No. 16 /CAET, Date: 3rd Jan 2020

TENDER NOTICE

Sealed tenders are invited from reputed manufacturers/ authorized dealers having valid GST/PAN and Service Centers in India, preferably in Odisha, for supply, installation and commissioning of different items as specified in the tender document at different Colleges/ Departments/ Projects located at Bhubaneswar as well as at different parts of Odisha under Odisha University of Agriculture and Technology (OUAT). Interested firms have to download the tender documents from the official Website of OUAT at ouat.nic.in and submit the same along with the required tender fee as specified in the tender document.

The last date for receipt of tender bids by speed post (India post) is 27th Jan, 2020 up to 4 PM. For details of opening of bids, important information, terms and conditions, requirements, etc. please refer to the tender document available at www://ouat.nic.in.

Sd/-
Chairman
Central Purchase Committee, 2019-20
cum–Dean, CAET
O.U.A.T, Bhubaneswar 751003
TENDER PARTICULARS AND INSTRUCTIONS OF TENDER NOTICE

NO. 16 / CAET, Dt. 3rd Jan, 2020

Tender Fee
(Non refundable)

Rs. 2000 per each item quoted of each group (Group: A, B, D & E)

Rs.2000/each sub-group (chemicals/ glassware/ plasticware/ labwares/Gas) (Group: C)

CHAIRMAN
CENTRAL PURCHASE COMMITTEE 2019-20 CUM-DEAN, CAET
ODISHA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
BHUBANESWAR – 751 003
1. IMPORTANT INFORMATION

1. Period during which tender document will be available on website www.ouat.nic.in
   From 04th Jan 2020 to 26th Jan, 2020

2. Place of submission of Tender
   Chairman
   Central Purchase Committee 2019-20-cum-Dean, College of Agril. Engg. & Tech.,
   OUAT, Bhubaneswar-751003

3. Mode of Submission of Bids
   By Indian Postal Speed Post Only

4. Closing date & time for receipt of tender
   27th Jan 2020 up to 4.00 pm

5. Date & time of opening of Technical Bid
   28th Jan 2020 at 10.30 AM

6. Place of opening of Technical Bid
   College of Agril. Engg. & Tech., Odisha
   University of Agriculture &Technology, Bhubaneswar-751003

7. Mode of communication to Technically Qualified bidders
   By telephone, email or SMS

8. Date & time of opening of Financial Bid
   To be intimated to technically qualified bidders by telephone, email or SMS

9. Place of opening of Financial Bid
   College of Agril. Engg. & Tech., Odisha
   University of Agriculture &Technology, Bhubaneswar-751003
2. SUBMISSION OF TENDER

The tenderer has to submit the tender in two parts for each item (for all groups);

Part-I: Technical Bid
Part-II: Financial bid

For Group A, B, C, D and E
PART- I – TECHNICAL BID

Submit technical bid separately for each equipment/instrument/item as per the given format (Table 1)

It should include:

1. A letter from the firms (the manufacturer and the authorized dealer) indicating that they have not been blacklisted/debarred by any government department/institute or State Agricultural University or any organization in India from sale and participating in tender/quotation.
2. Detail technical description of the equipment/apparatus as per the format appended (Table 1). Failure to submit the bid in prescribed format is liable for rejection.
3. Printed literature indicating photographs and detail technical specification, working CD, Manual and their function must be attached.
4. Tender Document Fee in the form of applicable Demand Draft drawn in favour of Chairman, CPC 2019-20, OUAT payable at SBI, OUAT Campus branch, Bhubaneswar-751003. The Tender Bid shall not be accepted without required Tender Document Fee.
5. A firm participating in more than one item needs to pay tender fee for each item for which bids are submitted, else the bid shall not be accepted.
6. It is necessary that specific brand, make, model, etc. shall be clearly mentioned in the Technical Bid for each item as per the format appended (Table 1).
7. If the bid is submitted by an authorized dealer, then they must submit an authorization letter as per Annexure IV.
8. Separate list indicating recent users, name of users, address along with contact telephone number and email of users of the equipment (same make and model for which bid has been submitted) must be submitted in the technical bid for each item separately.
9. Letter from manufacturer indicating year of introduction of the item, period for which spare and service shall be provided and likely date of phase out of the item must be submitted.
10. Letter indicating that the quoted item is new and has not been tampered.
11. Letter indicating the country and place of origin and assembly of the item.
12. Letter from manufacturer indicating that the manufacturer shall provide after sales service during Warranty/Comprehensive Annual Maintenance Contract/Annual Maintenance Contract period if the authorized dealer/bidder fails to provide same.
13. The duly filled technical bid along with all supporting documents must be submitted in hard copy as well as soft copy in the form of pen drive (soft copy should be mirror copy of the hard copy as per table 1 in MS word version 2007 format with clear mention of name of firm, tender sl.no., Technical bids has to be clearly written on the top of the pen drive), else the bid may be rejected.
14. All the electrical/electronic equipments should have a provision to be operated as per Indian electricity supply.
Table 1: Format for submission of detail specification for each item

<table>
<thead>
<tr>
<th>Name of the firm with complete address, email &amp; contact no/fax</th>
<th>Sl. No. of the item as per the tender document</th>
<th>Name of the quoted item</th>
<th>Make and Model</th>
<th>Technical specifications as in the tender documents</th>
<th>Conformance of technical specifications in the quoted model (yes/no)</th>
<th>Deviation in specifications of the quoted model</th>
<th>Justification for deviation</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
</tr>
</tbody>
</table>

1. Mention name of the bidder/firm with complete postal address, email, contact number/fax at column ‘1’
2. Specify the serial number of the item as per the tender document at column ‘2’
3. Mention the item’s name as per the tender specifications at column ‘3’
4. Specify make and full make and model name along with model number, if any at column ‘4’
5. Mention the technical specifications of the item as per tender document for which bid has been submitted in the same sequence as per tender document at column ‘5’.
6. In the 6th column write ‘yes’ against each specification of the 5th column, if the specification of the offered model confirms, otherwise write ‘No’
7. In the 7th column, specify deviations in specifications of the quoted model from the specifications mentioned (same as mentioned in tender document) at column ‘5’.
8. In the 8th column, specify justification for deviation.
9. The additional specifications, if any along with other comments may be specified at column ‘9’

3. PART-II- FINANCIAL BID

1. Price should be quoted in Indian Currency only except for imported items.
2. For imported items, bids should be submitted in two parts;
   (i) in Indian currency, which should include cost, rate and amount of discount. The taxes, packing, forwarding, transportation and other levies FOR destination must be mentioned separately.
   (ii) In foreign currency indicating cost, rate and amount of discount, rate & amount of customs duty as per DSIR Certificate, customs clearing charges, packing, forwarding, insurance, transportation and any other taxes and levies FOR destination, separately
3. EMD @2% of the quoted value (inclusive of all taxes & levies FOR destination).
4. EMD to be submitted separately for each item. Firms submitting one EMD for many items shall be liable for rejection.
5. NSIC/ SSI/ SME units are exempted for submitting Bid Security/ EMD as per Govt. of India order for specific item for which they have registration. Such firms will submit the cost of tender paper, which shall not be considered for exemption.
6. An undertaking indicating that the quoted make and model have not been sold to any other organization in India at lower price both by the manufacturer and the firm submitting the bid. Undertaking needs to be submitted by the manufacturer and supplier in this regard. The undertaking should also include the text that “If it is found later that the quoted make and model have been supplied to other organization/ firm at lower price than the offer price to OUAT, then the difference of cost shall be recovered from the bidder and the bidder may be blacklisted”.

4 | P a g e
7. Detail of basic cost of item, cost of mandatory, auxiliary and consumable parts including prerequisite parts, civil works required for successful installation and demonstration, all taxes including customs duty and/or sales tax, packing, insurance, forwarding and any other charges as per the Table 2.

8. The detailed price break up for each make and model quoted should be given in separate sheet as per Table 2.

9. The price quoted should be onsite delivery price to different offices/departments of OUAT situated throughout Odisha.

10. For imported items customs duty against DSIR certificate, customs clearing charges and local transportation, etc. if any, should be clearly mentioned, otherwise offer may not be accepted.

11. The cost of packing, forwarding, insurance etc. must be mentioned separately in exact figure (it should not be written “as applicable”)

12. GST and other government taxes shall be paid as per government rule and need to be mentioned separately.

13. The exact figure of percentage of discount offered as applicable to non-profit, non-commercial government educational institute.

14. It should contain letter confirming 3-years onsite warranty from manufacturer (if warranty is less than 3 years, then the additional cost of onsite Comprehensive Annual Maintenance Contract with zero financial liability to the University must be included for calculating 3 years warranty), else the bid may not be accepted.

15. The warranty of 3 years is not applicable for soil engaging parts like tynes, shovels, and blades. Etc. excluding manufacturing defects.

16. The tenderer must submit a letter from manufacturer stating that if the authorized dealer/ bidder fails to provide after sales service during warranty, Comprehensive Annual Maintenance Contract or Annual Maintenance Contract, the manufacturer shall provide onsite after sales service as per warranty and comprehensive annual rate contract or annual maintenance contract without any financial liability to the university and any precondition what so ever.

17. The cost of AMC beyond warranty period (year wise at least for 5 years beyond 3 years mandatory warranty).

18. Clear copy of PAN & GSTIN (provisional copy shall not be accepted) showing the registered number and photograph (where applicable).

19. The duly filled financial bid as per table 2 along with all supporting documents must be submitted in hard copy as well as soft copy in the form of pen drive (in soft copy should be mirror copy of the hard copy as per table 1 in MS word version 2007 format with clear mention of name of firm, tender sl.no., Financial bid has to be clearly written on the top of the pen drive), else the bid may be rejected.

20. Submit financial bid separately for each equipment/instrument as per the given format (Table 2).

21. Clubbing of many items together shall be liable for rejection.

Table 2: Format for submission of Financial Bid

| 1 | Name of the firm with complete address, email & contact no/fax |
| 2 | Tender Sl. No |
| 3 | Item with Make & model |
| 4 | Technical specification as per technical bid submitted by the firm |
| 5 | Basic Price of each |
| 6 | Total cost |
| 7 | Educational discount |
| 8 | Price after discount |
| 9 | GST/Customs duty (if any) |
| 10 | Customs clearing charges (if applicable) |
| 11 | Packing, forwarding and insurance charges (if any) |
| 12 | Any other Charges (if any including cost of installation, civil works, if any) |
5. TERMS AND CONDITIONS FOR SUBMISSION OF BIDS

1. All offers and communications should be in English only.
2. The hard copy of tender document available with the Chairman, Central Purchase Committee cum Dean, College of Agricultural Engineering & Technology, OUAT, Bhubaneswar shall be treated as final and binding.
3. Each part of bid (Technical or Financial) along with all required documents and fees has to be put inside separate sealed envelope with clear mention over it about name and address of tenderer, the type of bid (Technical bid or Financial bid), tender sl. no. & items for which bid has been submitted. Both the sealed envelopes (Technical bid and Financial bid) have to be put inside another sealed envelope with clear mention of the name and address of the tenderer, tender sl. no. & name of the item, for which bid has been placed inside.
4. Tenderers quoting for more than one item have to follow the same procedure for each item quoted. Clubbing of many items together shall be liable for rejection.
5. The sealed envelope must show the name of the tenderer, his address and should be subscribed as “Tender Sl. No”, whatever is applicable on the top of the envelope.
6. The tenders should be addressed and submitted to Chairman, Central Purchase Committee cum Dean, College of Agricultural Engineering & Technology, Odisha University of Agriculture & Technology, Bhubaneswar-751003, Odisha on or before the date specified at page 2 of this document and will be opened in the conference hall/ Gallery, College of College of Agricultural Engineering & Technology, OUAT, Bhubaneswar 751003 in the presence of the tenderers or their authorized representatives, as may be desired as per the date and time mentioned earlier. Tenderer or their authorized representative should submit ID proof and authorization letter before entry into the Conference Hall for participation in the Opening of Tenders failing which they will not be allowed to be present in the opening of Tender Bids.
7. Tender bid (both soft and hard copy) should be sent by SPEED POST (India post) only. Tenders sent by other than SPEED POST (of India post) shall not be accepted.
8. Authorised dealers/representative other than manufacturer should produce authorization letter from the manufacturer for participation in the Tender failing which the offer will be summarily rejected. The certificate so furnished should clearly incorporate the period for which such authorization is valid.

9. Tenders shall be fully in accordance with the requirements of the terms and conditions and accompanied with the technical specification, detailed leaflets and make attached there to. Incomplete tenders will be rejected. Telegraphic tenders will not be accepted.

10. Submission of more than one tender by a particular tenderer under different names is strictly prohibited. In case it is discovered later on that this condition is violated, all the tenders submitted by such tenderers would be rejected or contract cancelled and earnest money deposit forfeited.

11. Warrantee period, delivery period and post-sale service condition etc. have also to be indicated. The rate to be quoted should be “at onsite destination” inclusive all packing and forwarding charges, all levies and taxes. The rate of such charges also be indicated separately.

12. Firms submitting bids have to accept that the rates and the conditions of the offer will remain valid for at least one year from the date of rate contract or till the next rate contract is made, whichever is earlier. The rate contract for glasswares/ chemicals/ plasticwares/ lab wares and gases will be valid till 31st March 2021 or till the next rate contract is made.

13. After submission of the tender bids, no change or alteration of the terms and conditions, quoted price will be acceptable on any account.

14. Tenders submitted with over writing or erased or illegible rate/rates will be rejected.

15. Request from tenderers in respect of addition, alteration, modification, corrections, etc. of either terms or conditions or rate after opening of the tender may not be considered.

16. Tenderers shall carefully examine the terms and conditions of the tender documents and submit an undertaking with authorized signature indicating that they are submitting the bid(s) by accepting all terms and conditions laid down in this tender document.

17. Should a tenderer find discrepancies in or omissions from the specification or other documents or would thereby any doubt as to their meaning should at once notify the Chairman, Central Purchase Committee 2019-20, OUAT, Bhubaneswar 751003 and obtain clarification in writing. This however, does not entitle the tenderers to ask for time beyond the due date fixed.

18. Verbal clarification and/or information given by the purchaser or its employees or representatives shall not be binding on the purchaser.

19. While, tenders under consideration, tenderers and their representative or other interested parties are advised to refrain from contacting by any means to the purchaser’s personnel or representatives on matter relating to the tenders under study.

20. Submission of sealed tender will carry with the implication that the tenderer agrees to abide by all the conditions laid down in this tender.

21. The purchaser, if necessary will obtain clarification on tenders by requesting such information from any or all the tenderers either in writing or through personal contact as may be necessary.

22. The undersigned reserves the right to reject any tender on the basis of Technical Bid or accept any tender for a better Technical specification than published in the tender document.

23. In case any tender is rejected on the basis of Technical Bid, the Financial Bid corresponding to that tender will not be opened by the tender committee and would be returned as such to the tenderer.

24. The Chairman, Central Purchase Committee 2019-20 reserves the right to call for price negotiation of any item, if the price found to be in higher side. In such cases the firm quoted lowest price shall be called for negotiation. If the offer of lowest quoted bidder is not acceptable to Central Purchase Committee, then the Bidder having the next higher price shall be called for negotiation. The CPC 2019-20 reserves the right to call any bidder for negotiation if price quoted found to be on higher side.
25. Tenderers violating any guidelines shall be liable for rejection.
26. The successful tenderer has to intimate the indenting officer about the site requirement and any other requirement at least 2 weeks before supply of the equipments.
27. For same item rate contract may be awarded to more than one firm based on quality parameter.
28. The rate contract of a particular item does not give guarantee that the item shall be purchased. Purchase shall be made as per the requirement and fund availability.

The timelines and terms and conditions must be adhered to strictly.

University will give preferences to those bidders when bids are received directly from the manufacturers. However, in some cases of merit, the University may take considerate view for supply by the manufacturers through the authorized dealers.

The Central Purchase Committee has the right to cancel any bid (technical or financial) without assigning any reason thereof.

6. GST

Odisha University of Agriculture and Technology is a non-profit, non-commercial premier institute engaged in teaching, research at undergraduate, post graduate and PhD level and as such, we do not have any commercial license. **GST identification number of our university is 21AAAJ00250CIZ1.**

Odisha University of Agriculture and Technology, Bhubaneswar is also registered with the Department of Scientific and Industrial Research (DSIR regn no. TU/V/RG-CDE (421)/2013, dated 21st February, 2017 valid up to 31st August 2021) for purposes of availing Custom Duty exemption and IGST-SGST exemption. Accordingly, the GST calculation may be made on the concessional rate. GST must be calculated as per 23rd GST council meeting and amended from time to time applicable for public funded research organization with valid DSIR certificate.

7. CUSTOMS DUTY EXEMPTION

Odisha University of Agriculture and Technology, Bhubaneswar is registered with the Department of Scientific and Industrial Research (DSIR regn no. TU/V/RG-CDE (421)/2013, dated 21st February, 2017 valid up to 31st August 2021) for purposes of availing Custom Duty exemption and IGST-SGST exemption. The applicable amount of customs duty/ GST for our University against DSIR certificate should be mentioned in the financial bid. For details, please refer to PART-II-FINANCIAL BID as mentioned earlier of this document.

8. DISCOUNT

OUAT is a non-profit, non-commercial pioneer institution in the field of teaching, research and extension in agricultural and allied fields. As such the University avails price discount for purchase of equipment/ instruments, etc. The maximum rate of discount on each equipment/ instruments may also be indicated in the tender specifically.

9. SUPPLY

The materials intended would be delivered by the supplier to such indenting Officers/ Departments/ Research Projects located at Bhubaneswar and at different parts of Odisha without any additional cost. The items should confirm to the latest relevant, National/International standards and shall be complete in all respect.
Any components, fittings, etc. which may not have been specifically mentioned in the tender specifications but are usual and necessary for successful installation and demonstration shall be supplied by the tenderer at no extra cost if not quoted.

The cost of article damaged in transit or found short at the time of delivery will be deducted from the bill of the firm, in case the firm does not replace the stock within a week from the date of receipt of complaint over post, email, phone or fax.

In case any firm supplies goods of inferior quality which is not in conformity with the approved specifications, the entire stock supplied by the firm will be rejected and the purchaser will not be responsible for any loss sustained by the tenderer on that account.

The articles against all the indents placed by the indenting officer must be supplied in one lot within the period specified in the indent, failing which the earnest money deposit will be forfeited.

Conditional offers and offers qualified by such vogue and indefinite expression as “subject to immediate acceptance”, “subject to prior “will not be considered.

The Central Purchase Committee has the right to cancel any bid (technical or financial) without assigning any reason thereof.

10. AFTER SALES SERVICE

The manufacturer or their authorized dealer (with written permission from the manufacturer) should also sign an agreement with the indenting official in Rs.100.00 court stamp paper (to be borne by the bidder) in presence of Magistrate/Notary regarding after sales conditions (Annexure-V) at the time of supply, else payment shall be held up till such agreement is signed and the cost involved shall be borne by the manufacturer or supplier.

During the warranty period and subsequently, after agreement of AMC, the supplier shall attend to the problems reported by the users of OUAT on a priority basis. For any problem reported, the supplier shall attend within 2 days and rectify the problem within a week. In case of any major breakdown during the warranty period, the supplier will make all necessary arrangements to replace/rectify the supplied equipments/parts within two week of the complaint. Complaint on any problem will be informed through message, phone, fax or mail number given by the supplier. The supplier will maintain an inventory of all essential spares and accessories for a minimum period of 8 years from the date of installation.

11. WARRANTY

The item’s being purchased are expected to be used continuously. The reliability and safety of the total installed system and trouble-free operation are, therefore, of prime importance. The supplied devices/ item and components shall be covered under Three-Year Comprehensive On-site Warranty from the date of successful demonstration at site (if warranty is less than 3 years then the additional cost of onsite Comprehensive Annual Maintenance Contract with zero financial liability to the University must be included for calculating 3 years warranty). This should be taken into consideration while quoting the price. Warranty of an equipment shall start from the date of successful installation and demonstration at site and not from the date of invoice or sale. Specific warranty requirement (other than 3 years comprehensive) for some items is indicated in respective items.

If the bid is submitted by an authorised dealer/agent, then he should submit a letter from Manufacturer stating that if the authorized dealer/bidder fails to provide after sales service during
warranty, Comprehensive Annual Maintenance Contract or Annual Maintenance Contract, the manufacturer shall provide onsite after sales service as per warranty and comprehensive annual rate contract or annual maintenance contract without any additional cost and any precondition what so ever.

During Warranty/ CAMC period, it shall be the responsibility of the bidder/authorized dealer or manufacturer to provide all essential spares, which may be required for maintenance and trouble-free operation of the devices/components at the supplier’s cost.

12. ANNUAL MAINTENANCE CONTRACT

The period of warranty is to be calculated from the date of successful installation/ demonstration at site. The bidder/ authorized supplier/ manufacturer shall be under the obligation to enter into an Annual Maintenance Contract (AMC beyond warranty period (at least for 5 years beyond 3 years warranty) with respective indenters for a minimum further period of five years, renewable if felt necessary, on mutually acceptable rate, terms and conditions after the completion of Warranty period of three years. The scope of AMC shall cover at least 2 periodic maintenances and attending breakdown of equipments. The indenting officer shall have to arrange/ bear the cost of spares required. All cost towards visiting of engineer and technicians or any other person from the company shall be included in the AMC. Accordingly, the bidder has to offer rates for the AMC structure year-wise in a separate sheet.

13. TRAINING

Both onsite and off-site training to be provided up to the satisfaction of the user/users and all the cost involved shall be borne by the supplier.

14. EARNEST MONEY DEPOSIT

Tenderers shall have to deposit earnest money of 2% of their quoted value (onsite delivery price which shall include cost of equipment including packing, forwarding, insurance, all taxes and levis) of each equipment/ instrument/ apparatus in shape of Bank draft/ Banker’s cheque duly pledged in favour of the Chairman, CPC 2019-20, OUAT, Bhubaneswar– 751003, Odisha payable at State Bank of India, OUAT campus branch, Bhubaneswar – 751003 (IFS code: 0003341) failing which the tender offer will not be accepted at the time of opening of the tender. No request for adjustment of claims, if any, will be accepted.

As per Government of Odisha (Industry Department) Rules, the small scale industries situated in Odisha are exempted from deposit of EMD for particular item for which they have been registered with EPM. Such firms should submit the documents of registration and other related papers along with their offer.

The earnest money deposit of unsuccessful tenders will be refunded as soon as possible after the tenders are finalized.

EMD of the successful bidders shall be refunded after the validity of rate contract period. However, if the successful bidder has supplied equipment as per the rate contract to any of the establishments of the University, then the EMD will be refunded after completion of the warranty period of the equipment/ accessories etc.
No one should submit a tender who is unable to furnish earnest money as indicated above and to supply the item within the specified period as indicated in the indent/order issued further quantity in his favour.
In case the items supplied are not found up to the specification and rejected, the supplier should be intimated to take back his stock at his own cost within 3 days from the date of rejection and to replace the same within a week failing which the cost there of will be recovered from his pending bills/EMD.

The supplier shall be responsible for releasing the item from carrier/transporters. The item shall be delivered and installed at the respective place of indent.

15. TAX DEDUCTION AT SOURCE

If the supplier makes intra-state supply (i.e., charges under CGST and SGST in the invoice), TDS shall be made @1% under CGST and 1% under SGST, totaling to 2%. But if the supplier makes inter-state supply (i.e., charges tax under IGST in the invoice), TDS shall be made @2% under IGST. The deducted GST shall be deposited into their GST account by the comptroller, OUAT.

16. PERFORMANCE SECURITY

The successful bidders awarded with order should produce Performance Security for an amount of 10% of the value of the contract. The performance security may be furnished in the form of an account payee demand draft, fixed deposited receipt from a commercial bank, bank guarantee from a commercial bank in an acceptable form. The Model Bank Guarantee format is at Annexure –I. Performance security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.

17. PAYMENT

Full payment of contract price/billing price shall be paid on receipt of materials at site on verification/installation/demonstration thereof and receipt of performance security (annexure I). Bidder/Firm seeking advance payment has to submit Bank guarantee equal to the advance amount (annexure II).

18. PENALTY

In the event the compliance are not attended to and rectified as per prescribed time under clause AFTER SALES SERVICE, the supplier will be liable to a penalty @ 0.5 % of the purchase cost of the item per day till the equipment is brought to functional condition.

19. RIGHT TO ACCEPT/REJECTION OF BIDS

The right of acceptance of bid and/or awarding contracts rests with the purchaser. The purchaser shall also reserve the right either to reject or accept any/or all tenders, split the orders between different tenders. The purchaser has exclusive right to alter the quantities of materials at the time of placing the final purchase order.

20. SETTLEMENT OF DISPUTE

Suits, if any arising out of the contract shall be filled by either party in a court of law to which the jurisdiction of the High Court of Odisha extends.

Chairman,
Central Purchase Committee 2019-20
cum–Dean, CAET
O.U.A.T, Bhubaneswar 751003
21. IMPORTANT INSTRUCTIONS

PLEASE READ CAREFULLY BEFORE FILLING UP THE TENDER FORM

1. Tenderer should obtain and/or download and carefully examine the above Notice Inviting Tender and the Tender document, including amendments, if any, and unconditionally agree to all the terms and conditions indicated in the tender enquiry documents and subsequent amendments.

2. The final Hard Copy of the Tender Document retained in the records of the Chairman, Central Purchase Committee 2019-20 will be deemed authentic in case of any dispute at any stage.

3. The following tenders shall be ignored:
   a) Tenders submitted by those who do not meet the eligibility and qualification criteria
   b) Tenders sent by fax/ telex/ cable/ email/ hand delivery or by courier service
   c) Tenders that do not meet the basic requirements
   d) Tenders which have minor infirmities/ irregularities and the tenderer does not respond to clarifications sought by the purchaser within the time specified by him
   e) Tenders where, in the opinion of the purchaser, there is an arithmetical inaccuracy in the price bid and the tenderer does not agree with the Purchaser
   f) Incomplete tenders
   g) Tenders received without the EMD and tender fee
   h) Blacklisted/debarred companies/dealers/representatives by Govt. of India, any State Agricultural University or any state/union territory of India.

4. Any tender may be rejected, if:
   a) The bid price is directly or indirectly indicated in the technical bid
   b) Tenderer fails to provide required information or provide incorrect information or fail to comply with the instructions in the Tender Document
   c) The technical specification have not been submitted in the manner indicated in the Tender Document (Table 1)
   d) The prices are not quoted in the manner indicated in the Tender Document (Table 2)
   e) On verification, the data/ credentials furnished by the tenderer are found to be incorrect or any adverse report on requisite financial condition has come to the knowledge of the purchaser
   f) Tenderer attempts to influence the Purchaser’s decision during scrutiny, comparison and evaluation of tenders and award of contract
   g) Tenderer is disqualified on the grounds of national security or public interest.

5. Purchaser is not bound to accept the lowest or any tender that may be received against the above-referred tender enquiry.

6. Until a contract is signed, this tender form submitted by the tenderer read with its acceptance by the Purchaser constitutes a binding contract between them.

Having carefully gone through the above instructions, the Tender Notice and the Tender Document, we, M/s...........................................(name and complete address of the tenderer), the tenderer, agree to all the terms and conditions mentioned in therein and hereby, make the following offer to supply goods and perform services as per the list requirements, delivery schedule and in conformity with all other conditions in the tender document and amendments thereto.

Authorised Signature with name, designation & Seal
22. INFORMATION TO BE SUBMITTED BY TENDERER (BIDDER)
(INFORMATION SHEET OF BIDDER)

1. Name of the tenderer______________________________
2. Address _________________________________________
3. Email___________________________________________
4. Phone____________________ Fax____________________
5. Income Tax Permanent Account Number (PAN):______________
6. GST No._____________________
7. Name and designation of the person signing and submitting the bid on behalf of the tenderer_________________________________________________
8. Has the person at 7 above been authorised by a Resolution of the Board of Directors of the Tenderer Company to sign and submit this tender? (Yes/No)
9. Name and complete address of the Tenderer’s bankers:
   a) ______________________________________________________________
   b) ______________________________________________________________

Authorised Signature with name, designation & Seal
Annexure I

23. BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

The Comptroller
Odisha University of Agriculture & Technology
Bhubaneswar 751003

WHEREAS ............................................................................. (Name and address of the Supplier) (hereinafter called “the Supplier”) has undertaken, in pursuance of purchase order no.......................... dated .......... to supply ........(description of goods and services) (herein after called “the contract”).

AND WHEREAS it has been stipulated by you in the said purchase order that the Supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with and due performance of the contract;

AND WHEREAS we have agreed to give the Supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the Supplier, up to a total of Rs. ............................................................... (amount of the guarantee in words and figures), and we hereby irrevocably and absolutely undertake to pay you immediately, upon your first written demand declaring the Supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

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

We agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the Supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

The Bank guarantee shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this Bank Guarantee has been established in such form and with such content that is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

The Bank Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank or the Supplier.

The Bank further undertakes not to revoke this Guarantee during its currency except with the previous express consent of the Purchaser in writing.

The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorized and has full power to execute this Guarantee for an on behalf of the Bank. This guarantee shall be valid up to and including the ...... day of ......, 20......

................................................
(Signature with date of the authorised officer of the Bank)

.............................................................
Name and designation of the officer

.............................................................
Seal, name & address of the Bank and address of the Branch
Annexure II

24. BANK GUARANTEE PROFORMA FOR ADVANCE PAYMENT
(ON NON-JUDICIAL STAMP PAPER OF AN APPROPRIATE VALUE)

The Comptroller
Odisha University of Agriculture & Technology
Bhubaneswar 751003

Dear Sir, we______________________________ (name & address of bank) hereby refer to the Purchase Order
no____, dated________ and pro-forma Invoice/Bill no____ dated _____ between ______________ (Name &
address of indenting officer), herein after called as indenter and M/s________________, herein after called as
supplier in terms of the tender No. _______ for supply of ___________ with onsite delivery price of _______.

This guarantee shall be construed as an irrevocable, absolute, unconditional and direct guarantee for an amount
of Rs. ______ without regard to the validity, regularity or enforceability of any obligation of the parties to the
purchase order & proforma invoice/bill.

The Comptroller, OUAT shall be entitled to enforce this guarantee without being obliged to resort initially to any
other security or to any other remedy to enforce any of the obligations herein guaranteed and may pursue any
or all of it remedies at one or at different times.

Upon default of the supply & successful installation and demonstration at indenter site, we agree to pay to the
Comptroller, OUAT, Bhubaneswar on demand and without any demur the sum of Rs. _________________ or
any part thereof, immediately upon presentation of a written statement by the Comptroller, OUAT,
Bhubaneswar that the amount of said demand is due from the Supplier to the _______ (Indenting officer), OUAT
by virtue of breach of supply, installation & demonstration by the Supplier under the terms of the aforesaid
purchase order &pro-forma invoice/bill. Notwithstanding any dispute or disputes raised by the supplier in any
suit or proceeding pending before any Court or Tribunal relating thereto, liability under this present guarantee
is absolute and unequivocal.

The determination of the amount due under the guarantee shall be in the sole discretion of the Comptroller,
OUAT, Bhubaneswar whose decision shall be conclusive and binding on us as guarantor. It is mutually agreed
that the Comptroller, OUAT, Bhubaneswar shall have the fullest liberty without affecting in any manner our
obligation hereunder with or without our consent to vary any of the terms of the said purchase order or to
extend the time for performance by the Supplier, from time to time any of the powers exercisable by the
Comptroller, OUAT, Bhubaneswar against the Supplier and either to forebear or enforce any of the terms and
conditions relating to the said Purchase Order and we shall not be relieved from our liability by reasons of any
variation or any extension being granted to the Supplier or for any forbearance, act or omission on the part of
the Comptroller, OUAT, Bhubaneswar or any indulgence by the Comptroller, OUAT, Bhubaneswar to the Supplier
or by any such matter or thing whatsoever which under the law relating to the sureties would but for this
provision have effect of so relieving our obligation.

This guarantee is confirmed and irrevocable and shall remain in effect until _________________ and such
extended periods, which may be mutually agreed to.

We hereby expressly waive notice of any said extension of the time for performance and alteration or change in
any of the terms and conditions of the said Purchase order. This guarantee will not be discharged due to change
in constitution of the Bank or the Contractor. We __________________________(Name of the Bank) undertake not
to revoke this guarantee during its currency without written consent of the authority. This guarantee will not be
discharged due to change in the constitution of the Bank or the Supplier.

Very truly yours,

__________________________________________________________ ________________________________
(Name, Seal & Authorised Signature of the Bank and date)
Annexure III

25. MODEL CERTIFICATE OF INSTALLATION

No. _____  Dated

1. Reference : Purchase Order No.……….. Dt…..  Invoice no.……….. Contract No. ……..  dt…..

2. It is certified that
   a. M/s ____________ have completed installation of ______________ (name of equipment) on
      ______________ [date(s)] and Site Acceptance Test (SAT) and other inspection & tests, as
      stipulated in the purchase order on, ______________ [date(s)] to the satisfaction of the Purchaser
      and user at the designated site ______ (name of the site).
   b. Records of SAT and other inspection & tests are annexed to this Certificate.
      Documentation, etc. have been taken over (all documents required to be delivered at the time of
      SAT).

For Tenderer

   Witness:       Signature
   Name:         Name
   Designation:  Designation
   Address:      Address
   Date:         Date

For Purchaser

   Witness:       Signature
   Name:         Name
   Designation:  Designation
   Address:      Address
   Date:         Date
26. MANUFACTURERS AUTHORIZATION CERTIFICATE

To

We .........................(name of complete address of manufacturer) is the manufacture of the following equipment.

1..............................................
2..............................................

We hereby grant our authorisation to M/s ....................(complete name and address of dealer/representative) ........... to submit, participate and finalise bid in response to your Tender Notice no ______/CAET, dt._____/____/2020

We also give guarantee that M/s ...(name and complete address).. is our authorised service centre situated in the state of Odisha/Eastern Region of Odisha and shall provide after sales service during Warranty/CMAC/AMC period. In case M/s ....................(name and complete address) fails to meet the after sales service during Warranty/CAMC/AMC period, we shall be liable to provide after sales service during Warranty/CAMC/AMC period directly.

Undertaking:
The Company hereby agrees not to withdraw the authorization or dealership for the sales & service of the above equipment up to at least 3 years from the date of the successful installation at your organization. In case, it happens for the reason whatsoever the company also agrees to take the responsibility for providing the service with spares itself or through its other dealer or agent in India at the same terms & conditions and price submitted by our above current agent or dealer. In case of defaulting, we will be penalized under the Laws of Union of India.

Authorized Signatory
(having the power of Attorney on behalf of the Manufacturer)
Name:
Designation:
Name of the Company/ Firm:
Complete Postal Address:
Telephone no(s):
Fax:
E-mail:
Website:
27. AGREEMENT

This Memorandum of Agreement hereinafter referred to as agreement signed this __________, __/__/2020 by and between ..........the Odisha University of Agriculture and Technology, Bhubaneswar – 751 003 (hereinafter referred to as OUAT) having its office at Bhubaneswar – 751 003 here represented by the ........ (Indenting Officer) as the first part.

AND

____________________ (name of firm), (hereinafter referred to as ________) having their registered office at ____________________ (address), and represented by ________________________________ (name, designation and address) (hereinafter referred to as ___________) which shall include and mean their successors, assignees, administrators, executors as the second part.

Both the parts have agreed to the followings:

REQUIREMENT BY SUPPLIER AT THE TIME OF SUPPLY

Each equipment is to have permanently attached to it a rating plate on non-corrosive material in a conspicuous position, upon which the total specifications along with the manufacture’s name, address etc. are to be engraved.

All the equipment are to be suitably protected, covered in water proof packing and crated to prevent damage or deterioration during transit and storage till the time of installation. The supplier shall be responsible for any loss or damage during transportation, handling or storage due to improper packaging and shall replace such damage parts without extra cost.

SUPPLY AND DELIVERY

The materials indented would be delivered by the supplier to the indenting officers. The equipment should confirm to the approved Specifications and shall be complete in all respect. Any component, fitting etc. which may not have been specifically mentioned in the specifications but which are usual and necessary for the equipments shall be supplied by the supplier at no extra cost.

Articles damaged in transit or found short at the time of delivery/ installation should be immediately replaced to make the whole item operational.

In case the items supplied by the supplier are not found as per the specification and rejected at the time of installation, testing and commissioning, the supplier shall replace the same at once at his own cost for satisfactory performance.

The articles against the indent placed by an indenting officer must be supplied in one lot within the period specified in the indent failing which EMD deposit will be forfeited.

Delivery, installation, testing and commissioning should be completed within 20 days from the date of order.

The supplier shall be responsible for releasing the equipments from the carriers/transporter without any additional charge. After successful completion of installation and commissioning of the equipment by the supplier at the site, the performance of the equipment shall be demonstrated for trouble free
continuous operation, meeting the specified standards. The supplier shall supply all necessary consumables for demonstration.

The installation and commissioning of the systems will be made at the delivery sites within two weeks after delivery with free installation charges by the supplier. After complete installation and demonstration, the Bank Guarantee shall be returned only after receiving the user report by the user and technical committee.

The supplier shall provide free training to the indenting officers.

Authorised signature of the supplier  
With designation and detail address  
Signature of the Indenting officer  
with designation and detail address

Witness: 1.
Witness: 2.
### 28. FORMAT FOR CHECKLIST FOR TECHNICAL BID (Please indicate Yes/No)

<table>
<thead>
<tr>
<th>SL No</th>
<th>Yes/No</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Tender Document Fee</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Letter indicating bidder is not blacklisted/debarred by any government Department/institute</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Authorisation letter (as per annexure IV)</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Participation in single or multiple tender</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Bid submitted separately for each item</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Detail technical description as per the format (table 1)</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Make &amp; model specified</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Printed literature with detail technical specification</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>List of user along with contact detail (address, telephone &amp; email of user) for the quoted item</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Letter from manufacturer indicating that the manufacturer shall provide after sales service during Warranty/Comprehensive Annual Maintenance Contract/Annual Maintenance Contract period if the authorized dealer/bidder fails to provide same</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Letter indicating the country and place of origin and assembly of the item</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Duly filled technical bid along with all supporting documents in hard copy as well as soft copy in the form of CD</td>
</tr>
</tbody>
</table>

Signature of the Authorised person with date & seal
### 29 FORMAT FOR CHECKLIST FOR FINANCIAL BID (Please indicate Yes/No)

<table>
<thead>
<tr>
<th>SL No</th>
<th>Yes/No</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EMD @2% of onsite delivery price</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Copy of PAN</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>VAT clearance certificate</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Central Sales tax clearance certificate</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Quoted Price in Indian Currency</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Quoted Price in Foreign Currency</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Bid submitted separately for each item</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Separately submitted EMD for each item</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Undertaking indicating not quoting lower price to any other organization in India</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Detail of basic cost of item, cost of mandatory, auxiliary and consumable parts including prerequisite parts required for successful installation and demonstration</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Detail price break up for each make and model</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Onsite delivery price to different offices/departments of OUAT situated throughout Odisha</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>3-years onsite warranty for the quoted item</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>AMC beyond warranty period</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Letter from Manufacturer stating that if the authorized dealer/bidder fails to provide after sales service during warranty, Comprehensive Annual Maintenance Contract or Annual Maintenance Contract, the manufacturer shall provide onsite after sales service as per warranty and comprehensive annual rate contract or annual maintenance contract without any financial liability to the university and any precondition</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Duly filled financial bid in hard copy as well as soft copy in the form of CD</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Details of the account to which the EMD will be refunded</td>
<td></td>
</tr>
</tbody>
</table>

Signature of the Authorised person with date & seal
# Group A: Laboratory Equipment

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Equipment</th>
<th>Technical Specification in detail</th>
</tr>
</thead>
</table>
| 1.      | Sample processor       | 1. Suitable for grinding and homogenised mixing of samples such as plant tissue, animal tissue, fruits and vegetables etc.  
          |                        | 2. Speed: Max-3000rpm  
          |                        | 3. Bowl capacity: 2.9 lt. stainless steel, fully autoclavable, Leak proof polycarbonate cover with scrapper arm. |
| 2.      | Bath sonicator         | 1. Tank Capacity up to 6.0 Litre  
          |                        | 2. Tank Size must be: 11.5 x 6 x 6 inches  
          |                        | 3. Overall Size must be: 15.6 x 12.5 x 14.8 inches  
          |                        | 4. Frequency shall be not more than 40Khz  
          |                        | 5. Real Time digital display of parameters including wattmeter, timer, temperature, power.  
          |                        | 6. Amplitude include sound proof enclosure, stand, clamp and laboratory jack.  
          |                        | 7. The System’s control circuitry must actively tracks the operating frequency of the bath and immediately brings the tank’s frequency back to its optimum point.  
          |                        | 8. Automatic ultrasonic activation: When the process temperature reaches the programmable set point, the ultrasonic cycle begins. This includes selectable times for both degas and ultrasonic processing High/low power control:  
          |                        | 9. When cleaning delicate parts, the system must allow the user to lower the amplitude of the acoustic energy in the bath: 100% power to the tank for normal applications, 70% power for delicate application.  
          |                        | 10. Must have drain Facility to drain out the liquid after completing the process for the cleaning of the instrument. |
| 3.      | Autoclave              | 1. Automatic microprocessor controlled bench top front loading autoclave.  
          |                        | 3. Dimensions: 60-80 litre internal chamber volume without any compromise on safety features.  
          |                        | 4. Fully microprocessor based Proportional Integral Differential (PID) pressure control.  
          |                        | 5. Sensors: Should have in-built platinum resistance temperature detector with resistance of 100 Ω at 0°C that complies with international standards of safety requirements for electric equipment for measurement control and laboratory use, eg. IEC61010-1, IEC61010-2-040. Option to connect additional temperature sensors and pressure sensors should be available.  
          |                        | 6. Display: User interface should be easy to operate and have digital display enabling visualization of stage of the cycle, set and process temperature, pressure and quick access to important information, preferably have graphical display of temperature and pressure, have notification for replacement of filters after appropriate number of runs performed.  
          |                        | 7. Suitable number of basket for bottle, vessels or agar media preparation should be quoted along with the instrument.  
          |                        | 8. Chamber material: Should be long lasting, made up of 316Ti grade Stainless steel of ASME/UL grade.  
          |                        | 9. Chamber pressure: Chamber should be designed to withstand at least 2.8Bar/142°C and should meet European Pressure Equipment Directive. |
10. Chamber heating: Should be heated uniformly by a heating plate on the outer wall with heater of suitable wattage for quick heating.
11. Chamber insulation: Chamber should be completely insulated with chloride free glass wool.
12. Sterilization temperature range: 105°C to 137°C with accuracy of ± 0.1 deg C at 121 deg C & an additional isothermal temperature range of 60°C to 105°C. Should have feature minimizes the time liquids are exposed to high temperatures during sterilization thereby protecting liquid media, saving laboratory time and reducing energy consumption. Must have F0 controller with the system.
13. Should have the facility to filter air removed from chamber before sterilization.
15. Safe and convenient operation for over temp, pressure, current over leakage protection, automatic over pressure release value to ensure user safety.
16. Water level monitoring and maintenance of constant level for safety of heaters.
17. A safety device to prevent opening the door when the chamber is pressurized.
18. Prevent starting of runs if doors are improperly locked.
19. Safety feature should allow opening of doors only when the temperature reaches a preset temperature and pressure reaches atmospheric pressure.
20. Suitable Voltage Stabilizer (90-280V) should be supplied with the equipment.
21. The equipment should be provided with all necessary accessories and spare parts to run without hindrance.
22. The system should be suited to Indian system of electrical inputs (230V/50Hz) in single phase.

4. **Lyophiliser**

1. Bench top model suitable for aqueous samples.
2. Drying performance should be 2 kg or more in 24 hrs.
3. Cold trap temperature -500°C or Below.
4. HCFC/CFC-free refrigeration system to cool collector to -50°C or more
5. Vacuum Level: Up to 0.001 mbar or more
6. Graphic LC- Display showing real time display of collector temperature, vacuum level, process data like ice condenser temperature, process time, section time etc.
7. Should have facility to dry in trays minimum 200 mm dia and at least three shelves.
8. Additional adapters to hold minimum 15 ampoules for long term microbial storages and should include sealing torch with 2 flames.
10. Operating Voltage: 220-240 V, 50 Hz
11. Should provide compatible UPS with battery backup time of 1 hours
12. The system should be complete with all accessories (adapters, sealing torch, vials, ampules(500 Nos.) and flasks of different sizes.)
13. System should fulfill FDA and cGMP guidelines.
14. Three years comprehensive warranty.
15. Complete installation, demonstration and onsite training to be provided by the supplier.

5. **Automatic Microbial Identification system**

1) The system should be an automated system based on the technology of Advanced colorimetry capable of handling at least 30 different samples per run.
2) System should be USFDA cleared and 21 CFR Part 11 compliant for traceability of samples to be tested.
3) System should be able to identify Gram positive cocci, Bacillus species, Coryneform species, Enterobacteriacea, Non
Enterobacteriaceae, Yeast species, Neisseria species, Haemophilus species and Anaerobic bacteria within one day.
4) System should be supplied with an automated accessory for Gram staining with a capacity to stain at least 30 slides at a time.
5) The Gram staining system should have features of touch screen, stain level sensing, waste monitoring, expiry of reagents alarm, password protection for users, event logs.
6) The data for event logs should be capable of being transferred to any computer for print outs.
7) System should be capable of performing the Antibiotic susceptibility testing for bacteria and yeast species and interpret results as per the CLSI guidelines for human and veterinary sample isolates.
8) The AST result interpretation should be guided by an advances expert system in the software to interpret as per regulatory guidelines.
9) System should be able to identify typical phenotypes like MRSA, ESBL, VRE etc. for the isolates being tested.
10) System should have a feature of adding additional database into the software as per the user’s choice.
11) System should be supplied with an electronic densitometer for standardization of the test inoculum.
12) System should have an intuitive software which is easy to be used by the operator.
13) System software should have features of audit trail, data archive and automatic backup to avoid losing any old data.
14) System should be provided with a remote access to software.
15) System should be provided with a computer pre loaded with original software, monitor, colour printer (Preferably ink bottle type) and barcode scanner.
16) System should be upgraded free of cost with software and database as and when required.
17) Consumable for minimum 100 tests for different organisms needs to be supplied along with the system.
18) The manufacture should submit one undertaking to provide the consumable and service support for a minimum period of 10 years from the date of installation.
19) Complete installation, demonstration and onsite training to be provided by the supplier.
20) The costs of the cards for different organisms like GPR, GNR, GPC, Anaerobes, Gram stain Kit, etc. and AST to be quoted as supplementary materials.
21) Operating Voltage: 220-240 V, 50 Hz
22) Online UPS system with 1 hr backup should be provided.
23) 3 years comprehensive warranty.
25.0

6. Water Analyser with probe

| Water analyser with probe for pH, ORP, conductivity, total alkalinity, hardness, TDS, salinity, Dissolved Oxygen, temperature, turbidity, colour along with UV-VIS based double beam PC based Spectrophotometer and necessary kits for spectrophotometric determination of nitrite, nitrate, ammonia, sulphide, sulphate etc. Trinocular Microscope with dark field, phase contrast attachment and digital imaging PC compatible camera with laptop. |

7. Low volume concentrator

| 1. Bench Top Type with Nitrogen Cylinder |
| 2. Evaporation medium: Nitrogen Gas |
| 3. Sample volume: 1 ml to 30 ml size |
| 4. Min No of samples: 50 |
| 5. Nitrogen Control valves with ON/OFF Switches |
| 6. 50 nitrogen-dispensing nozzle in five horizontal rows |
| 7. Easy ON/OFF switches to turn Nitrogen Flow on or off to the nozzle above the sample vials |
| 8. Gas regulator range: 0 to 100 PSI (approx) |
9. Pressure gauge range : 0 to 100 PSI  
10. Controlled: Fully Automatic Microprocessor based  
11. Variable time and Temp setting arrangement  
12. Display: LCD Digital temp & time  
13. Time Range: 15 sec to 10 hours  
14. Temperature range: Ambient to 100 °C (thermal cutout for safety)  
15. Start/stop : Green LED indication when process is On  
16. Power supply : 230 V AC / 3Amp 50 Hzs  
17. Error indication : LED indication with Buzzer  
18. Easy ON/OFF switches to turn Nitrogen Flow on or off to the nozzle above the sample vials  
19. Side Handles for easy movement  
20. SS 316 tank & Nozzle for durability and maintenance free  
21. Efficient & adjustable ventilation with Built-in exhaust fan with blower  
22. Flexible Transparent gas Path Tubing  
23. Snap fitting 8mm OD Flexible Polyethylene Tubing for nitrogen supply  
24. Audible alarm with automatic shut down for timed end point  
25. All mechanical components are isolated from the chemical fumes and vapors for longer life.  
26. Standard fittings like Nuts, Ferrules, Union, Couplings, clamps, Hardware Hose Pipe, Cable etc.  
27. Two Nos. of Nitrogen cylinders with regulator and all other accessories.  
28. Suitable Online UPS with minimum 45 min. back up to be supplied.

8. **2D ELECTROPHORESIS SYSTEM**  
2D electrophoresis system having isoelectric focusing (IEF) proteins, run 1–12 IPG strips in 7, 11, 13, 17, 18, or 24 cm focusing trays. Each channel in the isoelectric focusing tray is independently powered, enabling precise control over each IPG strip. This feature makes it possible to run different sample types, different pH gradients, and multiple protocols simultaneously., each channel is independent, easily run, create, and edit isoelectric focusing protocols from the touch screen user interface. Preprogrammed protocols stored in the internal memory serve as a convenient starting point for developing optimized sample-specific conditions.

Run gel side up, gel side down, or with loading cups — focusing trays and electrode assemblies accommodate all possible gel configurations.

Supplied with:
- System with 90–240 VAC, includes basic unit, positive and negative electrode assemblies, more than 7 cm, 11 cm, and 17 cm focusing trays with IPG strip retainers, 1 pack each of 7 cm, 11 cm, and 17 cm rehydration/equilibration trays, 2 packs of electrode wicks for gel-side down and gel-side up applications, mineral oil, 2 cleaning brushes, cleaning concentrate, 2 USB flash drives, 3 styluses, pH 3–10, IPG strips in 7 cm, 11 cm, and 17 cm lengths, 12, 13, 18 & 24 cm focusing tray, rehydration sample buffer, and sample cups, cup holder and instruction manual.

License 2-D Analysis Software, Required Computer, UPS and 3 years warranty

9. **MICROPLATE READER**  
On board software, featuring an intuitive user interface, preset or customized end point and kinetic analysis protocols, powerful curve fittings routines and statistical analysis.  
- Test protocol and reporting for transmission  
- Ability to read flat U, V Bottom and micro-plate with 12 channel strips.  
- Automatic calibration  
- Single and dual wave length detection  
- Motorized door for plate loading & retrieval
- Integral thermal printer
- Built in variable speed plate shaking capability

**OPTICAL SPECIFICATIONS:**
- Spectral range: 350 – 750 nm
- Photometric method: Single/dual wave length
- Photometric range: 0 – 3.0 OD.
- Bandwidth : more than 10 nm
- Resolution : more than 0.001 OD
- Measurement range: 0 – 2.5 at 405 nm
- Accuracy : ± 1%
- Linearity : ± 1%
- Light source: Tungsten halogen lamp (20W)
- Warm up time : 3 min.
- Shaking speed : 3 speeds(low, medium,high)
- Data storage : Calendar / clock function, 50 assay protocol.
- Filters : 410, 450, 490, 595, 655, 750
- Reading speed: 6 seconds/96 well plate
- Interfaces : Serial Interfaces RS–232 & parallel interface
- Shaking : Linear shaking, 3 speeds
- With 1 KVA UPS and 3 years warranty

10. **CHEMIDOC**

Molecular Imager ChemiDoc System with suitable PC, camera, darkroom, UV transilluminator, epi-white illumination, cables, firewire card, Software, instructions and UPS.

Specification:
- CCD based Imager with CCD Resolution more than 4 Mega Pixels, Pixel Density : 16-bit
- Pixel size (HxV) : more than 4.5 x 4.5 micrometre
- Max Sample size: - 25 X 35 cm
- Camera Cooling system upto -25°C.
- Motorized zoom lens, C-mount, f/1.0 -1.2, 10 - 70mm
- Illumination modes: Trans-UV, Trans-white and epi-white
- Excitation source: 300 standard,
- Incorporates MultiDye technology with Filter sliders options positions:
  - Fluorescence:2, Chemiluminescence:1 with emission filters
  - Quantum efficiency at 425 nm (chemiluminescence)- 50%
  - Quantum efficiency at 600nm (EtBr)- 55%
  - Peak quantum efficiency- 70%
  - Fluorescence application (ETBr, SYBR Green, SYPRO Ruby, Flamingo fluorescent gel stains)
  - Colorimetry application (Coomassie Blue, Silver stain, blots, prestained markers) GFP, colorimetric Chemiluminescence
  - Fluorescent western blots
  - Gel alignment templates, and software acquisition. 3 D Viewer Resolves closely spaced bands and detects signals from a wide range of sample intensities to Size and quantify proteins of interest and produce publication quality data and images
  - Image Lab software: Unsurpassed automation of the image capture and analysis for Proteins and nucleic acids gels electrophoresis and blotting
  - To be supplied with 2 KVA on line UPS with standard back up (30 mints) with branded computer and suitable printer. 3 Years warranty

11. **Cold room**

Pre-fabricated PUFF Insulated Panels with exterior and interior made from thick pre-painted CRCA Sheet. Insulation is done with 60 mm thick PUFF. Flooring to be done with PUFF panels with anti skid G.I. sheet.

Joints of the panels of walls need to be of tongue and groove type with cam-lock system, Roof should be properly insulated and is made from the same material as of the sides, Vapour proof light.
<table>
<thead>
<tr>
<th>Room Size : 12’ x 10’ x 8’ (Approx.)</th>
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</thead>
<tbody>
<tr>
<td>Insulation : 60 mm thick PUFF</td>
</tr>
<tr>
<td>Door Size: Flush Door Size 34” x 78” (Swing Type) duly insulated, door to be fitted with heavy duty hinge type &amp; lock, door closer. Door lock fitted with internal safety release mechanism against accidental locking from inside, sweep gasket, heated vent, posi seal closure.</td>
</tr>
<tr>
<td>Temperature : 4°C to 8°C Deg C (±2° C) and is controlled by Digital temperature Indicator-cum-Controller with reliable sensor (like PT – 100 sensor).</td>
</tr>
<tr>
<td>Humidity : 40% RH ± 5% RH</td>
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<tr>
<td>Dehumidifier: 600 cfm dehumidifier</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Specifications and related requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable stabilizer with reputed make, Technical compliance against each point along with printed &amp; authentic documents must be enclosed, accessories to be supplied by the original manufacture only, Installation and Testing included, working under power supply of 160 V to 260 V.</td>
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</tbody>
</table>

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<tr>
<th>TERMS AND CONDITIONS:</th>
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<tbody>
<tr>
<td>1 year on-site warrantee, cost for two additional years of warranty be quoted, Quotations need to be submitted item wise. The bidder must have experience of 2-3 years of the same chambers and must enclose the copy of the orders for the relevancy, reputed make with proven track record.</td>
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</table>

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<tr>
<th>12. Binocular Microscope with Photographic Attachment</th>
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<tr>
<td>Upright compound binocular microscope should have paired eyepiece With diopter adjustment, of 10× magnification and plan achromatic objectives of 10×, 20×, 40×, 100× [Oil].Microscope stand with inward tilt</td>
</tr>
<tr>
<td>Quintuple revolving nosepiece with high colour reproductively LED transmitted light source(Life time at least 60,000 hrs) true Koehler illumination for brightfield application. Optical system must be infinity corrected for maximum S/N ratio and best optical performance from UV to near-infrared.</td>
</tr>
<tr>
<td>Universal Abbe condenser with 7 turret positions for BF (4–100X), 2X,DF, Ph1, Ph2, Ph3, FL.</td>
</tr>
<tr>
<td>Digital camera- true color, 2592 x 1944 pixels (5-10 M pixels) - 0.5X reduction lens to get larger field of view - 0.01 m calibration slide: 1mm/100 division. Frame speed: 5fps at 2592 x 1944, 18fps at 1280 x 960, 60fps at 640 x 480 - Software compatible with Windows XP/Vista/7/8/10 operating system for capturing microscope images, measuring lengths, angles, areas, editing images - USB cable included</td>
</tr>
<tr>
<td>All-in-one desktop computer (min.16” screen, Gen Intel Core i3 processor, 4GB RAM, 1TB hard drive, integrated graphics, blue tooth, ports for USB, HDMI etc.) preloaded with licensed MS windows 7/10 operating system, corded mouse, laser colour printer and accessories as suitable for the equipment. It should be provided with compatible software for image acquisition and</td>
</tr>
</tbody>
</table>
### Analysis

Power supply: AC/DC adapter, Input: 100-220V
All other cables, accessories and features, calibration & validation
documents and protocols needed to make the unit fully functional
must be included /quoted.
It should have co-axial coarse and fine focusing system with fine
adjustment upto 0.002mm.

### Orthopedic Drill And Accessories

Orthopaedic drill with oscillating saw [One hand piece, One bone drill
adapter, One canulate drill adapter, One oscillating saw adapter with
two blades, One sternum saw adapter with two blades] with drill speed
0-1000 rpm, Torque>6N.M. Oscillating saw 0-12500ocs/m; Range of
swing: >4.5degree and sternum saw 0-12500ocs/m; Reciprocation
distance: >3.2 mm, Hand guided jacob’s chuck and key Accessories
(Pin cutter, bone cutter, bone chisel, bone mallet, Different sizes of drill
guides, drill sleeves, neutral and loading guides, drill bits, bone
taps, tap “T” handle, depth gauges, Hex screw drivers, bending irons,
self centering forceps, interlocking Nail fixation accessories like drill-
guide jig, extension pieces, nails, reamer, Trocar, wire cutter, wire
tensioner, osteotome, periosteal elevators, bone curette, bone nibbler)

### Portable Ultrasound Scanner

Portable Colour Doppler Ultrasound Scanner with multi frequency
Transrectal probe and additional convex probes (microconvex) and linear
one between 3.5 to 10.0 MHz. Extended pure harmonic detection
(ExPHD) Technology, Viewing monitor should have minimum 10 inch
diagonal LCD with Tilt angle variable, equipment should have both B and
M mode for image display, should support Electronic convex probe and
linear probe, at least 6 step STC/TGC gain adjustments, Real time
magnification up to 6 times minimum, cine loop memory, should have 2
USB port for flash drives, inbuilt nonvolatile image memory of 1000 frames
and at least 4 sets of independent measurement calipers. The system
must have the ability to function by AC/DC or battery power with the same
degree of functionality, the battery life (run time) shall be atleast 2 (Two)
hours

### Band sealer

Heavy duty continuous Band Sealing with variable speed
Speed: 0 to 10 meters/ minute
Sealing width: 6-12mm
Temp range: 0-300 deg C
Max conveyor loading: 3kg (approx)
Inbuilt gas flushing
Inbuilt date and batch code embossing

### Vacuum Packaging Machine for food

Should have SS304 chamber
Sealing length: 100 to 500 mm or better
Sealing width: 10 mm (approximately)
Double sealing
Transparent window for vacuum chamber
Should have facility for selecting variable vacuum
Should have facility of selecting different temperature
Should automatically vacuum, flush gas and seal
Should be able to operate for continuous use for 6 to 8 hours without
break
Minimum packing cycle should be 3 to 4 cycle per minute
With gas flushing system inbuilt

### Hand hold Ultrasonic homogeniser

Suitable for manual operation or for stand use
Power: 50 watts
Frequency: 30kHz
Automatic frequency tuning system
Amplitude adjustable 20-100%
Pulse 0-100%
Dry running protection
<p>| | |</p>
<table>
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<tbody>
<tr>
<td><strong>Timer (0-100 min)</strong></td>
<td>Stand, mounting tools and sound protection box</td>
</tr>
<tr>
<td>With Sonotrode made of titanium suitable for samples from 10ml up to 250ml</td>
<td></td>
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</tbody>
</table>

18. **Ultrasonic bath**

- **Capacity of the bath:** 3 litres
- **Ultrasonic power~W:** 480
- **Ultrasonic nominal power:** 120W
- **Max. frequency:** 35kHz
- **Min. heating/cooling temperature:** 30°C
- **Max. heating/cooling temperature:** 80°C
- **Heating power~W:** 140
- **Protection class:** IP32

19. **Temperature and humidity cabinet**

- **Cabinet interior size:** 150 liters (approx) (SS 304)
- **Double door (interior glass and outer SS)**
- **Temperature range:** 10 to 60 deg C with ± 1 deg
- **Capacitive type humidity sensor**
- **Digitally controlled active humidification and dehumidification 40% to 95% RH**
- **Microprocessor based PID digital temp indicator cum controller**
- **Condensation free**

20. **Pulverisor (paste)**

- Suitable to make paste by pulverising fruit and vegetables like ginger, garlic, onion, carrot, cashew nut etc.
- **Capacity:** 100 kg /hr (approx)
- **Contact parts:** food grade SS
- **Inbuilt water jacketted head**
- **With electric motor and control system**
- Suitable for continuous operation of 8 hours without break

21. **Pulverisor (dry)**

- Suitable for dry grinding of wheat, spices, besan
- **Multipurpose pulveriser (beater type with different screen)**
- **Capacity:** 20 to 60 kg/h with feeding hopper and feed control arrangement
- **Body:** Stainless steel
- **With single phase motor, overload protection**

22. **Steam jacketed kettle with scrapper and stirrer**

- **Capacity:** 50 liters (approx)
- **Contact part made out of food grade SS**
- **With inbuilt stirrer and scrapper (food grade SS)**
- **Attachment of easy loading and unloading**

23. **Homogeniser**

- Suitable for homogenising juice, pulp etc.
- **Capacity:** 100 liter/h (approx)
- **Pressure:** upto 60 Mpa
- All contact parts to be food grade SS
- **Homogenizer chamber should be made of single piece forged AISI 316 block with suction/discharge valves and diaphragh type pressure gauge**
- **Complete with control panel**

24. **Automatic steam boiler**

- **Capacity:** 30 to 50kg/h
- **With water softer, feed water pump**
- **Auto-cut-off diesel fired burner, diesel tank, chimney**
- **Essential safety mechanism**
- **As per ISI standard**

25. **Rice puffing machine**

- **Type:** continuous rotary type with electric motor and with provision to adjust rotation
- **Capacity:** 50kg/hr (aprx)
- **Heating:** LPG fired burner with provision for controlling temperature
- **With feed hopper and non choking feeding system**

26. **Household Rice Mill**

- **Motor :** 3HP single phase, rpm: 2800 r/min
- **Spindle Speed r/min :** 1500-1600
- **Capacity :** 200 kg/h(milling approx)
- **Hopper Capacity :** 15kg (approx) with husk aspiration system
<table>
<thead>
<tr>
<th>27.</th>
<th>Motorised Ghani</th>
</tr>
</thead>
</table>
|      | Semi-automatic, 17 rpm  
|      | Capacity: 5 to 10kg/batch (approx)  
|      | Machine body: SS, crushing part: stone  
|      | Dive mechanism: high steel gearbox  
|      | 2hp single phase electric motor  
|      | With oil plate, on-off switch, pulley, v-belt complete with platform |
## Group B: Farm Equipments

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Equipment</th>
<th>Technical Specification in detail</th>
</tr>
</thead>
</table>
| 1.     | Torque Transducer and Display Unit | (A) Torque Transducer  
- Type: Contact  
- Rated Torque: 500 Nm  
- Rated Output: 1.5mv/V or 2mv/V or 0-10V or 4-20 mA  
- Safe over Load: 150% of RO minimum  
- Accuracy: ± 0.5% of FS or better  
- Operating Temperature 0 to 50 °C  
- Operating RPM range: Up to 1000  
(B) Display  
- Display: Two Line alpha Numeric LCD display with backlight  
- Display Unit: Nm  
- Resolution: 1 Nm or better  
- Tare option  
- Communication port RS 232 or USB, o/p to transfer real time data  
- Analog O/P: 0-10 V or 4-20 mA corresponding to Torque  
- Power supply: 230 V AC or 06 - 30V DC |
| 2.     | Fuel consumption meter with GPS system | Suitable to be fitted with tractor and power tiller and monitoring from any place, including laptop and software |
| 3.     | Plasma cutting machine | Table Size: 3000 X 4000 mm  
Plate Cutting length & width: 3100 x 1600 mm  
CNC Controller: Hi Tech Globus 10.1"  
Positioning speed: up to 12000 mm/min  
Plasma Torch Station: Plasma AVC with IHS  
Motor and Drives: Digital AC servo drive  
Plasma Source: PMX 85 with professional nesting software and CNC Controller software  
Cutting Table with suction blower to blow out smoke and dust, Including installation |
| 4.     | Hydraulic press | Capacity: 15T, Motor : more than 15 hp, with different fixtures and tool carrier |
| 5.     | Load cell with data logger | Load cell for Tension and Compression Application  
Universal type Load cell  
Capacity: 5Ton  
Excitation Voltage: 10 VDC  
Nominal Output: 2mV/ V  
Non Linearity: 0.2% FSO  
Portable Data Logger- Single Channel  
This product should be portable/ handy type for strain gauge and connectable with 4-gauge sensors such as load cell or displacement meter,  
It should be equipped with functions like 3.2" TFT screen, 4GB save memory, lithium-ion battery, USB charging and Provided PC program. |
| 6.     | CNC Lathe | Swing over bed dia: 450-550 mm  
Maximum turning length(with chuck): 300 mm  
Maximum turning dia: 300 mm  
Spindle speed: 4500-5000 rpm  
With controller and all accessories |
| 7.     | Universal Data Acquisition system | • 04 channel universal system in a single module  
• Facility to upgrade to more channels via cascading |
<table>
<thead>
<tr>
<th>Complete digital amplifier cum data acquisition system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal conditioning:</td>
</tr>
<tr>
<td>All 04 Channels should Support Strain gage half and full bridge, Load cells, Force transducers, Half &amp; full inductive bridges, LVDT, RTD, Thermocouples, Potentiometer, voltage, current, resistance. All individually adjustable for each channel inputs</td>
</tr>
<tr>
<td>A/D Converter:</td>
</tr>
<tr>
<td>Each channel should have separate 24 bit A/D Converter for synchronous &amp; parallel measurements.</td>
</tr>
<tr>
<td>No Multiple Sampling rate per channel:</td>
</tr>
<tr>
<td>Minimum 10 kHz/channel or more. Individually adjustable / channel</td>
</tr>
<tr>
<td>Excitation voltage for Sensors:</td>
</tr>
<tr>
<td>5 ... 24 VDC adjustable for each channel; ± 10VDC for strain gauge based sensors</td>
</tr>
<tr>
<td>Carrier frequency(sine):4800 Hz or more</td>
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<tr>
<td>Accuracy class:0.05 or better</td>
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<tr>
<td>Linearity error: 0.02% or better</td>
</tr>
<tr>
<td>Channel Isolation</td>
</tr>
<tr>
<td>All inputs to be electrically isolated</td>
</tr>
<tr>
<td>Transducer cable length</td>
</tr>
<tr>
<td>Should support up to 50 meters or more</td>
</tr>
<tr>
<td>Zero drift</td>
</tr>
<tr>
<td>0.002% of Full Scale or better</td>
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<tr>
<td>Full Scale drift</td>
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<tr>
<td>0.005% of the measured value or better</td>
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<tr>
<td>TEDS support</td>
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<tr>
<td>Advanced plug and measure (APM) technology through TEDS and plug-on-detection</td>
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<tr>
<td>Transducer connector</td>
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<tr>
<td>Interface</td>
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<tr>
<td>Fire wire, Gigabit Ethernet</td>
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<tr>
<td>Vibration (30 min)</td>
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<tr>
<td>40 m/s² or more</td>
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<tr>
<td>Operating temperature</td>
</tr>
<tr>
<td>0 ... +50°C or more</td>
</tr>
<tr>
<td>Power Supply</td>
</tr>
<tr>
<td>10 ... 30V DC for field applications with 230 VAC adapter for Lab.</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td>• The software should include: Hardware setup, simplified data Logging, simplified Data Viewing.</td>
</tr>
<tr>
<td>• Automatic sensor recognition</td>
</tr>
<tr>
<td>• User friendly</td>
</tr>
<tr>
<td>• No programming language to work on the software: Either scripting or graphical</td>
</tr>
<tr>
<td>• Compatible with window 7 or higher PC operating system</td>
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<tr>
<td>Channel configuration</td>
</tr>
<tr>
<td>Automatically via TEDS (integrated editor). Manually via integrated sensor database which must be open &amp; expandable.</td>
</tr>
<tr>
<td>Online calculations</td>
</tr>
<tr>
<td>Arithmetic, exponent, root, root mean square value, logic, trigonometry, integral/differential, exponential, logarithm, limit values.</td>
</tr>
<tr>
<td>Software Display Elements</td>
</tr>
<tr>
<td>Numeric display, line recorder (y−t, x−y etc.), spread sheet, indicator, bar graph, LED, polar diagram, switch (button), checkbox, selection box, background image, text</td>
</tr>
<tr>
<td>Data Storage Format</td>
</tr>
<tr>
<td>ASCII, Microsoft Excel. The complete meta data (sensors, measurement, configuration, test parameters), statistics log should be stored for data traceability.</td>
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<tr>
<td><strong>System</strong></td>
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<tr>
<td><strong>Minimum 1 year warranty</strong></td>
</tr>
<tr>
<td><strong>Installation &amp; commissioning at site</strong></td>
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<tr>
<td><strong>8. Torque Transducer</strong></td>
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<td><strong>9. Pesticide spray drone</strong></td>
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<td><strong>10. Rotavator</strong></td>
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<td><strong>11. Pick up van</strong></td>
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<tr>
<td><strong>12. Groundnut Pod cleaning-cum-grading unit with complete set</strong></td>
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<td><strong>13. Groundnut digger-cum-shaper</strong></td>
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</table>
GROUP-C1: ANNUAL RATE CONTRACT FOR SUPPLY OF LABORATORY CHEMICALS & FINE CHEMICALS /BIOCHEMICALS AND KITS, LABORATORY GLASS WARES, PLASTIC WARES AND FILTER AIDS

The Odisha University of Agriculture and Technology, Bhubaneswar-751003, engaged in teaching, research and extension activities, is intending to enter into Annual Rate Contract for supply of substantial quantity of Laboratory Chemicals & Fine chemicals / molecular grade chemicals/ biochemicals and kits, Laboratory Glass wares, Plastic wares & Filter paper/ aids etc. for use in different colleges/Departments/Laboratories /Research projects located at Bhubaneswar and different offices of the University throughout the state. Accordingly, the undersigned is authorized to finalize the rate contract for the above items valid upto 31st March 2021 or till the next rate contract is made.

Only the manufacturers of the required items who can execute the purchase order at Bhubaneswar/different locations of the state under the University are eligible to enter into rate contract with the University.

The interested firm has to submit their offer in two bid system
1. Technical bid
2. Financial bid

Technical bid should contain the following documents
i. Item group for which bid is submitted (chemical/glassware/plasticware/labware /kits)
ii. Tender Fee of Rs.2000/- for each item group by the firm drawn in favour of Chairman, CPC 2019-20, OUAT, payable at Bhubaneswar. A firm participating for more than one item needs to pay tender fee for each item for which the firm is submitting offer.
iii. Offer should be submitted separately for chemicals, glassware, plasticware, labwares and kits
iv. Document regarding registration/ Certificate of incorporation of the firm issued by the appropriate agency needs to be included in each offer.
v. Copies of GSTN (no provisional GSTN shall be accepted) along with copy of GST return for the last year
vi. Copy of PAN along with return of previous 3 financial years i.e., 2017--18, 2018-19 and 2019-20
vii. Self-certification to the effect that the supplier/ firm has not been blacklisted by any Govt./ Pvt./ Autonomous organization. If no certificate is submitted, it will be assumed that the firm has been blacklisted and will be rejected at the bid evaluation stage.
viii. Declaration towards possessions of certificate of analysis (only for chemicals), copy for certificate towards materials safety data sheet (MSDs only for chemicals) must be supplied along with the bid.
ix. User list with contact name, address, email and mobile number, etc.

x. Undertaking that the rate contract shall be valid upto 31st March 2021 or till next rate contract is finalized by this University.

xi. Undertaking by the manufacturer and authorised dealers that they have quoted the lowest price with maximum discount to OUAT and they have not offered lower price or more discount to any other organisation/ firm than OUAT.

xii. Name of local dealer/ stockist and their role.
xiii. Copy of GSTN of local supplier along with GST return for the last year.
xiv. Copy of PAN no. of local supplier along with return of previous 3 financial years i.e., 2017-18, 2018-19 and 2019-20.
xv. Clear indication is also required to be appended whether such local agency can raise the bill for them. The role of the Dealer/Stockist to be specified.

xvi. Undertaking that the chemicals/standards/kits/media have minimum life span of one year from the date of supply of item to respective departments/colleges/offices.

Financial bid:

i. The detailed printed price list books (Hard copy in original and soft copy in form of CD/pen drive) of all types of chemicals (LR/GR/AR/molecular/ ER/MB/A.C.S./ U.S.P. grade including HPLC, AAS solvents, media and bio-chemicals/ kits), Glassware/ plastic ware (complete Laboratory range), lab wares and filter papers (of high quality)

ii. The details of taxes and duties, if any, are to be specified clearly.

iii. Our university is registered with DST and have valid DSIR certificate and GST should be mentioned as applicable.

iv. Quantum of discount provided on submitted printed price list.

v. Undertaking that quoted price is for on site delivery basis and should be door delivered at different colleges/departments/ laboratories/research projects located at Bhubaneswar and different offices/units of University throughout the state.

THE OTHER TERMS AND CONDITIONS ARE AS BELOW.

i. Delivery must be made within stipulated period from the issue of the order either directly or through their dealer network unless otherwise specified.

ii. If the supplier fails to deliver the stores within the allotted delivery period as specified above, the purchaser may procure goods or services similar to those undelivered upon such terms and in such manner as it deems appropriate, from any other firm and the supplier will be liable to pay the purchaser for any excess cost.

iii. Firms not providing with complete information/document shall not be considered for rate contract.

iv. Submission of required document/ information after the due date will not be accepted.

v. The Odisha University of Agriculture and Technology reserves the right to enter into parallel rate contract for similar items at any time during the period of rate contract with one or more parties.

vi. The rate contract can be terminated at any time by giving one month notice by OUAT.

vii. The items to be supplied will have to be of high quality and grade and in the event the supplied materials are found to be of inferior quality, the supplier is liable to be blacklisted.

viii. The firms must ensure the compliance of all the above mentioned terms and conditions and attach the requisite certificates/documents/declaration asked for the rate contract failing which the rate contract offer will be liable to be rejected as non-responsive.

ix. The acceptance of the rate contract will rest with the undersigned and reserves the right to reject/accept partially or wholly the rate offers received, without assigning any reason.

x. The supplies must be confiming to the specification of our supply order. If the same is found defective the same must be replaced immediately free of charge

xi. The bill should be presented in triplicate.

xii. The empanelment can be terminated without any notice in case the performance of the party is found consistently unsatisfactory or due to the serious lapse on the part of the bidder.

xiii. Submission of offer for rate contract indicates that the party shall abide by all terms and conditions spelt above. The firm who are not interested to abide by the above terms and conditions should not participate in rate contract.

xiv. Price list in soft and hard copy.

xv. An undertaking stating for adhering the price list: Price list once submitted will not be changed during the period of Rate Contract
The firm need to submit offer separately for each item with two bid system. Technical matters in technical bid and financial matters in financial bid with a clear mention on the envelop regarding item for which bid is submitted, type of bid (technical or financial), name and address of the bidder. Both the bids should be put inside another envelop with clear mention about the item for which bid is submitted, name and address of the firm.
GROUP C2: ANNUAL RATE CONTRACT FOR SUPPLYING & REFILLING OF VARIOUS GASES & GAS CYLINDER

The interested firm has to submit their offer in two bid system
1. Technical bid
2. Financial bid

Technical bid should contain the following documents
i. Item for which bid is submitted
ii. Tender Fee of Rs.2000/- drawn in favour of Chairman, CPC 2019-20, OUAT, payable at Bhubaneswar.
iii. Document regarding registration /Certificate of incorporation of the firm issued by the appropriate agency needs to be included in each offer.
iv. Copies of GSTN (no provisional GSTN shall be accepted) along with copy of GST return for the last year
v. Copy of PAN along with return of previous 3 financial years i.e., 2017—18, 2018-19 and 2019-20
vi. Self certification to the effect that the supplier/firm has not been blacklisted by any Govt./Pvt./Autonomous organization. If no certificate is submitted, it will be assumed that the firm has been blacklisted and will be rejected at the bid evaluation stage.
vii. The bidders should have experience in execution of orders with Govt/ reputed organizations for the similar items.
viii. Valid Explosive Licenses for all Industrial Gases on Rate contract for manufacturing and storing till safe delivery of industrial gases. (Copy to be enclosed)
ix. Capacity of each cylinder
x. Quoting of Price (s) : Price quoted should be in Indian Rupees, free pick up & delivery at OUAT Campus, Bhubaneswar.
xii. Time for delivery of new cylinder and refilling
xiii. User list with contact name, address, email and mobile number
xiv. Undertaking that the rate contract shall be valid upto 31st march 2021 or till next rate contract is finalized by this University.
xv. Undertaking by the manufacturer and authorized dealers that they have quoted the lowest price with maximum discount to OUAT and they have not offered lower price or more discount to any other organisation/firm than OUAT.
xvi. Undertaking that there will be no change in price structure during the period of contract except, if the statutory levels, taxes are otherwise made applicable, by the Government through Notification/regulation
xvii. Copy of GSTN of local supplier along with GST return for the last year
xviii. Copy of PAN no. of local supplier along with return of previous 3 financial years i.e., 2017—18, 2018-19 and 2019-20

Filled in table as per list given below

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Description</th>
<th>Gas Purity %</th>
<th>Impurity details (PPM level)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Argon</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UHP grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regular grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Helium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UHP grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regular grade</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>
| 3 | Hydrogen  
   UHP grade  
   Regular grade |   |
| 4 | Oxygen  
   UHP grade  
   Regular grade |   |
| 5 | Nitrogen  
   UHP grade  
   Regular grade |   |
| 6 | Air  
   UHP grade  
   Regular grade |   |
| 7 | CO₂  
   UHP grade  
   Regular grade |   |
| 8 | Liquid nitrogen |   |
| 9 | Nitrous oxide |   |
| 10 | Acetylene |   |
| 11 | Mixed gas |   |

Financial bid:

i. Price of each new cylinder with gas  
ii. Price of regulator for each type of gas cylinder and accessories  
iii. Price of refilling of each cylinder  
iv. Discount offered  
v. The details of taxes and duties, if any, are to be specified clearly.  
vi. Our university is registered with DST and have valid DSIR certificate and taxes should be mentioned as applicable.  
vii. Quantum of discount provided on submitted printed price list.  
viii. Undertaking that quoted price is for on site delivery basis and should be door delivered at OUAT campus.

THE OTHER TERMS AND CONDITIONS ARE AS BELOW.

i. Delivery must be made within stipulated period from the issue of the order either directly or through their dealer network unless otherwise specified.  
ii. If the supplier fails to deliver the stores within the allotted delivery period as specified above, the purchaser may procure goods or services similar to those undelivered upon such terms and in such manner as it deems appropriate, from any other firm and the supplier will be liable to pay the purchaser for any excess cost.  
iii. Firms not providing with complete information/document shall not be considered for rate contract.  
iv. Submission of required document/information after the due date will not be accepted.  
v. The Odisha University of Agriculture and Technology reserves the right to enter into parallel rate contract for similar items at any time during the period of rate contract with one or more parties.  
vi. The rate contract can be terminated at any time by giving one month notice by OUAT.  
vi. The items to be supplied will have to be of high quality and grade and in the event the supplied materials are found to be of inferior quality, the supplier is liable to be blacklisted.  
vi. The firms must ensure the compliance of all the above mentioned terms and conditions and attach the requisite certificates/documents/declaration asked for the rate contract failing which the rate contract offer will be liable to be rejected as non-responsive.
ix. The acceptance of the rate contract will rest with the undersigned and reserves the right to reject/accept partially or wholly the rate offers received, without assigning any reason.

x. The supplies must be confirming to the specification of our supply order. If the same is found defective the same must be replaced immediately free of charge.

xi. The bill should be presented in triplicate.

xii. The empanelment can be terminated without any notice in case the performance of the party is found consistently unsatisfactory or due to the serious lapse on the part of the bidder.

xiii. Submission of offer for rate contract indicates that the party shall abide by all terms and conditions spelt above. The firm who are not interested to abide by the above terms and conditions should not participate in rate contract.

xiv. An undertaking stating for adhering the price list: Price list once submitted will not be changed during the period of Rate Contract.

The firm need to submit offer separately for each item with two bid system. Technical matters in technical bid and financial matters in financial bid with a clear mention on the envelop regarding item for which bid is submitted, type of bid (technical or financial), name and address of the bidder. Both the bids should be put inside another envelop with clear mention about the item for which bid is submitted, name and address of the firm.
### Group-D: Computers, Printers, Networking and other Accessories

<table>
<thead>
<tr>
<th>1. HPC (High Performance Computing Cluster)</th>
<th>UoM</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Master Node</td>
<td>Form factor: 2U rack mountable</td>
<td>Set</td>
</tr>
<tr>
<td></td>
<td>CPU: 2 x Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) Processor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motherboard: Intel C621 /higher series chipset</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memory: 288GB DDR4@2933MHz, 24 DIMM slots or higher</td>
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<tr>
<td></td>
<td>Memory protection: Advanced ECC with multi-bit error protection, Online spare, mirrored memory</td>
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</tr>
<tr>
<td></td>
<td>HDD: 2 x 480GB SSD</td>
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<tr>
<td></td>
<td>RAID controller: PCIe 3.0 based 12Gb/s SAS Raid Controller with RAID 0/1/1+0/5/50/6/60 (onboard or on a PCI Express slot)</td>
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</tr>
<tr>
<td></td>
<td>Networking: 4 port 1G Ethernet, 2 x 10G Ethernet, 1 x 100G IB-EDR/OPA</td>
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<tr>
<td></td>
<td>Storage Networking: Dual port SAS/FC HBA</td>
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<tr>
<td></td>
<td>Interface: Micro SD slot (1 no), USB 3.0 (5 no’s)</td>
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<tr>
<td></td>
<td>Bus Slots: Three PCI-Express 3.0 slots, atleast two x16 PCIe slots</td>
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<td></td>
<td>Power Supply: Hot plug redundant low halogen power supplies, minimum 90% efficiency.</td>
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<tr>
<td></td>
<td>Cooling: Redundant hot-plug system fans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Management:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Server should have dedicated 1Gbps remote management port.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Remote management port should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d) Server should support agentless management using the out-of-band remote management port.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e) Server shall provide insights, forecasting and recommendations for quicker problem resolutions including automating case creation for enhanced service experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warranty: 5-year Parts, 5-year labour, 5-year onsite Support with NBD Hardware replacement.</td>
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<tr>
<td></td>
<td>b) Compute Node</td>
<td>Compute Node Chassis Requirement: (Set of 4 servers with enclosure)</td>
</tr>
<tr>
<td></td>
<td>Vendor should offer a Server chassis / enclosure based solution which can hold dense servers(Pure CPU based compute nodes) on an average of 0.5U per Server, capable of getting mounted in a standard 19&quot; 42U Rack (max depth of 1000mm). Each of the Server nodes should be individually serviceable, without shutting down the other Server nodes.</td>
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</tr>
</tbody>
</table>
Any blank slots in the Chassis as part of the solution shall not be counted to work out the average of .5U per Server.

The entire solution should be offered with redundant power supplies at enclosure level.

The offered Power supplies shall be with minimum 2000W per Power Supply. The offered Power supply Wattage should be such that failure of one power supply, should not throttle rest of the servers.

The chassis / enclosure should be configured with redundant fans

**Compute Node Requirement:**
(Each of the compute nodes in the chassis/enclosure should be configured with the following)

- **CPU:** 2 x Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) Processor
- **Motherboard:** Intel C621/higher series chipset
- **Memory:** 288GB DDR4 @ 2933MHz, 16 DIMM slots or higher
- **Memory protection:** Advanced ECC
- **HDD:** 1 x 2TB SATA
- **Networking:** 2 port 1G Ethernet, 1 x 100G IB-EDR/OPA
- **Management port:** 1G dedicated remote management port
- **Bus slots:** Ability to be configured with minimum two PCIe-Gen3 (x8/16) low profile IO slots

**Management:**

- a) System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication.
- b) Server should have dedicated 1Gbps remote management port.
- c) Remote management port should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware
- d) Server should support agentless management using the out-of-band remote management port.
- e) Server shall provide insights, forecasting and recommendations for quicker problem resolutions including automating case creation for enhanced service experience

**Warranty:** 5-year Parts, 5-year labour, 5-year onsite Support with NBD Hardware replacement.

c) **GPU Node**

- **Form factor:** 2U rack mountable
- **CPU:** 2 x Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) Processor
- **Motherboard:** Intel C621/higher series chipset
- **Memory:** 288GB DDR4 @ 2933MHz, 24 DIMM slots or higher
- **Memory protection:** Advanced ECC with multi-bit error protection, Online spare, mirrored memory
- **HDD:** 1 x 2TB SATA
- **Networking:** 4 port 1G Ethernet, 1 x 100G IB-EDR/OPA
**GPU:** Each of the nodes should be configured with 2 x NVIDIA T4 16GB GPUs & must be scalable to 3 GPUs in future.

**Interface:** Micro SD slot (1 no), USB 3.0 (5 no's)

**Bus Slots:** Three PCI-Express 3.0 slots, atleast two x16 PCIe slots

**Power Supply:** Hot plug redundant low halogen power supplies, minimum 90% efficiency.

**Cooling:** Redundant hot-plug system fans

**Management:**
- a) System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication.
- b) Server should have dedicated 1Gbps remote management port.
- c) Remote management port should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware.
- d) Server should support agentless management using the out-of-band remote management port.
- e) Server shall provide insights, forecasting and recommendations for quicker problem resolutions including automating case creation for enhanced service experience.

**Warranty:** 5-year Parts, 5-year labour, 5-year onsite Support with NBD Hardware replacement.

<table>
<thead>
<tr>
<th>Storage Node</th>
<th>Solution to be offered for 100TB PFS storage with 4GB/sec Write performance using IOR. Solution should be scalable to 200TB.</th>
<th>Set 01</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Commercial support up to L3 should be quoted for offer Parallel File System</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Usable capacity for OSS should be min. 100TB usable RAID6 (Hardware / Software RAID).</td>
<td></td>
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<tr>
<td></td>
<td>Preferred disk layout: 9D + 2P or 8D + 2P. Minimum NL SAS disks (12Gbps) or SAS or SSD can be used.</td>
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</tr>
<tr>
<td></td>
<td>Usable capacity for MDS:-Vendor should size as per solution/ performance requirement. The usable capacity should be min. 2% of the OST capacity.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Storage Array. The Storage Array used for MDS and OSS can be common or independent as per solution requirement.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Node requirement for MDS/OSS: - The solution should be configured with minimum 4 nodes, ie one MDS Node pair and one OSS node pair. The MDS node should be configured with 2 x Minimum 6-core@3GHz CPU and 96GB Memory or better. The OSS node should be configured with 2 x Minimum 12-core@3GHz CPU and 384GB Memory or better CPU and memory specifications.</td>
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<tr>
<td></td>
<td>In case of any node failure, the services should start from the other surviving node, without any manual intervention.</td>
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</tr>
<tr>
<td>One hard disk each to be configured as spare for both Metadata and OSS. Spare can be either hot spares.</td>
<td>Solution should be configured with No Single Point of Failure including Power Supplies and fans.</td>
<td>Warranty: 5-year Parts, 5-year labour, 5-year onsite Support with NBD Hardware replacement.</td>
</tr>
<tr>
<td>e) IB Switch</td>
<td>100% non-blocking factor with a Fat Tree topology with 100Gbps InfiniBand/Intel OPA switch with redundant power supplies. Cables as per solution requirements should be included.</td>
<td>Set 01</td>
</tr>
<tr>
<td>f) Ethernet Switch</td>
<td>24-port 1G Ethernet switch with additional 4-port 1G SFP ports Rack mount configuration with mounting kits Minimum 800MHz processor, 1GB Flash, and 1GB RAM 56Gbps throughput and 41.7 Mpps packet forwarding capacity 30K MAC address table, REST API, OpenFlow/equivalent, VxLAN IPv6 security: RA Guard, and DHCPv6 Protection, PBR Console access: Serial, USB</td>
<td>Set 01</td>
</tr>
<tr>
<td>g) Rack (42U, Server Rack)</td>
<td>Server Racks should be of 600 mm wide and 1200 mm deep with caster wheels and levelling feet, front and Back doors perforated with min 77% perforation, cable entry from the top and bottom, vertical equipment mounting space of 42U and each U position marked with its numbering both on the Front and Back 19 Inch Rail, vertical mounting rails having two sets of EIA mounting holes perpendicular to the primary mounting holes to allow devices to be mounted in the side channel, front and rear doors should open a minimum of 148 degrees for easy access to the interior, the front door to be field reversible so that it may open from either side, frame to support 1360kg static weight load, 1022kg dynamic (non- transit) weight load, and 907kg transit weight load, sheet metal components powder coated RAL7021(Black) Two nos. IP PDU with each rack, each IP PDU should have Minimum IEC 320 C13 x 30 and IEC 320 C19 x 6 No. of output sockets, Input current rating: 3 phase and 16A as per requirement for load upto 11KW. It should support High Operating temperature of 0 to 60 deg C, hot swappable Communication module in the rack PDU with dual Ethernet Ports, reporting error thru email or any other suitable model. Minimum 16-port KVM Switch with all cables &amp; adapters, 17” rack console with integrated keyboard &amp; touchpad, Warranty : 5-year Parts, 5-year labour, 5-year on site Supports NBD On Hardware and software.</td>
<td>Set 01</td>
</tr>
<tr>
<td>h) Precision Air Conditioner</td>
<td>a) Precision air conditioner having digital scroll Compressor, EC fan compatible with R 410 A Refrigerant with horizontal air flow pattern, can be placed in-between the racks or at the ends of rows, close to the heat source with 20kW Nominal capacity to work in 1+1 configuration. Inside room</td>
<td>Set 01</td>
</tr>
</tbody>
</table>
temperature and humidity should maintain 22+/-1 deg C, 50+/-5 RH respectively against maximum ambient outside temperature and humidity of 45 deg C and 90% respectively. Outdoor Condenser unit shall comprise of Copper coil with Aluminium fins and Axial fan with fan speed controller motor. The outdoor unit shall be IP54 type of protection.

b) The vendor must provide 5 years comprehensive warranty for all software and hardware components. The vendor will thus be responsible for upkeep, update and upgrade of the software components and maintenance as well as replacement of faulty hardwares for 5 years.

c) The OEM should have their service Centre at Bhubaneswar and they should have 24x7 after sales support system. The OEM should have supplied Precision AC System to atleast two customers for HPC application.

i) Online UPS (40KVA) 40KVA UPS System with IGBT based rectifier and Inverter 0.9 output power factor, 3 phase input & output to work in N+N parallel redundant configuration with SMF Battery bank for 60 minutes back up. Each UPS System should have inbuilt static, Maintenance bypass switch and Battery breaker in UPS to Battery path. UPS & Battery should have 5years warranty.

Scope of Work (HPC)

i. Relocation: SI/Bidder needs to consider suitable services/materials for one-time relocation of the complete setup from one site to another site any time during the warranty period.

ii. OEM installation: SI/Bidder needs to ensure installation from respective server OEM on the HPC hardware and software.

iii. Admin and Console Network should be on different physical switches and should not be clubbed in the Primary Interconnect Enclosure or Switch.

iv. All nodes need to be connected by Gigabit network for remote management hardware as well as for system network.

v. Quantity of switches and cables and other required accessories to be provided as per proposed solution requirement.

vi. Advanced license for IPMI based management and monitoring of all server nodes.

vii. The entire solution should be based on certified hardware / software components, which are fully validated and supported by the OEM.

viii. The server and storage management software should provide proactive notification of actual or impending component failure. Bidder should provide required hardware components, if any.

ix. The bidder should build the cluster based on open source HPC management software with 64-bit Open source Linux operating system (preferably CentOS LTS). Open source CMS like ROCKS may be considered for the HPC system. Open source solutions like Torque and Maui or equivalent for the scheduler with full customization may be considered for the HPC system.

x. The bidder shall install and configure all the required hardware and software as required including but not limited to racking and stacking, cluster networking, configuring all nodes, installation of open source compilers and applications, configuration of environment variables and license utility configuration.

xi. The bidder to ensure that the hardware and software components are compatible with each other, and provide necessary cables/wires and any other accessories necessary for connecting the supplied components. Bidder must install the complete system interconnecting all the components.

xii. Training: The bidder should provide minimum 10 hours training at OUAT on the offered system and their day-to-day management.
<table>
<thead>
<tr>
<th>xiii.</th>
<th>Life Science software installation:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OMICs data analysis</strong></td>
<td>Open Source Softwares to be installed in the HPC environment</td>
</tr>
<tr>
<td>SOAP package, GATK, Bowtie, BWA, BLAST, DIAMOND, BEDTOOLS, SAMTOOLS, CAP3, BUSCO, MIRA, FASTQC, TRIMMOMATIC, NGS TOOLKIT, CUTADAPT, MaSuRCA, Velvet, Newbler</td>
<td></td>
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<tr>
<td><strong>Metagenomics</strong></td>
<td>QIIME, MOTHUR</td>
</tr>
<tr>
<td><strong>Transcriptomics</strong></td>
<td>FastQC, Trimmomatic, Cutadapt, FastX toolkit</td>
</tr>
<tr>
<td>STAR2, HISAT2, TOPHAT2, CUFLINKS, HTSEQ, STRINGTIE, Trinity, SOAP DENOVO Trans, CYTOSCAPE, EDGErü, DESEQ2, Trans-ABYSS, RSEM, Velvet-Oases, StringTie2, limma, edgeR, Ballgown</td>
<td></td>
</tr>
<tr>
<td><strong>Variant calling</strong></td>
<td>Genome Analysis Tool kit v4 and above, Bcftools, snpEff, snpSIFT, Annovar</td>
</tr>
<tr>
<td><strong>Proteomics</strong></td>
<td>XCMS, AutoDock, Gromacs, AutoDock Vina, Pymol, Discovery Studio Visualiser.</td>
</tr>
<tr>
<td><strong>Epigenetic Analysis</strong></td>
<td>Bycicle pipeline, The Chip Analysis, Methylation pipeline,</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Desktop Computer</th>
<th>Set</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor:</td>
<td>Intel 8th Generation Core i7 with 3.2 GHz, 6 core with V-Pro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motherboard</td>
<td>Intel Q370 or better Chipset on OEM Motherboard</td>
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</tr>
<tr>
<td>Memory</td>
<td>8GB DDR4 RAM expandability up to 64 GB on 4 DIMM Slots, (Non-ECC dual-channel up to 2666 MT/s DDR4 SDRAM)</td>
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<tr>
<td>Graphics</td>
<td>In built Intel integrated graphics</td>
<td></td>
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<tr>
<td>HDD / HDD Controller</td>
<td>1 TB 7200 RPM, SATA III 6 Gbps, with pre-failure alert indication</td>
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<tr>
<td>Network Controller &amp; HBA</td>
<td>Integrated onboard Ethernet controller 10/100/1000mbps with remote wakeup,</td>
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<tr>
<td>Security/Certification</td>
<td>TPM 2.0, Energy star, ROHS, EPEAT certification for India, FCC, ISO 9001,14001,20001,27001</td>
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<tr>
<td>Monitor</td>
<td>23.8&quot; or higher IPS Panel LED backlit with Minimum resolution of 1920x1080 with VGA &amp; HDMI input</td>
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<tr>
<td>Optical Drive</td>
<td>DVD RW drive</td>
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<tr>
<td>Operating System</td>
<td>Pre-installed Windows 10 Professional 64 bits</td>
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<tr>
<td>Form factor</td>
<td>Tower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keyboard</td>
<td>USB keyboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mouse</td>
<td>USB Optical Scroll Mouse</td>
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<tr>
<td>Ports and Slots</td>
<td>Minimum 10 USB Ports, out of which 5 USB Ports should be in front for easy access</td>
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</tr>
<tr>
<td></td>
<td>1 Universal audio jack for headphone / Mic, HDMI video port; Display Port/DVI-D Port, RJ-45 network connector, serial Port, Audio –out, Audio-in</td>
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<tr>
<td></td>
<td>Minimum 4 PCI/PCIe Slots, (1 x PCIeX16, 1 x PCIeX4,1 x PCIeX1,1 PCI) &amp; 2x (M.2 PCIe)</td>
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<td></td>
</tr>
<tr>
<td>Audio</td>
<td>High Definition Integrated Audio with Internal Speaker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>400W power supply with 92% efficiency</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>Workstation</th>
<th>Set</th>
<th>04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor:</td>
<td>Intel Xeon E 2286,3.80 GHz, 6 Core 12 MB Smart Cache or better Processor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motherboard</td>
<td>Intel C 246 Chipset Motherboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>32 GB DDR4 2666 MHz RAM expandability up to 128 GB on 4 DIMM Slots, or higher</td>
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<tr>
<td>Graphics</td>
<td>N-VIDIA Quadro P2000 or better graphics card (Certified drivers for card application) to be supplied</td>
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<tr>
<td>HDD / HDD Controller</td>
<td>2 TB 7200 RPM, SATA Hard disk with integrated SATA controller, Should support RAID 0,1</td>
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<tr>
<td>Network Controller &amp; HBA</td>
<td>Integrated onboard Ethernet controller 10/100/1000mbps with Intel V Pro &amp; Intel AMT 12.0 support</td>
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<tr>
<td>Security/Certification</td>
<td>EPEAT, TPM 2.0, SATA Port disablement, Power on Password</td>
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<tr>
<td>Monitor</td>
<td>23.8&quot; or higher IPS Panel LED backlit with Minimum resolution of 1920x1080 with VGA &amp; HDMI input</td>
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<tr>
<td>Optical Drive</td>
<td>DVD RW</td>
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<tr>
<td>Operating System</td>
<td>Pre-installed Windows 10 Professional 64 bits (Workstation) with authentication</td>
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<tr>
<td>Form factor</td>
<td>Tower/SFF</td>
<td></td>
<td></td>
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<tr>
<td>Keyboard</td>
<td>USB Keyboard</td>
<td></td>
<td></td>
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<tr>
<td>Mouse</td>
<td>USB optical scroll mouse</td>
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<tr>
<td>Ports and Slots</td>
<td>Minimum 6 USB Ports, 1 Universal audio jack for headphone / Mic Display Port, RJ-45 network connector, serial Port, Minimum 4 PCI/PCIe Slots (1 x PClex16, 1 x PClex4, 1 x PClex1, 1 PCI) &amp; 2x M.2, 1xM.2 WLAN</td>
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<tr>
<td>Audio</td>
<td>High Definition Integrated Audio with Internal Speaker</td>
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<tr>
<td>Power</td>
<td>310W power supply with 90% efficiency</td>
<td></td>
<td></td>
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<tr>
<td>5. Laptop</td>
<td>Core i3 7th generation Processor 8Gb DDR4 RAM 64 BIT Windows 10 Operating system 14&quot; display</td>
<td>No. 2 nos.</td>
<td></td>
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<tr>
<td>6. Online UPS (6KVA)</td>
<td>6KVA On Line UPS System with IGBT based rectifier and Inverter unity output power factor, 1 phase input &amp; output, inbuilt isolation transformer, inbuilt static &amp; maintenance bypass switch, 50 deg C operating temperature with SMF Battery bank for 30 minutes back up. UPS &amp; Battery should have 5 years warranty.</td>
<td>Set 02</td>
<td></td>
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<tr>
<td>7. DSLR Camera</td>
<td>Effective pixel: around 18 to 24 MP (approx), Shooting mode: Auto Modes (Auto: Auto (Flash Off)), Programmed Auto with Flexible Program, Shutter-priority Auto, Aperture-priority Auto, Manual, Scene Modes, Special Effects, Sensor: CMOS, ISO rating: ISO 100 – 12800, Focus range: Detection Range (-1 to +19 EV (ISO 100, 20°C)), White balance: Auto, Incandescent, Fluorescent, Direct Sunlight, Flash, Cloudy, Shade, Preset Manual, Exposure compensation: 1/3 EV Steps +/- 5.0 EV, Shutter type: Electronically-controlled Vertical-travel Focal-plane Shutter, Built-in flash, Lens: Lense: 18 to 55mm, Lense: 55mm to 250 mm (auto focus and image stabilizer), With at least 8GB SD card, carry case, rechargeable battery and charger, lens cover Warranty: 3 years</td>
<td>Set 01</td>
<td></td>
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<tr>
<td>8. LAB Networking</td>
<td>a) Network Switch 48-port 1G Ethernet switch with additional 4-port 10G SFP+ ports Rack mount configuration with mounting kits Minimum 1GHz processor, 1GB RAM and 1GB Flash 176Gbps throughput and 112 Mpps packet forwarding capacity 30K MAC address table, REST API, sFlow, OpenFlow/equivalent, VxLAN RMON and Extended RMON, 1500 VLAN</td>
<td>Set 02</td>
<td></td>
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<tr>
<td></td>
<td>Description</td>
<td>Unit</td>
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<tr>
<td>IPv6 security: RA Guard,</td>
<td>RA Guard, and DHCPv6 Protection, PBR</td>
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<tr>
<td>and DHCPv6 Protection,</td>
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<td>PBR</td>
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<tr>
<td>Console access: Serial,</td>
<td>Serial, USB</td>
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<td>USB</td>
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<tr>
<td>Stacking module and</td>
<td>Stacking module and cable as applicable</td>
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<tr>
<td>cable as applicable</td>
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<tr>
<td>OEM should be in</td>
<td>OEM should be in Gartner’s leader quadrant</td>
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<td>Gartner’s leader quadrant</td>
<td>consecutively for 3 Years in LAN category</td>
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<tr>
<td>Warranty: 5-year Parts,</td>
<td>Warranty: 5-year Parts, 5-year labour, 5-year</td>
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<tr>
<td>5-year labour, 5-year</td>
<td>onsite Support with NBD Hardware replacement.</td>
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<td>onsite Support</td>
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<tr>
<td>b) Patch Panel</td>
<td>24-port CAT6 patch panel (loaded)</td>
<td>Set</td>
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<td>02</td>
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<tr>
<td>c) I/O Box</td>
<td>I/O (Single) with box and faceplate</td>
<td>Set</td>
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<tr>
<td>d) CAT6 Cable</td>
<td>CAT 6 Cable (305 meters)</td>
<td>Set</td>
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<tr>
<td>e) Patch Cord (1m)</td>
<td>CAT6 1 meter patch cord, factory crimped</td>
<td>Set</td>
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<tr>
<td>f) Patch Cord (2m)</td>
<td>CAT6 2 meter patch cord, factory crimped</td>
<td>Set</td>
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<tr>
<td>g) Wall Mount Rack</td>
<td>9U wall mount rack with all accessories</td>
<td>Set</td>
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<tr>
<td>h) Installation Charges</td>
<td>Installation Charges including Cable Management</td>
<td>L/S</td>
<td></td>
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<tr>
<td>including Cable Management</td>
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<td>01</td>
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</tbody>
</table>
### Group E: Furniture and Miscellaneous items

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Item</th>
<th>Technical Details</th>
</tr>
</thead>
</table>
| 1.   | Wooden Cot (for hostel) | **Size:** (L) 78" (L) x 36" (B) x 18" (H)  
Frame made of sal wood  
Top Made of non sal wood plank |
| 2.   | Wooden chair | Seating height: 460 mm,  
seat size (455 mm – 510 mm) x (455 mm – 510 mm)  
Back height: 990 mm; Legs: four of size: at least 45 mm x 45 mm.  
Sal wood frame,  
Seat material: 19 mm DWR Ply (ISI mark) fixed with 1mm mica (ISI Mark),  
Wood color polishing and finishing |
| 3.   | Wooden table | Size 3’ x 2’, height 2’6”, Legs four 45 mm x 45 mm, sal wood frame, top made up of 19 mm DWR ply (ISI mark) fixed with 1 mm mica, wood colour polish and finishing |
| 4.   | Dining table with granite top | Size 8’ x 3’, height 2’6”, six nos., stainless steel of tubular frame of 16 gauge s.s, polished granite top |
| 5.   | Tread mill | AC driving system with 5 HP AC continuous (10 HP peak) motor;  
Adjustable variable frequency; Heavy cushioned deck for shock absorption and heavy duty reliable orthopedic running belt; Speed 1-22 kmph or above; Inclination 18% or above; Running surface at least 20”x 62”; LED Display for time, speed, distance, heart rate, etc. with emergency stop button; Maximum User Weight: Minimum130 kgs. |
| 6.   | Recumbent bike | Display showing pulse, Recovery, Time, RPM, Speed, Distance, Calories, Watt, Heart Rate, BMI, BMR, etc.; Magnetic brake with V-belt drive system; Tension control system; Upright and seat rails; Easy to adjust seat positioning; Seat and back rest made of good quality PU; Transport wheels; Maximum user weight 130 kgs |
| 7.   | Invertor | 2500VA inverter of reputed brand with service centres at Bhubaneswar;  
150 Ah tall tabular battery-24 V of reputed brand with service centres at Bhubaneswar; Double tubular stand; including installation cost and connections to desired points. |
| 8.   | Sanitary napkin destroyer | Manual-Front Loading type, 15-20 napkins per hour, electrically operated by 230 V 50 Hz power supply; Housing made up of at least 1.2 mm good quality steel, Auto cut off of power supply, PCB control with LED/LCD display, Minimum 1000 W heater |
| 9.   | Paper shredding machine | Feed width: 300 mm; Shred size: at least 3 mm x 28 mm; Shred Capacity (70 gsm A4 sheets): 18-20 sheets; Cutters made of high grade special alloy steel, Operating voltage: 220 V; Power: 600 watts or above; Speed: at least 4 mtrs/min; Bin capacity: 60 Litres; Suitable for continuous operation with overload protection, Auto Start & Stop, |
| 10.  | Slatted plastic sheet for elevated flooring of Goat Sheds (1500 ft²) | Material: Polypropylene plastic  
Color: Green or Blue  
Plastic slat Size: 2 ft x 2 ft approx.  
Features: strong interlocking on all sides of slats, washable, detachable, Anti-skid features, Load Bearing Capacity: at least 300 kg/Sq.meter |