fabricated sheet steel with a tough, textured paint finish</td> </tr> </tbody> </table> | Specification  | Requirements | Measuring principle | Visual, in terms of Lovibond® units  | Modes       | Transmittance, reflectance Range 0.1 - 79.9 Red, Yellow; 0.1 - 49.9 Blue; 0.1 - 3.9 Neutral | Resolution | 0.1 Lovibond® unit | Optical system | 11 glass-filled nylon racks containing a graduated range of Lovibond® color glasses | Power pack | 12 Volt AC, switchable to suit 220/110 Volt supply Approvals<br><br>CE Instrument housing Fabricated sheet steel with a tough, textured paint finish |
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| Resolution          | 0.1 Lovibond® unit   |   |   |                |              |                     |  |             |   |            |                    |                |   |            |  |
| Optical system      | 11 glass-filled nylon racks containing a graduated range of Lovibond® color glasses  |   |   |                |              |                     |  |             |   |            |                    |                |   |            |  |
| Power pack          | 12 Volt AC, switchable to suit 220/110 Volt supply Approvals<br><br>CE Instrument housing Fabricated sheet steel with a tough, textured paint finish |   |   |                |              |                     |  |             |   |            |                    |                |   |            |  |
| 6                   | Bomb Calorimeter   | 1 | <p>Bomb calorimeter is required to calculate the total energy value of the food products</p> <table border="1"> <thead> <tr> <th>Specifications</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td>Instrument</td> <td>Fully Automatic Bomb Calorimeter for rapid determination of Gross Calorific Value of food items.</td> </tr> <tr> <td>Temperature</td> <td>0.0001<sup>0</sup>C or Better</td> </tr> </tbody> </table>  | Specifications | Requirement  | Instrument          | Fully Automatic Bomb Calorimeter for rapid determination of Gross Calorific Value of food items. | Temperature | 0.0001 <sup>0</sup> C or Better   |            |                    |                |   |            |  |
| Specifications      | Requirement  |   |   |                |              |                     |  |             |   |            |                    |                |   |            |  |
| Instrument          | Fully Automatic Bomb Calorimeter for rapid determination of Gross Calorific Value of food items.   |   |   |                |              |                     |  |             |   |            |                    |                |   |            |  |
| Temperature         | 0.0001 <sup>0</sup> C or Better  |   |   |                |              |                     |  |             |   |            |                    |                |   |            |  |

|           |                              |          |  |   |
|-----------|------------------------------|----------|--|---|
|           |                              |          | resolution   |   |
|           |                              |          | Reproducibility / Repeatability  | <0.1% RSD or better   |
|           |                              |          | Unit of measurement  | CAL and KJ  |
|           |                              |          | Memory   | 1000 test or Higher   |
|           |                              |          | Pelletizer   | Suitable for pelletizing food samples.  |
|           |                              |          | Sample weight  | 0.5 to 1.0 g, or better   |
| <b>7</b>  | Conductivity And Tds Meter   | <b>1</b> | <b>Application:</b> The instrument is used to measure conductivity, total dissolved solids (TDS) and temperature of the solution.  |   |
|           |                              |          | <b>Specification</b>   | <b>Requirement</b>  |
|           |                              |          | Range  | Conductivity: 0 $\mu$ S/cm - 200 mS/cm; TDS: 0 - 200 g/L or ppt;<br>Temperature: 0 - 100 °C   |
|           |                              |          | Resolution   | Conductivity: 0.01 $\mu$ s/cm<br>TDS: 0.01 mg/L or ppm to 0.1 $\mu$ g/L or ppt;<br>Temperature: 0.1 °C  |
|           |                              |          | Accuracy   | Conductivity: $\pm$ 1% full-scale;<br>TDS: $\pm$ 1% full-scale; Temperature: $\pm$ 0.5 °C   |
|           |                              |          | Calibration  | Calibration by certified reference material traceable to SI units or ISO 17034.   |
|           |                              |          | Additional Requirements  | Conductivity calibration and verification standards that is traceable to certified international standard SRM NIST.<br>Calibration certificate and inspection |
|           |                              |          | Accessories  | Electrode holder<br>One spare electrode   |
| <b>8.</b> | Digital Butyro Refractometer | <b>1</b> | <b>Application:</b> It is an automated small instrument used for measuring refractive index of animal and vegetable fats and oils. |   |

|   |  |   | <table border="1"> <thead> <tr> <th>Specification</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td>Function</td> <td>Checking purity and adulteration of fats and oils</td> </tr> <tr> <td>Features</td> <td>Automated Operating system with LCD/LED screen directly<br/>without manual alignment can connect PC with RS232 interface;<br/>The required data to be displayed on the screen, including: the<br/>date, temperature, refractive index, concentration, and<br/>amended in accordance with the current temperature</td> </tr> </tbody> </table>  | Specification  | Requirement | Function    | Checking purity and adulteration of fats and oils  | Features | Automated Operating system with LCD/LED screen directly<br>without manual alignment can connect PC with RS232 interface;<br>The required data to be displayed on the screen, including: the<br>date, temperature, refractive index, concentration, and<br>amended in accordance with the current temperature |   |   |
|---|--|---|--|----------------|-------------|-------------|--|----------|--|---|---|
| Specification   | Requirement  |   |  |                |             |             |  |          |  |   |   |
| Function  | Checking purity and adulteration of fats and oils  |   |  |                |             |             |  |          |  |   |   |
| Features  | Automated Operating system with LCD/LED screen directly<br>without manual alignment can connect PC with RS232 interface;<br>The required data to be displayed on the screen, including: the<br>date, temperature, refractive index, concentration, and<br>amended in accordance with the current temperature |   |  |                |             |             |  |          |  |   |   |
| 9   | pH METER   | 1 | <p><b>Application</b> For food analysis, pH adjustment of buffers, solvents etc. with comprehensive range of features and functions, making it suitable for general laboratory, QC and GLP based applications</p> <table border="1"> <thead> <tr> <th>Specifications</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td>Accessories</td> <td> <ul style="list-style-type: none"> <li>• Extra Electrode</li> <li>• Standard buffer solution (pH 4.0, 7.0, 9.0 x 500ml for each bottle)</li> <li>• Standard electrode holder</li> <li>• AC /DC Adaptor.</li> </ul> </td> </tr> <tr> <td>Power</td> <td>9V DC</td> </tr> <tr> <td>Documents Certificates<br/>Performance and safety standards (specific to the device type); Local</td> <td>           Electrical safety conforms to the           <ul style="list-style-type: none"> <li>• standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> </ul>           Certified to be compliant with IEC           <ul style="list-style-type: none"> <li>• 61010-1, IEC 61010-</li> </ul> </td> </tr> </tbody> </table> | Specifications | Requirement | Accessories | <ul style="list-style-type: none"> <li>• Extra Electrode</li> <li>• Standard buffer solution (pH 4.0, 7.0, 9.0 x 500ml for each bottle)</li> <li>• Standard electrode holder</li> <li>• AC /DC Adaptor.</li> </ul> | Power    | 9V DC  | Documents Certificates<br>Performance and safety standards (specific to the device type); Local | Electrical safety conforms to the <ul style="list-style-type: none"> <li>• standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> </ul> Certified to be compliant with IEC <ul style="list-style-type: none"> <li>• 61010-1, IEC 61010-</li> </ul> |
| Specifications  | Requirement  |   |  |                |             |             |  |          |  |   |   |
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| Power   | 9V DC  |   |  |                |             |             |  |          |  |   |   |
| Documents Certificates<br>Performance and safety standards (specific to the device type); Local | Electrical safety conforms to the <ul style="list-style-type: none"> <li>• standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> </ul> Certified to be compliant with IEC <ul style="list-style-type: none"> <li>• 61010-1, IEC 61010-</li> </ul>                |   |  |                |             |             |  |          |  |   |   |

|           |                   |          |  |  |
|-----------|-------------------|----------|--|--|
| <b>10</b> | <b>Viscometer</b> | <b>1</b> | and/or international   | <p>2-40 for safety</p> <p>Complete with IQ, OQ, PQ,</p> <ul style="list-style-type: none"> <li>• Documents, Operations and Maintenance manuals</li> </ul>  |
|           |                   |          | Warranty   | <p>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)</p>   |
|           |                   |          | 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> |
|           |                   |          | <p><b>Application:</b> Rotary Viscometer is required to measure the dynamic viscosity, kinematic viscosity and density of food samples such as beverages, sauces juices, syrup and milk etc.</p> |  |
|           |                   |          | <b>Specifications</b>  | <b>Required</b>  |
|           |                   |          | Display Resolution   | <p>Viscosity: 4 significant digits or better</p> <p>Density: 0.001 gm/cm<sup>3</sup> or better</p> <p>Thermostat: 0.01<sup>0</sup>C or better</p>  |
|           |                   |          | Warranty   | <ul style="list-style-type: none"> <li>• Minimum 2 years warranty should be provided starting from date of satisfactory and faultless functioning of the equipment</li> </ul>  |

|  |  |  |  |
|--|--|--|--|
|  |  |  | <p>at the respective laboratory premises.</p> <ul style="list-style-type: none"> <li>• Comprehensive Maintenance contract (CMC) Service for 3 years, after expiry of standard Warranty should be quoted.</li> <li>• Annual calibration of the equipment shall be a part of the CMC. It shall also be mandatory to perform calibration after every major repair/breakdown.</li> </ul>   |
|  |  | <p>Aft sales service/<br/><br/>Post warranty</p> | <ul style="list-style-type: none"> <li>• Contact details of manufacturer, supplier and local service agent to be provided, including toll free/ Landline Number;</li> <li>• 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>• Should carry out yearly PM with at least one PM kit</li> <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> |
|  |  | <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</p>  |

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.

11

**Deep Freezer (Upright)**

1

**Application:** Deep freezers are used to store samples, reagents & kits, reference materials at low temperature i.e., around -20 °C to -30°C.

| Specification                | Requirements   |
|------------------------------|--|
| Capacity                     | : 250 L or higher  |
| Shelves/ Drawers             | Sealed 5-7 pullout drawers / shelves of different sizes that can be adjusted for storage flexibility |
| Material Of Chamber Interior | Stainless steel, preferably 304 grades   |
| Material of Chamber Exterior | Stainless steel, preferably 304 grades   |
| Warranty of complete unit)   | 3 Year from the date of satisfactory functioning   |
| Warranty of stabilizer in    | 3 Year   |

12

**MUFFLE FURNACE**

1

**Application:** A muffle furnace generates the high-temperature up to 1600 °C and turns the sample into ash. The chemical composition can be determined easily after determining the ash content. It is the best way to determine the quality and levels of silica of the food products.

| Specification | Requirements |
|---------------|--------------|
|---------------|--------------|

|  |  |  |   |   |
|--|--|--|---|---|
|  |  |  | <p>Inside Chamber</p> <p>Volume</p>       | <p>7 L or better</p> <p>With lift door with hot surface facing away from the operator and swing aside door at the front</p>   |
|  |  |  | <p>Cooling Fan/Air</p> <p>Circulation</p> | <p>Attached with Furnace, provided inside the control unit to protect</p> <p>Costly component</p>   |
|  |  |  | <p>Maximum power</p>                      | <p>Up to 8 KW</p>   |
|  |  |  | <p>Accessories to be supplied</p>         | <p>Al<sub>2</sub>O<sub>3</sub> Sample Plate                      1 pcs</p> <p>Al<sub>2</sub>O<sub>3</sub> Furnace Door Block              1 pcs</p> <p>Protection Glove              2 pairs</p> <p>Crucible Clip                      1 pair</p> <p>Crucibles                              6 pcs</p> |
|  |  |  | <p>Warranty</p>                           | <p>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)</p>  |
|  |  |  | <p>IQ/PQ/OQ</p>                           | <p>On site IQ, OQ of instrument along with document to be provided &amp; supplier to assist till satisfactory PQ of instrument</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.</p> <p>This statement must be signed, with the company seal, for its</p>                      |

|                    |   |          |   | <p>authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification.</p> |              |         |   |                  |   |  |
|--------------------|---|----------|---|---|--------------|---------|---|------------------|---|--|
| <b>13</b>          | <b>Water Purification System</b>  | <b>1</b> | <p><b>Application:</b> Ultrapure water purification system is required for purification of water and making it free of contaminants that interfere with microbiological analysis. An ultrapure water system is equipped with ultra-filters to remove endotoxins, DNase and RNase left over from bacteria destroyed by UV, resulting in extremely low total organic carbon (TOC) and having a resistance of up to 18.2 MΩ/cm.</p> <table border="1"> <thead> <tr> <th>Specific<br/>ations</th> <th>Requirements</th> </tr> </thead> <tbody> <tr> <td>General</td> <td> <p>Compact, Wall mountable/benchttop system for microbiology / molecular biology/LC-MS/MS grade water applications.</p> <p>Should deliver ultra-pure product water by point of use dispenser with flexible dispenser, volumetric dispensing and auto shut off facility.</p> </td> </tr> <tr> <td>Quality of water</td> <td> <p>Should deliver Type I/Ultra-pure as per International specifications as follows:</p> <p>Electrical Resistivity Min. 18.2 MΩ/cm @ 25°C</p> <p>Conductivity 0.055 μS/cm compensated to 25°C</p> <p>TOC level (system with UV lamp) &lt;5ppb</p> <p>Flow rate &gt; 1 lit / min</p> <p>Bacteria &lt;1 CFU/100 ml</p> </td> </tr> </tbody> </table> | Specific<br>ations  | Requirements | General | <p>Compact, Wall mountable/benchttop system for microbiology / molecular biology/LC-MS/MS grade water applications.</p> <p>Should deliver ultra-pure product water by point of use dispenser with flexible dispenser, volumetric dispensing and auto shut off facility.</p> | Quality of water | <p>Should deliver Type I/Ultra-pure as per International specifications as follows:</p> <p>Electrical Resistivity Min. 18.2 MΩ/cm @ 25°C</p> <p>Conductivity 0.055 μS/cm compensated to 25°C</p> <p>TOC level (system with UV lamp) &lt;5ppb</p> <p>Flow rate &gt; 1 lit / min</p> <p>Bacteria &lt;1 CFU/100 ml</p> |  |
| Specific<br>ations | Requirements  |          |   |   |              |         |   |                  |   |  |
| General            | <p>Compact, Wall mountable/benchttop system for microbiology / molecular biology/LC-MS/MS grade water applications.</p> <p>Should deliver ultra-pure product water by point of use dispenser with flexible dispenser, volumetric dispensing and auto shut off facility.</p>   |          |   |   |              |         |   |                  |   |  |
| Quality of water   | <p>Should deliver Type I/Ultra-pure as per International specifications as follows:</p> <p>Electrical Resistivity Min. 18.2 MΩ/cm @ 25°C</p> <p>Conductivity 0.055 μS/cm compensated to 25°C</p> <p>TOC level (system with UV lamp) &lt;5ppb</p> <p>Flow rate &gt; 1 lit / min</p> <p>Bacteria &lt;1 CFU/100 ml</p> |          |   |   |              |         |   |                  |   |  |

|                      |  |   | <p>Particulates(size&gt;0.22µm)<br/>&lt;1/mL</p> <p>Sodium (ppb)&lt; 1</p> <p>Chloride (ppb) &lt; 1</p> <p>Total Silica (ppb) &lt; 3</p> <p>Pyrogens &lt;0.001 Eu/ml</p> <p>RNases free, &lt;1pg/ml</p> <p>DNases free, &lt;5 pg/ml</p>  |                      |  |         |  |
|----------------------|--|---|--|----------------------|--|---------|--|
|                      |  |   | <table border="1"> <tr> <td>Compliance statement</td> <td> <p>The quote should also include a compliance statement vis-à- vis specifications in a “tabular form” clearly stating the compliance giving justification, if any supported by technical literature.</p> <p>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> </td> </tr> </table>   | Compliance statement | <p>The quote should also include a compliance statement vis-à- vis specifications in a “tabular form” clearly stating the compliance giving justification, if any supported by technical literature.</p> <p>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> |         |  |
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| 14                   | <b>NITROGEN GENERATOR</b>  | 1 | <p><b>Application:</b> Nitrogen is used as a gas in several applications especially as an evaporating gas and Gas chromatography.</p> <table border="1"> <thead> <tr> <th>Specifications</th> <th>Requirements</th> </tr> </thead> <tbody> <tr> <td>General</td> <td> <p>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</p> </td> </tr> </tbody> </table> | Specifications       | Requirements   | General | <p>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</p> |
| Specifications       | Requirements   |   |  |                      |  |         |  |
| General              | <p>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</p>   |   |  |                      |  |         |  |

|                      |   |          | <p>atmospheric air. Whole system should be compact and</p> <p>properly assembled without any leakage with operating</p> <p>voltage 230v50 Hz</p> <p><b>It should have a Hydrocarbon removal unit.</b></p> <p>The equipment should be capable of running for 24 hrs.</p> <p>round the year</p>   |                    |                           |                |  |             |   |                      |   |
|----------------------|---|----------|---|--------------------|---------------------------|----------------|--|-------------|---|----------------------|---|
|                      |   |          | <table border="1"> <tr> <td>Power requirements</td> <td>230 V / 50 Hz – 230V/60Hz</td> </tr> </table>   | Power requirements | 230 V / 50 Hz – 230V/60Hz |                |  |             |   |                      |   |
| Power requirements   | 230 V / 50 Hz – 230V/60Hz   |          |   |                    |                           |                |  |             |   |                      |   |
| <b>15</b>            | <b>Micropipettes</b>  | <b>1</b> | <p><b>Application:</b> Micropipettes are used to measure and deliver accurate volumes of liquid in any analytical measurement. These devices measure small volume, starting at 1 microliter, and are used in various laboratories, including food analytical laboratories</p> <table border="1"> <thead> <tr> <th>Specifications</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td><b>General</b></td> <td>Liquid handling equipment, Autoclavable with high precision, robust and reliable</td> </tr> <tr> <td>Accessories</td> <td>Suitable Tips for all pipettes, Tip boxes<br/><br/>Rotatable holder with Large rubber feet protection from liquids spilled on bench top to hold and for storing up to 6 pipettes in upright position: 4 Nos</td> </tr> <tr> <td>Compliance statement</td> <td>The quote should also include a compliance statement vis-à-vis specifications in a “tabular form” clearly stating the</td> </tr> </tbody> </table> | Specifications     | Requirement               | <b>General</b> | Liquid handling equipment, Autoclavable with high precision, robust and reliable | Accessories | Suitable Tips for all pipettes, Tip boxes<br><br>Rotatable holder with Large rubber feet protection from liquids spilled on bench top to hold and for storing up to 6 pipettes in upright position: 4 Nos | Compliance statement | The quote should also include a compliance statement vis-à-vis specifications in a “tabular form” clearly stating the |
| Specifications       | Requirement   |          |   |                    |                           |                |  |             |   |                      |   |
| <b>General</b>       | Liquid handling equipment, Autoclavable with high precision, robust and reliable  |          |   |                    |                           |                |  |             |   |                      |   |
| Accessories          | Suitable Tips for all pipettes, Tip boxes<br><br>Rotatable holder with Large rubber feet protection from liquids spilled on bench top to hold and for storing up to 6 pipettes in upright position: 4 Nos |          |   |                    |                           |                |  |             |   |                      |   |
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|                      |  |          | <p>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>  |             |               |         |   |                 |   |                      |  |
|----------------------|--|----------|---|-------------|---------------|---------|---|-----------------|---|----------------------|--|
| <b>16</b>            | <b>BOTTLE-TOP DISPENSER</b>  | <b>1</b> | <p><b>Application:</b> Bottle-top dispensers are used for safe dispensing of different volumes of concentrated acids and corrosive chemicals from a bottle safely and reliably, without contamination from the reagent bottles for use in laboratory</p> <table border="1"> <thead> <tr> <th>Requirement</th> <th>Specification</th> </tr> </thead> <tbody> <tr> <td>General</td> <td>For free dispensing of concentrated acids such as HNO<sub>3</sub>, HCl, HF, H<sub>2</sub>SO<sub>4</sub>, and liquid H<sub>2</sub>O<sub>2</sub><br/>Simple single-hand usage</td> </tr> <tr> <td>Safety features</td> <td>Dispenser should have recirculation valve to ensure safety during dispensing.<br/>The end of the discharge tube should have a hinged cap to avoid dripping after dispensing.</td> </tr> <tr> <td>Compliance statement</td> <td>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.<br/><br/>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.</td> </tr> </tbody> </table> | Requirement | Specification | General | For free dispensing of concentrated acids such as HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> SO <sub>4</sub> , and liquid H <sub>2</sub> O <sub>2</sub><br>Simple single-hand usage | Safety features | Dispenser should have recirculation valve to ensure safety during dispensing.<br>The end of the discharge tube should have a hinged cap to avoid dripping after dispensing. | 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.<br><br>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. |
| Requirement          | Specification  |          |   |             |               |         |   |                 |   |                      |  |
| General              | For free dispensing of concentrated acids such as HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> SO <sub>4</sub> , and liquid H <sub>2</sub> O <sub>2</sub><br>Simple single-hand usage  |          |   |             |               |         |   |                 |   |                      |  |
| Safety features      | Dispenser should have recirculation valve to ensure safety during dispensing.<br>The end of the discharge tube should have a hinged cap to avoid dripping after dispensing.  |          |   |             |               |         |   |                 |   |                      |  |
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| 17            | Texture analyser          | 1              | <p>Specification: Load Range - 5- 50000 grams, Resolution – 5.00gms, Accuracy - ±0.5% FSR (Full Scale Range).</p> <p>Trigger point:range –5- 5000gms</p> <p>Speed: 0.01 to 0.1 mm/s in increments of 0.01 mm/s 0.1 to 10 mm/s in increments of 0.1 mm/s, Accuracy: ±0.1% of set speed</p> <p>Position: Range: 0-101.6 mm, Resolution: 0.1mm, Accuracy: 0.1mm</p> <p>The CT3 is universal testing machine that offers both compression and tensile testing. It can calculate through compression and tensile data a number of physical properties that have proven to be highly correlated to human sensory evaluation of food and other consumer products. With six built-in test modes and ten memory slots for operator-protected tests with administrator rights, a wide choice of accessories and software package, the CT-3 is perfect for most any physical testing requirements (springiness, chewiness, hardness etc.). The CT3 performs like a high end texture analyzer.</p> |               |                    |                |               |     |   |               |     |   |
|---------------|---------------------------|----------------|--|---------------|--------------------|----------------|---------------|-----|---|---------------|-----|---|
| 18            | CLASSIC SOXHLET APPARATUS | 1              | <p>Apparatus for classic, manual extraction using the Soxhlet method. Tried and test C. Gerhardt quality for determining the fat content in food and feeds by means of solid/liquid extraction using an appropriate solvent. Serial heating unit with 6 individually adjustable heaters. With interchangeable top moulds, airbath inserts, support rods and mains cable. The cooling water supply system, Soxhlet glass parts and holders for fastening the glass parts to the support rods have to be ordered separately.</p> <p>Max surface temp – 400°C</p> <p>Supply – 230V, AC</p> <table border="0" data-bbox="657 945 1502 1050"> <thead> <tr> <th><b>Models</b></th> <th><b>Rating (kW)</b></th> <th><b>Heaters</b></th> </tr> </thead> <tbody> <tr> <td>TI – 184 IR B</td> <td>500</td> <td>4</td> </tr> <tr> <td>TI – 184 IR C</td> <td>750</td> <td>6</td> </tr> </tbody> </table>  | <b>Models</b> | <b>Rating (kW)</b> | <b>Heaters</b> | TI – 184 IR B | 500 | 4 | TI – 184 IR C | 750 | 6 |
| <b>Models</b> | <b>Rating (kW)</b>        | <b>Heaters</b> |  |               |                    |                |               |     |   |               |     |   |
| TI – 184 IR B | 500                       | 4              |  |               |                    |                |               |     |   |               |     |   |
| TI – 184 IR C | 750                       | 6              |  |               |                    |                |               |     |   |               |     |   |
| 19            | Moisture Analyzer         | 1              | <p><b>Halogen Moisture Analyzer HX204</b></p> <p>High-Performance Moisture Analysis. <i>0.001 %MC (0.1mg) readability, user guidance, real-time drying curve, user management, method (300) &amp; result (3000) storage, control charts, 4 drying programs, FACT, motorized lid.</i></p> <p><b>Accurate Results for All Sample Types</b></p> <p>Get highly reliable and repeatable moisture results thanks to fast halogen heating and superior weighing performance with high 0.001% MC readability.</p> <p><b>Designed for Compliance</b></p> <p>Smart compliance features to adhere to ALCOA+ principles with no original records on the moisture analyzer and automated export/printing functionality</p> <p><b>Easy Connection via Multiple Interfaces</b></p> <p>For easy reporting, connect the instrument to a PC, FTP server, strip printer or network printer using Wi-Fi, Ethernet, RS232 o</p>   |               |                    |                |               |     |   |               |     |   |

(Vinay Kumar)

**Sr. Scientist & Head  
Krishi Vigyan Kendra, Barmer**

**TENDER CONDITIONS ACCEPTANCE LETTER  
(To be given on Company Letter Head)**

Date:

To,  
Senior Scientist and Head  
KVK, Barmer - I

Sub: Acceptance of Terms & Conditions  
of Tender. Tender Reference No: .....

Name of Tender / Work: **Tender for supply, installation, commissioning of machinery and equipment for common incubation center at Krishi Vigyan Kendra, Barmer I**

Dear Sir,

1. I/We have downloaded/obtained the tender document(s) for the above mentioned Tender/Work from the web site(s) namely:

[www.barmer1.kvk2.in](http://www.barmer1.kvk2.in)

as per your advertisement, given in the above mentioned website(s).

1. I / We hereby certify that I / we have read entire terms and conditions of the tender documents from Page No. 01 to ..... (Including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby the terms / conditions / clauses contained therein.
2. The corrigendum(s) issued from time to time by your department/ organizations too have also been taken into consideration, while submitting this acceptance letter.
3. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
4. In case any provisions of this tender are found violated, your department/ organization shall be at liberty to reject this tender/bid including the forfeiture of the full said Earnest Money Deposit absolutely and we shall have no claim/right against dept. in satisfaction of this condition.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

000

**UNDER TAKING**

To,  
Krishi vigyan Kendra,  
Barmer I

Sir,

1. I/we the undersigned, certify that I/we have gone through the terms and conditions mentioned in the tender documents and undertake to comply with them.
2. It is further certified that our firm has not been blacklisted by any agency in India or abroad.
3. We will supply the goods in accordance to the specifications of the work order. At any stage, if it is found that the substandard /deviation from the specifications/ design/quality has been made by us, we shall be liable for penalty and legal action.

Dated:

SIGNATURE OF THE TENDERER  
WITHSEAL

NAME OF THE TENDERER  
WITH ADDRESS

**NOTE:** Certificate as per above must be submitted only on non-judicial stamp paper of Rs. 100/-(Rs One Hundred Only)

**Bid-Securing Declaration Form**

Date:

Bid No.:

To

(insert complete name and address of the bidder) I/ We. The undersigned, declare that:

*I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.*

*I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We*

- (a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- (b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.
- (c) I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of
  - (i) the receipt of your notification of the name of the successful Bidder; or
  - (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of

(insert legal capacity of person signing the Bid Securing Declaration). Name:  
(insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder)

**Dated on \_\_\_\_\_ day of \_\_\_\_\_ (insert date of signing)**

**Corporate Seal (where appropriate)**

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

**Instructions for Offline Bid Submission**

1. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids offline on the CPP Portal. More information for submitting offline bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>

**2. REGISTRATION**

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “offline bidder Enrolment” on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile number as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) Issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / Encode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6) Bidder then log in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

**3. SEARCHING FOR TENDER DOCUMENTS**

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective “My Tenders” folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

#### **4. PREPARATION OF BIDS**

- 1) Bidder should take into account any corrigendum published with reference to tender document before submitting their bids.
- 2) Bidders should go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. They should note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### **5. SUBMISSION OF BIDS**

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as “offline” to pay the fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) The server time (which is displayed on the bidders dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

- 6) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Anybid document that is uploaded to the server is subject to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid opener
- 7) The uploaded tender documents become readable only after the tender opening by the authorized bidopeners.
- 8) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### **6. ASSISTANCE TO BIDDERS**

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person Dr. Vinay Kumar - 6394226055, Mr. B.R. Morwal – 9929365620 and Dr. Sonali 8947030322 and Email us on [kvkbarmer@yahoo.com](mailto:kvkbarmer@yahoo.com) / [www.barmer1.kvk2.in](http://www.barmer1.kvk2.in).

**(Dr. Vinay Kumar)**  
**Sr. Scientist & Head**  
**Krishi Vigyan Kendra, Barmer -I**