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 16th March, 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. 361 / CAET, Dt. 22nd Feb, 2020

Tender Fee
(Non refundable)

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

CHAIRMAN
CENTRAL PURCHASE COMMITTEE 2019-20 CUM-DEAN, CAET
ODISHA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
BHUBANESWAR – 751 003
<table>
<thead>
<tr>
<th></th>
<th>Important Information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Period during which tender document will be available on website <a href="http://www.ouat.nic.in">www.ouat.nic.in</a></td>
<td>From 22nd Feb 2020 to 16th March, 2020</td>
</tr>
<tr>
<td>2</td>
<td>Place of submission of Tender</td>
<td>Chairman Central Purchase Committee 2019-20-cum-Dean, College of Agril. Engg. &amp; Tech., OUAT, Bhubaneswar-751003</td>
</tr>
<tr>
<td>3</td>
<td>Mode of Submission of Bids</td>
<td>By Indian Postal Speed Post Only</td>
</tr>
<tr>
<td>4</td>
<td>Closing date &amp; time for receipt of tender</td>
<td>16th March, 2020 up to 4.00 pm</td>
</tr>
<tr>
<td>5</td>
<td>Date &amp; time of opening of Technical Bid</td>
<td>17th March, 2020 at 10.30 AM</td>
</tr>
<tr>
<td>6</td>
<td>Place of opening of Technical Bid</td>
<td>College of Agril. Engg. &amp; Tech., Odisha University of Agriculture &amp;Technology, Bhubaneswar-751003</td>
</tr>
<tr>
<td>7</td>
<td>Mode of communication to Technically Qualified bidders</td>
<td>By telephone, email or SMS</td>
</tr>
<tr>
<td>8</td>
<td>Date &amp; time of opening of Financial Bid</td>
<td>To be intimated to technically qualified bidders by telephone, email or SMS</td>
</tr>
<tr>
<td>9</td>
<td>Place of opening of Financial Bid</td>
<td>College of Agril. Engg. &amp; Tech., Odisha University of Agriculture &amp;Technology, Bhubaneswar-751003</td>
</tr>
</tbody>
</table>
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 specification as in the tender documents</th>
<th>Conformation of technical specifications in the quoted model (yes/no)</th>
<th>Deviation in specifications of the quoted mode</th>
<th>Justification for deviation</th>
<th>Remark s</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”.

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4
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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name of the firm with complete address, email &amp; contact no/fax</td>
</tr>
<tr>
<td>2</td>
<td>Tender Sl. No</td>
</tr>
<tr>
<td>3</td>
<td>Item with Make &amp; model</td>
</tr>
<tr>
<td>4</td>
<td>Technical specification as per technical bid submitted by the firm</td>
</tr>
<tr>
<td>5</td>
<td>Basic Price of each</td>
</tr>
<tr>
<td>6</td>
<td>Total cost</td>
</tr>
<tr>
<td>7</td>
<td>Educational discount</td>
</tr>
<tr>
<td>8</td>
<td>Price after discount</td>
</tr>
<tr>
<td>9</td>
<td>GST/Customs duty (if any)</td>
</tr>
<tr>
<td>10</td>
<td>Customs clearing charges (if applicable)</td>
</tr>
<tr>
<td>11</td>
<td>Packing, forwarding and insurance charges (if any)</td>
</tr>
</tbody>
</table>
1. Mention name of firm with complete address, email, fax, telephone no at sl.no. ‘1’
2. Mention tender sl. no. at sl.no. ‘2’
3. Mention the name of item, make, model, mandatory, auxiliary and consumable parts including prerequisite parts at sl.no. ‘3’
4. Mention technical specification of each part as mentioned at sl.no. ‘3’ at sl.no. ‘4’
5. Mention basic price of each item at sl.no. ‘5’
6. Calculate the total cost and mention at sl.no. ‘6’
7. Mention rate and amount of maximum educational discount (OUAT is a non profit, non commercial educational institute and hence maximum discount as applicable should be given) on total cost and mention at sl.no. ‘7’
8. Calculate price after discount (sl.no. 6 minus sl.no. 7) and mention at sl.no. ‘8’
9. Mention rate and amount of GST/customs duty (if applicable) at sl.no. ‘9’
10. Mention rate and amount of Customs clearing charges (if applicable) to be mentioned at sl.no. ‘10’
11. Mention packing, forwarding and insurance charges (if any) at Sl.No.’11’
12. Mention rate and amount of any other charges (if any) at sl.no. ‘12’
13. Specify final onsite delivery price at sl.no. ‘13’
14. Indicate details of bank account to which the EMD shall be refunded at Sl.no.14

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 whatsoever.

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 there under 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
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)
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.
   c. Sample test, Software, Instruction Manual & Technical Manual, Soft & hard copies of Documentation, etc. have been taken over (all documents required to be delivered at the time of SAT).

<table>
<thead>
<tr>
<th>For Tenderer</th>
<th>For Purchaser</th>
</tr>
</thead>
<tbody>
<tr>
<td>Witness:</td>
<td>Witness:</td>
</tr>
<tr>
<td>Signature</td>
<td>Signature</td>
</tr>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>Designation</td>
<td>Designation</td>
</tr>
<tr>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
</tbody>
</table>
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/CMAC/AMC period, we shall be liable to provide after sales service during Warranty/CMAC/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:
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  Signature of the Indenting officer
With designation and detail address  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>Tender Document Fee</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Letter indicating bidder is not blacklisted/debarred by any government Department/institute</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Authorisation letter (as per annexure IV)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Participation in single or multiple tender</td>
<td>Single/Multiple</td>
</tr>
<tr>
<td>5</td>
<td>Bid submitted separately for each item</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Detail technical description as per the format (table 1)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Make &amp; model specified</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Printed literature with detail technical specification</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>List of user along with contact detail (address, telephone &amp; email of user) for the quoted item</td>
<td></td>
</tr>
<tr>
<td>10</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>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Letter indicating the country and place of origin and assembly of the item</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Duly filled technical bid along with all supporting documents in hard copy as well as soft copy in a pen drive</td>
<td></td>
</tr>
</tbody>
</table>

Signature of the Authorised person with date & seal
## Annexure VII

### 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></td>
<td>EMD @2% of onsite delivery price</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Copy of PAN</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>VAT clearance certificate</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Central Sales tax clearance certificate</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Quoted Price in Indian Currency</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Quoted Price in Foreign Currency</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Bid submitted separately for each item</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Separately submitted EMD for each item</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Undertaking indicating not quoting lower price to any other organization in India</td>
</tr>
<tr>
<td>10</td>
<td></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>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Detail price break up for each make and model</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Onsite delivery price to different offices/departments of OUAT situated throughout Odisha</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>3-years onsite warranty for the quoted item</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>AMC beyond warranty period</td>
</tr>
<tr>
<td>15</td>
<td></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>
</tr>
<tr>
<td>16</td>
<td></td>
<td>Duly filled financial bid in hard copy as well as soft copy in a pen drive</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>Details of the account to which the EMD will be refunded</td>
</tr>
</tbody>
</table>

Signature of the Authorised person with date & seal
<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 scraper arm.                                                                                                                                                                                                                                      |
| 2.     | 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 ºC (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.                                                                                                                                                                                                                                         |
| 3.     | 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:  |
<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td></td>
<td>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 pairs of forceps, 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 &amp; 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</td>
</tr>
<tr>
<td>4.</td>
<td>MICROPLATE READER</td>
</tr>
<tr>
<td></td>
<td>On board software, featuring an intuitive user interface, preset or customized end point and kinetic analysis protocols, powerful curve fittings routines and statistical analysis.</td>
</tr>
</tbody>
</table>
|   | - 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 |
| 5. | 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%  
<p>|   | Quantum efficiency at 600nm (EtBr)- 55% |</p>
<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td>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</td>
</tr>
<tr>
<td>6. Orthopedic Drill And Accessories</td>
<td>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&gt;6N.M. Oscillating saw 0-12500ocs/m; Range of swing:&gt;4.5degree and sternum saw 0-12500ocs/m; reciprocation distance: &gt;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)</td>
</tr>
<tr>
<td>7. Portable Ultrasound Scanner</td>
<td>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</td>
</tr>
<tr>
<td>8. Band sealer</td>
<td>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 coveyor loading: 3kg (approx) Inbuilt gas flushing Inbuilt date and batch code embossing</td>
</tr>
<tr>
<td>9. Vacuum Packaging Machine for food</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| 10. | 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  
Timer (0-100 min)  
Stand, mounting tools and sound protection box  
With Sonotrode made of titanium suitable for samples from 10ml up to 250ml |
| 11. | 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 |
| 12. | 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 |
| 13. | 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 jacketed head  
With electric motor and control system  
Suitable for continuous operation of 8 hours without break |
| 14. | 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 |
| 15. | 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 |
| 16. | 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 |
| 17. | 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 |
| 18. | Rice puffing machine | Type: continuous rotary type with electric motor and with provision to adjust rotation  
Capacity: 50kg/hr (approx) |
### Heating
- LPG fired burner with provision for controlling temperature
- With feed hopper and non choking feeding system

### 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

### Motorised Ghani
- **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**

### Trinocular Research Microscope with HD Camera (photomicrographic attachment)

#### **Trinocular Research Microscope specifications**:
- **Viewing Head**: 360° Rotatable sidentop trinocular head interpupillary
- **Distance**: 48mm-75mm.
- **Eye piece**: Wide field eye piece WF10X/20mm with diopter adjustment.
- **Objective**: Infinity plan objective: 4X, 10X, 40X, 100X (oil).
- **Nosepiece**: Quadruple Nosepiece (Backward)
- **Stage**: Double layer Mechanical Stage, 140mmx140mm/75mmx50mm.
- **Condenser**: Sliding –in centerable condenser N.A. 1.25/N.A. 0.9
- **Focusing**: Co axial coarse and Fine adjustment moving range 20mm, Fine division 0.002mm.
- **Illumination**: LED brightness adjustable
- **up-gradable**: to Phase contrast, Dark field, Fluorescent and Polarizing microscope.

#### **HD CAMERA (Photomicrographic attachment) specifications**
- **Camera type**: CMOS HD CAMERA – 5.0 MP  5.0MP (2592x1944 with image analysis)
- **Software**.
  - High sensitivity, low noise with excellent color correction
  - USB live video transfer
  - Compatible with Windows 2000/ XP/ Vista
  - Easy and fast software installation
  - User-friendly and sophisticated image processing applications
- **Premium optical lens adapter**
  - **Image Sensor**: 1/2.5”CMOS (HD) Valid Pixel : 2592x1944 (5.0M )

### Cooling Centrifuge
- **Maximum RCF more than 37000g**, cooling temperature up to 4°C, with rotor 12 x 15 ml 1 no. and 24x1.5 ml with voltage stabilizer
## 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.      | 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 |
| 6.      | Torque Transducer | Contactless transmission  
Measurement of rotating parts  
Cylindrical shaft ends  
Nominal (rated) torques - 200 Nm  
Nominal (rated) rotational speed : up to 3000 rpm  
Accuracy class : 0.5 % or better  
Torque measuring system (voltage/Current)  
Voltage output : 5-10 V  
Current output : 4-10 mA  
Output signal at torque = zero  
Voltage output : 0±0.2 V or better  
Current output :10±0.2 mA or better  
Power supply: 10-30 V (DC) |
| Linearity error including hysteresis, related to nominal (rated) sensitivity: ± 0.3 % or better
| Relative standard deviation of repeatability: ±0.1% or better
| Degree of protection per EN 60529: IP 40 or better
| Operating temperature range: 0...+60°C
| Limit torque, related to \( M_{\text{nominal}} \): 200% or better
| Breaking torque, related to \( M_{\text{nominal}} \): 250% or better
| Installation and commissioning at site

7. **Pesticide spray drone**
   - Standard takeoff weight: 20 kg or more
   - Hovering time: 20 min or more
   - Power of battery: 16000 mAh or more
   - Remote controller,
     - Speed: 4-7 m/s, liquid tank vol. 10 lit,
     - Transmission range: 0.5-1 km
   - no. of nozzle: 4
   - Spray width: 4 to 6 m

8. **Pick up van**
   - Engine size: 2400-2500 cc
   - No. of cylinders: 4
   - Power steering, power window,
   - Cabin: Dual with AC,
   - Pay load: 1000 + kg
   - Ground clearance: 200 + mm

9. **Groundnut Pod cleaning-cum-grading unit with complete set**
   - Capacity – 1 ton/hr
   - **Rotary Grader** with Blower, 3 phase 5HP motor 1440 rpm, Pulley, frame, hopper & outlet
   - Screen (1st 6mm hole, 2nd & 3rd 11mm round hole, one extra 8 mm and another extra 14mm) made up of 18 gauge sheet.
   - **Bucket elevator** 21 feet height with 3 phase 2HP motor 1440 rpm, frame, pulley, bucket, and belt
   - **Flat screen round grader** (centrifugal type) with frame, 3 phase 2HP motor 960 rpm, pulley and accessories
   - With all accessories, transportation, foundation, installation and commissioning

10. **Groundnut digger-cum-shaper**
    - with V-shape cutting blade suitable for 540 PTO rpm of tractor

11. **Groundnut thresher**
    - suitable for both dry and freshly harvested crop, tractor operated suitable for 35 hp tractor
## Group-D: Computers, Printers, Networking and other Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Photocopier</td>
<td>Type: Desktop&lt;br&gt;Function: Copy and print&lt;br&gt;Copy speed: 25ppm or higher&lt;br&gt;Max. size to copy: A3&lt;br&gt;Memory: 256 – 768 MB&lt;br&gt;Hard Drive: 40 GB or higher&lt;br&gt;Paper capacity: Min. 1000 sheets&lt;br&gt;Duty cycle: Min 75000/month&lt;br&gt;Magnification: Up to 200%&lt;br&gt;Power Supply: 220-240 V&lt;br&gt;Warranty: On site 03 years</td>
<td></td>
</tr>
<tr>
<td>2. Inverter with Battery</td>
<td>Type: Pure Sine Wave Inverter&lt;br&gt;Capacity: 2.0 KVA&lt;br&gt;Rated Power 1680 W&lt;br&gt;Max. Charging Current (in Amperes): 21&lt;br&gt;No. of batteries supported: 02 or more&lt;br&gt;36 Month Warranty&lt;br&gt;Input Mains type: Single phase&lt;br&gt;MCB for protection from Input mains&lt;br&gt;Safe for sensitive appliances with Sine wave out-put&lt;br&gt;Can run heavy loads&lt;br&gt;Auto over-load handling capacity&lt;br&gt;Bypass switch for supplying output directly from grid in case of Home UPS fault.&lt;br&gt;Noiseless Operations with the help of low harmonic distortion&lt;br&gt;Comprehensive protection against short-circuit, reverse polarity, battery over-charge, deep-discharge etc.&lt;br&gt;Adaptive Battery charging control system technology (ABCC) ensures faster battery charging and enhances battery life by around 70%&lt;br&gt;Supports a wide battery range, i.e. Flat Plate, Tubular &amp; VRLA (SMF)</td>
<td></td>
</tr>
<tr>
<td>3. CCTV camera</td>
<td>i) Bullet Camera (2 MP)&lt;br&gt;### Parameter&lt;br&gt;Image Sensor&lt;br&gt;Signal System&lt;br&gt;Pixel&lt;br&gt;Electronic&lt;br&gt;Shutter/Illumination&lt;br&gt;Video Output&lt;br&gt;Day &amp; Night&lt;br&gt;IR range/Focal length&lt;br&gt;IP rating</td>
<td>½.9” CMOS&lt;br&gt;PAL/NTSC&lt;br&gt;1920x1080&lt;br&gt;Auto, 0.1 Lux&lt;br&gt;</td>
</tr>
<tr>
<td>Parameter</td>
<td>Specification</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Body Type</strong></td>
<td>Metal</td>
<td></td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>5 Years OEM Warranty/</td>
<td></td>
</tr>
<tr>
<td><strong>(ii) Dome Camera (2 MP)</strong></td>
<td><strong>Specification</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Image Sensor</strong></td>
<td>¼.9” CMOS</td>
<td></td>
</tr>
<tr>
<td><strong>Signal System</strong></td>
<td>PAL/NTSC</td>
<td></td>
</tr>
<tr>
<td><strong>Pixel</strong></td>
<td>1920x1080</td>
<td></td>
</tr>
<tr>
<td><strong>Electronic Shutter/Illumination</strong></td>
<td>Auto, 0.1 Lux</td>
<td></td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td>AHD/TVi/CVI/CVBS</td>
<td></td>
</tr>
<tr>
<td><strong>Day &amp; Night</strong></td>
<td>Ext/Auto/Color/B&amp;W</td>
<td></td>
</tr>
<tr>
<td><strong>IR range/Focal length</strong></td>
<td>30 meter/ 3.6 mm fixed lens</td>
<td></td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>5 Years OEM Warranty/</td>
<td></td>
</tr>
<tr>
<td><strong>(iii) 16 Channel DVR</strong></td>
<td><strong>Specification</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Video Input</strong></td>
<td>16 Channel BNC</td>
<td></td>
</tr>
<tr>
<td><strong>TVi/CVI/AHD</strong></td>
<td>1080p,720P</td>
<td></td>
</tr>
<tr>
<td><strong>IPC</strong></td>
<td>Up to 16 channel (2 MP)</td>
<td></td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td>HDMI/VGA</td>
<td></td>
</tr>
<tr>
<td><strong>CBVS Support</strong></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Audio Output</strong></td>
<td>1 CH, RCA</td>
<td></td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>16Ch 1080P lite @ 12fps, 960H1/D1/CIF real time</td>
<td></td>
</tr>
<tr>
<td><strong>Frame rate</strong></td>
<td>1fps 12 fps</td>
<td></td>
</tr>
<tr>
<td><strong>Back up Mode</strong></td>
<td>USB/Network (2xUSB+ Network Port)</td>
<td></td>
</tr>
<tr>
<td><strong>Cloud storage</strong></td>
<td>Supports</td>
<td></td>
</tr>
<tr>
<td><strong>HDD</strong></td>
<td>1 SATA HDD supports up to 8 TB</td>
<td></td>
</tr>
<tr>
<td><strong>Warranty/Certification</strong></td>
<td>5 Years OEM Warranty/</td>
<td></td>
</tr>
<tr>
<td><strong>(iv) 32 inch display</strong></td>
<td><strong>Specification</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Screen Size</strong></td>
<td>32 inch LED</td>
<td></td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>1366x768 HD</td>
<td></td>
</tr>
<tr>
<td><strong>Broadcasting</strong></td>
<td>DVB-T2/C</td>
<td></td>
</tr>
<tr>
<td><strong>Av In</strong></td>
<td>Yes-1 nos.</td>
<td></td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>300+300</td>
<td></td>
</tr>
<tr>
<td><strong>Speaker</strong></td>
<td>2.0Ch</td>
<td></td>
</tr>
<tr>
<td><strong>Digital audio Out</strong></td>
<td>1 nos</td>
<td></td>
</tr>
<tr>
<td><strong>Port</strong></td>
<td>HDMI/HDCPI Input</td>
<td></td>
</tr>
<tr>
<td><strong>USB</strong></td>
<td>2.0 1 nos</td>
<td></td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>3 Years OEM Warranty/</td>
<td></td>
</tr>
</tbody>
</table>

**Other Passive Requirements:**
1- 2TB Surveillance Hard Disk
2- SMPS
3- VNC Connector
4- DC Power supply
5- Cable
6- Casing, Capping & installation cost

The price should include supply and installation of the CCTVs on site. The cost of all accessories is to be included in the bid.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4 Noise free generator</strong></td>
<td><strong>Noise Level</strong> Silent or Soundproof</td>
</tr>
<tr>
<td><strong>Gen set Rating KVA</strong></td>
<td>25 kVA or more</td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td>230 V and 440 V</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>20 Kw</td>
</tr>
<tr>
<td><strong>Engine type</strong></td>
<td>Diesel engine of suitable capacity, single or multi cylinder engines</td>
</tr>
<tr>
<td>31</td>
<td>Battery Capacity</td>
</tr>
<tr>
<td>31</td>
<td>Fuel Consumption</td>
</tr>
<tr>
<td>31</td>
<td>DG Size</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th>Digital podium</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type/Mounting</td>
</tr>
<tr>
<td>2</td>
<td>Construction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>Display</th>
<th>Built-in highly sensitive Interactive Panel with adjustable Manual tilt &amp; a mechanism to make the Panel stable so that it does not shake while writing with following minimum features-</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Screen Type</td>
<td>LED</td>
</tr>
<tr>
<td>(b)</td>
<td>Size</td>
<td>53.0cm(21inches) or higher</td>
</tr>
<tr>
<td>(c)</td>
<td>Resolution</td>
<td>1920x1080 or higher</td>
</tr>
<tr>
<td>(d)</td>
<td>Aspect ratio</td>
<td>16:9/16:10</td>
</tr>
<tr>
<td>(e)</td>
<td>Computer interface</td>
<td>One USB, One VGA/DVI/HDMI Port</td>
</tr>
<tr>
<td>(f)</td>
<td>Interactive Resolution</td>
<td>4000Lpi (lines per inch)</td>
</tr>
<tr>
<td>(g)</td>
<td>Response Time</td>
<td>5ms</td>
</tr>
<tr>
<td>(h)</td>
<td>Viewing Angles</td>
<td>170(H);160(V)</td>
</tr>
<tr>
<td>(i)</td>
<td>Touch</td>
<td>Finger and Stylus</td>
</tr>
<tr>
<td>(j)</td>
<td>Reading accuracy</td>
<td>±0.5mm (centre)</td>
</tr>
<tr>
<td>(k)</td>
<td>Tracking speed</td>
<td>Approximately200pointspersecond</td>
</tr>
<tr>
<td>(l)</td>
<td>Pen Pressure sensitivity</td>
<td>2048Levels</td>
</tr>
<tr>
<td>(m)</td>
<td>Speakers</td>
<td>Display panel should have Inbuilt Speaker</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4</th>
<th>System Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Processor</td>
</tr>
<tr>
<td>(b)</td>
<td>Small Form Factor</td>
</tr>
<tr>
<td>(c)</td>
<td>In-Built Wi-Fi/Wireless LAN Card</td>
</tr>
<tr>
<td>(d)</td>
<td>RAM</td>
</tr>
<tr>
<td>(e)</td>
<td>Hard Disk</td>
</tr>
<tr>
<td>(f)</td>
<td>Ports(Min.)</td>
</tr>
<tr>
<td>(g)</td>
<td>Keyboard &amp; Mouse</td>
</tr>
<tr>
<td>(h)</td>
<td>Operating System</td>
</tr>
<tr>
<td>(i)</td>
<td>Antivirus</td>
</tr>
<tr>
<td>5</td>
<td>Controller</td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
</tr>
<tr>
<td>(a)</td>
<td>Ports on front Panel of Controller (Minimum)</td>
</tr>
<tr>
<td>(b)</td>
<td>Buttons on front Panel of Controller (Minimum)</td>
</tr>
<tr>
<td>(c)</td>
<td>Ports on Rear Panel of Controller (Minimum)</td>
</tr>
<tr>
<td>(d)</td>
<td>Power</td>
</tr>
<tr>
<td>6</td>
<td>Built in devices</td>
</tr>
<tr>
<td>(a)</td>
<td>Gooseneck Microphone</td>
</tr>
<tr>
<td>(b)</td>
<td>Built in Amplifier Power</td>
</tr>
<tr>
<td>(c)</td>
<td>Speakers</td>
</tr>
<tr>
<td>(d)</td>
<td>Wireless Microphone Units</td>
</tr>
<tr>
<td>7</td>
<td>Sliding Trays</td>
</tr>
<tr>
<td>8</td>
<td>Power Supply</td>
</tr>
<tr>
<td>9</td>
<td>Security</td>
</tr>
<tr>
<td>10</td>
<td>Fans</td>
</tr>
</tbody>
</table>

6 Digital board
It should be an integrated solution including Frame, Cabinet with Mini PC, Multimedia Controller, Visual Presenter & Biometric attendance device, Digital Clock, IFPD, UPS & System Audio
Frame:
A Frame/Housing
   Frame | Wall mounted structure with locking facility and arrangement with Writing board (Minimum 60 inches diagonal) in front.

B Cabinet
   Cabinet | Wall Mounted Lockable Enclosure to house Computer, Controller, Visual Presenter, Digital Clock & Biometric attendance device
   Material of Cabinet | Powder coated CRCA Steel Sheet of minimum 1.2mm thickness
   C Mini PC |
<table>
<thead>
<tr>
<th><strong>Form Factor</strong></th>
<th>Mini PC should be of 2 litres Volume or less</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel Core i3 (8th Gen or better processor) with minimum 3.1 Ghz Base frequency</td>
</tr>
<tr>
<td><strong>RAM</strong></td>
<td>4 GB RAM</td>
</tr>
<tr>
<td><strong>Hard Disk</strong></td>
<td>1 TB or better</td>
</tr>
<tr>
<td><strong>In-Built Wi-Fi / Wireless LAN Card</strong></td>
<td>Should have an inbuilt Wi-Fi / Wireless LAN Card</td>
</tr>
<tr>
<td><strong>Ports (Minimum)</strong></td>
<td>HDMI x 1, DP(Display Port) x 2, USB ports x 6, LAN Port x 1</td>
</tr>
<tr>
<td><strong>Standard Keyboard</strong></td>
<td>Wireless Keyboard</td>
</tr>
<tr>
<td><strong>Optical Mouse</strong></td>
<td>Wireless Mouse</td>
</tr>
<tr>
<td><strong>Operating System</strong></td>
<td>Windows 10</td>
</tr>
</tbody>
</table>

**Multimedia Controller**

| **Ports on front Panel of Controller (Minimum)** | VGA, HDMI, USB3.0x2, Audio IN or more |
| **Buttons on front Panel of Controller (Minimum)** | Push buttons to control Volume Up & Down, Volume Mute and to switch sources of HDMI Visual Presenter, VGA Visual Presenter, HDMI Laptop, PC HDMI, VGA Laptop, VGA PC and Power On/Off or more |
| **Ports on Rear Panel of Controller (Minimum)** | USB 3.0 X 2, VGA Input x 2, VGA Output x 2, RCA Audio IN X 1, RCA Audio Output x 2, HDMI Input x 2, HDMI Output x 2 or more |
| **Power** | 5 V DC (Suitable Adaptor should be supplied with controller) |

**In -Built Visual Presenter**

| **Type** | Portable |
| **Technology** | CMOS |
| **Image Capture Size** | Minimum A4 Size (210x297 mm) |
| **Native Resolution** | Full HD 1920 x 1080 or better |
| **Optical Zoom** | 12x or better |
| **Digital Zoom** | 8x or better |
| **Video Frame Rates** | 30 FPS or better |
| **Focus Arrangement** | Auto Focus |
| **Camera Head Rotation Angle** | Camera head rotation angle-180 degree in horizontal and 180 degree in vertical or better |
| **Light Source** | White LED |

**Biometric Attendance Device**

| **Display** | Minimum 2.5" Colour Display |
| **Fingerprint Sensor** | Optical sensor for capturing fingerprints |
| **Failure Rate** | Recognition failure better then 0.001% & Acceptance failure better then 0.1% |
| **Recognition Speed** | less then 1 second |
| **Capacity** | minimum 1000 fingerprints |
| **Identification modes** | EM Card, password & Fingerprint |
| **Communication** | USB, TCP/IP |
| **Permissions** | minimum 50 open time, 5 groups & 10 kind of combinations to open door. |
| **Power** | DC 12V/1A |
| **In -Built Digital Clock** | |
### Technical Specifications for IFPD

**Display size (Diagonal)**
- 65 inches or higher

**Aspect Ratio**
- 16:9 or better

**Resolution**
- 3840 X 2160 or higher

**Contrast Ratio**
- 5000:1 or higher

**Brightness**
- 600 cd/m² or higher

**Display colour**
- 8 bit-16 million colours or better

**Input Ports (Minimum)**
- HDMI x 3, RGB/VGA x 1, Audio x 1, CVBS (AV) x 1, PC slot x 1, RS232 x 1

**Output Ports (Minimum)**
- HDMI x 1, Audio(Earphone out) x 1, Coax x 1, SPDIF x 1, RS232 x 1

**USB Ports (Minimum)**
- USB 2.0 Type A x 4, USB 3.0 Type A x 2, USB 2.0 Type B for Touch x 2

**Camera Port**
- Dedicated USB Based Camera Port

**Camera Plate**
- Camera Plate on top for screw-in web cam installation

**Communication port**
- RJ45 x 1 Giga LAN Port

**Built In Speakers**
- 2.1 Stereo Sound with in-built 20 Watt x 2 speakers and 15 Watt x 1 Sub-Woofer or better

**Viewing Angle**
- Horizontal 178 degrees, Vertical 178 degrees or better

**Touch Technology**
- IR Recognition or better

**Touch Resolution**
- 32767 x 32767 or better

**Touch Points**
- 20 Points or Higher

**Writing Points**
- 10 Points with automatically detect pen diameter (8mm & 2mm) and write simultaneously with different colours and thicknesses.

**Pen Recognition**
- Dual Pen recognition with 2mm tipped pens at real-time lag free response rate.

**Split Screen**
- 4 Way Split Screen content sharing software

**Touch on/Off**
- Should have touch on/off functionality

**Touch Response Time**
- 15 ms or better

**OS Support/Embedded Player**
- Windows 10/ Windows 8/ Windows 7/Linux/Mac/Android
- Embedded Player CPU Inbuilt.

**Stylus/Pen Holder**
- Frame/Structure of IFPD should have inbuilt magnetic mechanism to hold up to two numbers of Stylus/Pen

**Networking**
- DHCP (Auto identification) and Static IP supported

**Hardness, Anti Scratch, Anti Glare**
- Minimum 7 H hardness, scratch resistant, anti glare, anti crack resistant

**Software Features**
- Marker, Paint Brush, Highlighter, Laser Pen, Artificial intelligent Pen, Shape Pen, Magic Line Pen, Different sizes available with Region eraser, Shapes, Text, Generic consist of (shapes,3DShapes, Arrows & Tables), Integrated image search from internet, Search Light, Screen Curtain, inbuilt browser, screenshot, magnifier, calculator, soft keyboard, Clock, Stop Watch, Geometry Tools, Screen recording, integrated webcam, Desktop Annotation, White board with different backgrounds and colors, Cloud storage, Cloud Download, Page management system. Multiple numbers of
| **Save Option** | Images available with internet like nature, sport, Daily necessity, animals. Annotate on PC/ Laptop with the help of smart phone, New, Open, Save, Save as, Import & Export (PNG, JPG, PDF, PPTX, IW), Print, Youtube Drag & Drop, Magnifier, Youtube integration, Canvas moving, Inbuilt Animation libraries, Follow me AI, Complete Ecosystem on mobile, web & PC, Google for Education partner, Casting in & out from Remote locations via browser, Android & iOS Apps, Multi touch enable or Disable, Switching between presentation & Preparation modes |
| **Screen Mirroring, Wireless content sharing** | Should have option to save directly to Google Drive and One Drive |
| **Quiz** | Data from Mini PC should be shared wirelessly on multiple Phones/Tablets without any other hardware requirement. IFPD should allow user to share/mirror the content of Laptop/Desktop (Mac, Windows) and mobile device (ios, Android) wirelessly. Wireless presentation should allow user to access their Laptop/Desktop through IFPD |
| **QR Code Scan** | Should have built in tool to allow participants to submit answers from their Smart Phones (Answering/Voting/Messaging) |
| **Video Conference Interface** | Should have file download feature in smart phone just by scanning the QR code |
| **HDMI Out Mirroring (Extended Display)** | Should support USB based PTZ cameras allowing Software based Video Conferencing |
| **Integrated Wireless and Bluetooth Module** | Mirroring Capabilities deliver group discussion and spatial arrangement flexibility by allowing content to be mirrored on to two IFPD’s simultaneously |
| **In Built Android Hardware** | It should be dual band (2.4Ghz and 5Ghz). It should deliver fast wireless internet connection for interactive displays. It should support dual frequency of 2.4GHz and 5.0GHz bandwidth, along with the newest 802.11AC standard to provide up to 433Mbps transmission. It should also fast Bluetooth 4.0 connection with BLE (Bluetooth Low Energy) which saves power for one-to-one file and data transferring. |
| **CPU** | ARM Dual Core Cortex A73 1.2 GHz or Higher |
| **Memory** | 2 GB or Higher Storage |
| **Storage** | 16 GB eMMC or Higher |
| **Android Version** | 7 or higher |
| **Accessories** | AC Power cord, User Manual, Remote control, USB interface cable, Two Stylus, Wall mount bracket |
| **Power supply requirement** | 230V AC +/- 10%, 50 Hz |
| **Max Power consumption** | Maximum 105 Watts |
| **System Audio** | Solution should be supplied with minimum 80 watts RMS amplifier and two speakers housed in array of minimum 40 W RMS each. The sound bar should have a wireless microphone receiver inbuilt and one handheld wireless microphone should be supplied. |
| **Power Back up** | |
| 7 | Antivirus Software for 1 year (Enterprise Edition) | The Antivirus solution should provide enhanced antivirus protection for desktops, laptops & servers of all the attacks originating from places inside/outside of the network due to virus and/or other malicious programming code and should give appropriate warning messages.  
Solution should able to Detects and blocks malicious software in real time, including viruses, worms, Trojan horses, spyware, Adware, and RootKit.  
The Antivirus solution must automatically scan external devices (Floppy disks, Compact disks, USB devices and Network shares in real-time when accessed) as soon as they are attached to PC, Server, Laptop etc.  
Anti-Virus Software must have the capability to clean, Quarantine or delete Viruses and should be able to detect new classes of viruses by normal virus definition update mechanisms  
The Antivirus Solution technology should include a behavioral based technology apart from providing the signatures for vulnerability add heuristic based approach. It should be able to score both good and bad behaviors of unknown applications, enhancing detection and reducing false positives without the need to create rule-based configurations to provide protection from unseen threats i.e. zero-day threats.  
The Antivirus solution must scan compressed file formats like ZIP, ARJ GZIP, BZ2,JAR,, RAR,LHZ,TAR Microsoft compressed tile etc.  
The Antivirus solution Should have a Centralized Management Console & Shall manage the anti-virus programs on the network from a single web-based console.  
Antivirus solution should be capable of deploying Antivirus on all desktop and servers attached to the network centrally It should also able to generate the information reports such as Antivirus coverage, Virus definition update, Virus infection detected and action performed etc  
The Antivirus solution must provide a mechanism for developing and deploying policy to each system! Node with respect to scheduling scan jobs, real-time scans settings, signature distribution, alerting and analysis etc.  
The Antivirus solution Should Support Multi –Platform operating system(Windows , Mac, Linux ) and the same should be managed from a single Centralised Management cosole  
Antivirus solution should support integration with Active directory for directory structure of computers for better management & Should have logical group based on IPaddresses (Subnets),  
Antivirus solution Should have a Single, Configurable installation with centralized configuration & policymanagement & Should have a Common Distribution Mechanism via combination of push & pull Technology for better BW management  
Antivirus Should be capable of pushing client installation from a centralized location and it should also support manual installation of client Via network share .  
Automatic update of Antivirus Server from Vendor Site& client should get update from the local Server & If updating from the Primary Server fails for any reason(such as the user being off the network) an attempt should be made to contact the Secondary Server (i.e Vendor site)  
Administrator should provide centralized event logging to locate and cure virus problems.  
Administrator Should be able to initiate virus sweeps remotely in case of an outbreak.  
Administrator should have flexibility to schedule Scan and update at the endpoints from central Server. |
Administrator must be able to distribute new and update anti-virus software, virus definitions and Policies automatically to clients and servers from a central location.

Antivirus should provide a feature for the rollback of malware actions during disinfection (Roll back means rolling back the changes made to the file system (creating, relocating, renaming files) and registry keys.

Solution should provide web antivirus features which should analyse site address and block access to dangerous sites & Scan the object downloaded over HTTP

Solution should have file antivirus with following technologies

a) Signature based analyses
b) heuristic based analyses
c) iSwift & ichecker based scanning

Solution should provide mail antivirus features which should protect from the threats that e-mail message may contain & Messages should be intercepted at the protocol level (POP3 & SMTP level) and by embedding into the most popular mail clients.

Solution should provide IM antivirus features which should protect from the threats that IM attachment may contain & and it should support the following Instant messaging applications: ICQ, MSN, AIM, MAIL.RU AGENT & IRC

Solution should provide a web console feature that works via a browser (The websole should be used for creating reports and performing simple operations with computers like viewing the status, relocating, installing Antivirus.

Solution should provide Application privilege control to regulate the activities of the running programs, namely, access to the file system and registry as well as interaction with other programs.

Antivirus Solution should provide Application startup Control module with the ability to grant, block and audit application launch based on administrator-applied policies.

Antivirus Solution should provide Device-control module with ability to control usage of unknown or unwanted devices, reducing the risk of data loss, White list categories (based on serial numbers) & Temporary grant access to access block device.

Solution should provide tamper protection features i.e. user who does not know the password may not be able to change the existing policy, exit or uninstall the antivirus solution.

The proposed solution should have predefined rules for hundreds of the most commonly used applications reduce time spent on configuring the firewall.

The Firewall module should have rule-base approach, with administrator defined rules.

The Firewall module should have feature to allow or block certain network traffic, based on port-number /protocol and based on network address.

The Firewall module should monitor the traffic from the applications installed on that endpoint. Specific rules can be created to block certain applications’ network traffic.

The solution should have HIPS module, which could protect the endpoint from network based attacks. The signatures for HIPS should be regularly updated to identify latest network attacks for endpoints.

The endpoint solution should have a feature to detect network attacks originating from a computer, and then block the traffic from that computer.

The Firewall module should have option to create network subnets like Public, Trusted, Local etc, and accordingly the network traffic flowing rules should be created.

The firewall module should have option to automatically categorize the applications in Trusted, Low Restricted, High Restricted, Un-trusted etc, and accordingly the application’s network traffic should be allowed.
- Firewall should allow creation of inbound or outbound traffic restriction rules.
- Alerts on virus activity should be passed on to administrator.
- Antivirus Solution should provide web control module with the ability to monitor and filter users' browser activities by category, content and data type regardless of workstation location.
- Solution should provide Mobile device security & Mobile device Management (MDM) feature & it should support Active Directory, Microsoft Exchange ActiveSync and Apple MDM Server.
- Solution should provide management visibility and security for mobile endpoints — without the complexity of a separate solution.
- Solution should provide Antimalware feature for Mobile devices* and should use the power of the cloud to providerapid protection against new and emerging threats.
- Solution should provide Multi-level defense technologies for mobile devices (e.g. Anti-spam technology to filter out unwanted calls and text messages) it should also have Safe Browser feature for iOS devices to protect against phishing websites.
- Solution should have feature to Enforce encryption on each user's mobile device and should offer a convenient way to enforce the use of the encryption technologies that are resident within the mobile device — so we can easily ensure that all data on the device is encrypted or just encrypt all of the corporate data that's held within a special container on the user's device.
- Solution should support Bring Your Own Device (BYOD) initiatives and should include containerization features — to help ensure corporate data and personal data are held in separate containers on the user's device.
- Solution should have special Anti-theft features that should help to minimise the risk of security breaches that can result from a lost or stolen device.
- Solution should have Remote Lock, Locate and Wipe features (e.g. Administrator can remotely lock a mobile device, find the device's approximate location, and can also choose to wipe corporate data from the device and return the device to its original factory settings.
- Solution should have Self-Service Portal for Anti-theft. Users can rapidly respond to the loss of a device and reduce the risk of data loss and avoid load on administrators.
- Solution should have a feature which can help administrator in Controlling a lost device... even when its SIM has been changed.
- Solution should have a Mobile device management (MDM) feature with extensive mobile device management functionality — to give administrator easy and rapid control over all mobile security functions.
- Solution should have boosting systems management capabilities plus an array of security technologies that can be managed and controlled from one management console.
- Solution should have a feature for the creation and cloning of computer images — to save time and help to optimise operating system deployment. Images should be stored in a special inventory and it should be ready for access during deployment.
- Solution should have a Application provisioning feature (e.g. Administrator can deploy third party software on demand or can schedule it for outside normal office hours. The software deployment process should be entirely transparent to users.
- Solution should have a License Provisioning and Control feature (e.g. centralised license provisioning and tracking of any breaches of license conditions)
- Solution should have Asset management feature — hardware & software (e.g. all devices and software on the network should be automatically discovered and recorded in hardware and software inventories.)
Solution should have Patch Management features - Advanced in-depth scanning for vulnerabilities combined with the automated distribution of patches.

- Solution should have Network Admission Control (NAC) features (E.g. With Network Admission Control (NAC), administrator can create a network ‘guest’ policy. Guest devices should be automatically recognized and sent to a Corporate portal where the correct identification password should enable them to use the resources administrator has approved.

- Solution should have a Remote troubleshooting and deployment tool i.e it should help administrator to resolve problems efficiently. Furthermore, when he needs to deploy new software at a remote office, he can reduce the load on his network by using one local workstation as the update agent for the whole site.

- Solution should have full-disk, file level & removable media backed by Advanced Encryption Standard (AES) with 256 bit encryption to secure critical business information in the event of device theft or loss.

- Solution should have option to integrate with SIEM systems like, HP ArcSight & IBM QRadar

- Full Disk Encryption should operate on the physical sectors of the disk – to deliver encryption that’s ‘close to the hardware’ and also enable an ‘encrypt everything at once’

Strategy.

- File level Encryption should offer granular encryption of individual files and helps to enable secure sharing of data across your network.

- Solution should have a feature to Increase security through policies that enforce the encryption of data on removable devices.

- Solution should support Portable Mode for File Level Encryption on removable media

- Users can create password-protected, encrypted, self-extracting packages of files and folders. This enables the secure transfer and sharing of sensitive data – via a removable device, email or the web.

- Administrator should be able to access vital encrypted data in the event of a system failure – even if the operating system is unable to boot.

- If a user loses or forgets their password, a challenge/response mechanism should allow the recovery of the preboot password to access the encrypted data

- Vendor Should have 24x7 anti-malware laboratory analysis centers to provide proactive rapid protection against known and unknown threats

- Vendor should have local service and support provided by the Technical personnel as per requirement.

- Vendor should be ICSA (International computer security association), Check Mark(West coast Labs), AVComparatives & VB 100 certified.

- Vendor should be Top Rated Products for last 3 years in AV Comparatives Test

| 8 | Matlab software | Matlab 19b | MATLAB (Basic core engine), Optimization Toolbox, PDE (Partial Differential Equation Toolbox), Symbolic Math Toolbox, Graphics For 32 bit and 64 bit OS (i) paper license student edition and 24 user (ii) server version |
COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT

| 1 | DESKTOP COMPUTER CPU WITH MONITOR | i) CORE I5 CPU WITH 20” LED MONITOR  
ii) CORE I3 CPU WITH 18.5/19” LED MONITOR  
iii) CORE 2 DUO CPU WITH 17” TFT MONITOR  
iv) DUAL CORE CPU WITH 17” TFT MONITOR  
v) DUAL CORE CPU WITH 17” CRT MONITOR  
vi) PENTIUM IV CPU WITH 15” CRT MONITOR |
|---|---|---|
| 2 | PRINTER | i) RICOH Aficio SP C220N  
ii) HP CP 1525N  
iii) Samsung ML2570  
iv) Samsung ML2526  
v) Samsung ML2010  
vi) Samsung ML 2581N  
vii) Samsung ML 1676  
viii) Samsung ML 1866 |
| 3 | PRINTER-CUM-PHOTO COPIER MACHINE | i) Sharp AR 5316  
ii) Sharp AR 5516D  
iii) Sharp AR M160  
v) Ricoh Aficio MP2000L2  
vi) Sharp AR 5618  
vii) Ricoh MP2001L  
vii) Ricoh Aficio MP2000L2 with ADF  
ix) Xerox WC 5225  
x) Xerox WC 5325  
x) Xerox WC 5335  
x) Canon IR 3320 |
| 4 | DUPLICATING MACHINE | i) Ricoh 6123, DX- 2430 |
| 5 | DOT MATRIX PRINTERS | i) Epson LQ 2090  
ii) Epson LQ 1150 II |
| 6 | PRINT, SCAN AND COPIER MACHINE | i) HP LaserJet 3050  
ii) HP LaserJet 3015  
iii) HP LaserJet M 1136 MFP |
| 7 | SCANNER | i) Epson V30  
ii) HP Scan jet 3500C  
iii) HP Scan jet 2400 |
| 8 | Comprehensive Annual Maintenance of the active network components viz., Firewalls, L3 Switches, Managed & Unmanaged switches, Blade Server, Core switch, Audio visual equipments etc. and passive components viz. UTP & OFC cables laid for the campus wide LAN in the University and Hostels located at headquarters. |

SCOPE OF WORK

Proposals are invited from vendors to provide a Comprehensive Annual Maintenance Contract (CAMC) for a period of One year in respect of the above equipments.

The CAMC shall cover both types of maintenances such as preventive and as well as Breakdown maintenance.

The CAMC shall cover repair/ replacement of faulty/ defective parts of the system and components/ spares in the failed system.

Vendor has to station necessary minimum manpower at hub.

The preventive and breakdown maintenances are described as follows:

1. PREVENTIVE MAINTENANCE

The following work is to be carried out under the preventive maintenance:
i. Preventive maintenance should be carried out minimum four times in Year.

ii. To carry out Preventive Maintenance (PM) as recommended by the manufacturer.

iii. Calibration of instruments.

iv. Maintenance of UPS/Battery.

v. Any deviation in the parameter reading recommended by manufacturer to be corrected and the solution should be intimated to the officer-in-charge in the report form.

vi. The engineer must attend any problem reported by the user within 24Hrs.

vii. For problems that have been resolved, a resolution report shall be filed in noting the corrective action and this report should be signed by the officer-in-charge.

viii. Along with the bill of payment, a maintenance report shall be filed indicating the preventive maintenance activities, fault resolution, pending issues, etc.

ix. A review committee (to be set up) on half-yearly basis shall review CAMC performance, which may consist of senior representatives from the University. The agenda will be focused on improvement in CAMC service quality.

x. Repaired/replaced equipment/parts should be of same type/make/model/capacity etc.

xi. In case any problems, the faulty part is replaced with the lower capacity; the original capability part should be restored in 3 months.

xii. Fault identification should be done within 2 days or earlier.

xiii. Certification towards satisfactory performance after carrying out the preventive maintenance must be duly endorsed by the engineer and approved by the officer-in-charge.

xiv. The vendor shall be wholly responsible for any accident and compensation payable to the personnel employed by the man d working under their control. They should keep the department fully indemnified against any claim in this regard. The user shall not be responsible for any loss incurred by the service provider for their equipments etc. however; the service provider shall be responsible for any loss to University property incurred by the service provider/their representatives while executing the above CAMC.

2. BREAKDOWNMAINTENANCE

i. Any fault/breakdown should be attended immediately and remedial measures taken within 12 hours of fault reporting and fault should be rectified within 24 hours.

ii. The comprehensive AMC service to be provided by the vendor during service timings shall include but not limited to all corrective and preventive maintenance of the systems in satisfactory working order and shall include carrying out of repairs and servicing and replacement of defective parts. The replacement/worn out parts shall be the property of the University.

iii. Under system break down conditions, the service engineer shall have maximum 12 hours of response time, which in this case can be defined as the time taken between the down-call initiation and the engineer reporting at site.

iv. The vendor at no extra charge shall arrange the replacement of defective spare parts of the equipment under CAMC. The replacement shall be with a new part or equivalent functional unit from same manufacturer. In case the maintenance is held up for lack spares leading to making the equipment non-operational, a corresponding amount for each system, which is not functional, shall be deducted from the vendor’s bill/invoice if a standby equipment/system is not provided immediately.
v. Payments like custom duties, octroi, sales tax, etc. towards spares procurement shall be the sole responsibility of the vendor.

vi. University shall have no role play in the procurement of replacement parts during the maintenance period. It is distinctly understood that the vendor shall be entirely responsible for carrying out the procurement of spares/components required for fulfilling their commitment. The vendor/representative shall visit University proper to carry out such corrective services as and when the problem is booked by the officer-in-charge or the person on duty.

**CONTRACT PERIOD**

The contract period shall be of one year from the date of agreement.

**TABLE OF COMPLIANCE**

Bidder shall specifically confirm the compliance to all the sections of CAMC as per individual sections/parawise. Any non-compliance/deviations should be clearly mentioned parawise. Failure to do so will cause disqualification of the bidder. The scope of work and terms and conditions to maintain the equipments given in this document should be specifically complied with by stating so. Merely saying yes to specifications but not supporting it with documentary evidence or writing phrases like 'as per attached literature' will attract disqualification.

**PENALTY CLAUSE**

The penalty clause shall be applicable if the replacement of the available spare system is not done within 24 Hrs of the breakdown of the equipment. For any default penalty charge of 0.5% of contract value per day will be enforced on the Agency till the system is made operational. The penalty charge, if any, would be realized out of the Bank Guarantee submitted for the contract.

**RESPONSIBILITIESOFTHEBIDDER**

i. Vendor shall be responsible for any/all of the above activities and towards maintenance, etc.

ii. **Trouble shooting**: Vendor has to initially find the fault and then go for maintenance.

iii. **Repair/Replace/Re-work**: All repair/replace/re-work should be taken up immediately.

iv. **Spares**: Under comprehensive maintenance, Vendor has to keep additional spare parts for maintenance indicating the minimum quantity/inventory of the spares.

v. Vendor has to give the **schedule** of four **preventivemaintenance**.

vi. Vendor should adjust **time schedules** for maintenance of the systems in coordination with the users.

vii. Vendor has to send a **monthly report** to user as to what maintenance has been done on the systems and the current status of each system at various sites. Summary of Daily log is to be used for generation of monthly maintenance report and sent to user. The report is to be prepared by the vendor and approved by the user.

viii. Vendor has to maintain a logbook/service report depicting all the maintenance activities at sites. The vendor has to send the printouts of logbook and a monthly report showing the maintenance activities and the current status/condition of the system. Vendor has to maintain logbook for each equipment. Format is shown below:

<table>
<thead>
<tr>
<th>Date</th>
<th>Equipment</th>
<th>Type of work</th>
<th>Tasks done</th>
<th>Status after work</th>
<th>Special Remarks</th>
</tr>
</thead>
</table>

ix. Vendor has to send the **certificate** of conduct of satisfactory systems performance.

x. Vendor shall do all necessary coordination regarding system
INSTRUCTIONS TO BIDDER

Experience Certificate: The bidder should have a minimum of 03 years experience in Govt. / Govt. of India Enterprises sectors as System Integrator or Service provider for the Operations and Maintenance of equipments mentioned above.

The vendor shall furnish the following along with the bid:

i. Brief profile of company
ii. Latest Sales Tax, Income Tax and VAT Clearance Certificates
iii. Audited Statements of accounts for the past five years
iv. Vendors have to use their own test equipments and tools for maintenance work.
v. The submitted offer shall be valid for a period of at least one (01) year.
vi. Vendor shall be ready to attend technical discussions and/or commercial negotiations, if required and asked for
vii. Vendor may seek/request for any clarification before the submission of the offer.
viii. User can break the contract any time during contract period if the CAMC provided by vendor is not up to satisfactory level.

Payment Terms & Conditions

Payment shall be made to the vendor on half yearly basis after producing a certificate.
## 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 polish 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.   | 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 |
| 8.   | Paper shredding machine | Feed width: 300 mm; Shred size: at least 3 mm x28 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, |
Color: Green or Blue  
Plastic slat Size: 2 ft x2 ft approx..  
Features: strong interlocking on all sides of slats, washable, detachable, Anti-skid features, Load Bearing Capacity: at least 300 kg/Sq.meter |
| 10.  | Dual Desk | Material | Wooden, metal  
Top size | 1800 x 400 mm  
Seat of size | 1800 x 300 mm  
Desk height | 750 mm  
Back rest of size | 1800 x 150 mm  
Seat height | 450 mm  
Thickness | 18 mm |