



ORISSA UNIVERSITY OF AGRICULTURE & TECHNOLOGY, BHUBANESWAR - 751003

No .4719/CVS, Date: 01/12/2017

TENDER NOTICE

Sealed tenders are invited from internationally reputed manufacturers/authorized dealers having valid GST/PAN and Service Centers in India, preferably in Odisha for supply, installation, commissioning and after sale maintenance of different items, and for supply of Chemicals/ Kits/ Glassware/ Plastic ware/ labware / Filter aids etc. at different Colleges/ Departments/ Projects located at Bhubaneswar as well as at different parts of Odisha under this University. Interested firms have to download the Tender Documents from the official website of OUAT at **www.ouat.nic.in** and submit the same along with the required tender fee.

The last date for receipt of tender bids for group A, B, D, E & F / offers for group “ C “ items by speed post is **26/12/2017 up to 5.00 P.M.** For details on opening of bids, tender fees, important information, terms and conditions, requirements etc. please refer to the tender document, available at **www.ouat.nic.in** from 04/12/2017.

Sd/-

**Chairman, Central Purchase Committee,
- cum - Dean, C.V.Sc. & A.H.
O.U.A.T, Bhubaneswar 751003**

TENDER PARTICULARS AND INSTRUCTIONS OF TENDER NOTICE

NO.4719/CVS, Dt. 01/12/2017

Tender Fees

Group	Category of items	Tender fee (non-refundable)
A	Equipments/Instruments and accessories	Rs.2500/-
B	Farm Equipment/Implements	Rs.2500/-
C	Rate Contract for purchase of Chemicals/ Kits/ Glassware/ Plastic ware/ labware / Filter aids	Rs.2500/-
D	Computer with accessories, ICT materials	Rs.2500/-
E	Furniture items	Rs.2500/-
F	Miscellaneous items	Rs.1000/-

**CHAIRMAN
CENTRAL PURCHASE COMMITTEE
-CUM-DEAN, CVSc & AH
ORISSA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
BHUBANESWAR – 751 003**

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1. IMPORTANT INFORMATION

1	Period during which tender document will be available on website www.ouat.nic.in	From 04/12/2017 to 26/12/2017
2	Address for submitting tender offer	Chairman Central Purchase Committee cum Dean College of Veterinary Sci. & A.H., OUAT, Bhubaneswar-751003
3	Mode of Submission of Bids	By Indian Postal Speed Post Only
4	Deadlines of receipt of tender offer (date and time)	26/12/2017 up to 5.00 pm
5	Date & time of opening of Technical Bid	Group A: 02/01/2018 at 11.00 a.m. Group B: 03/01/2018 at 11.00 a.m. Group C: 04/01/2018 at 11.00 a.m. Group D: 05/01/2018 at 11.00 a.m. Group E: 05/01/2018 at 3.00 p.m. Group F: 05/01/2018 at 4.00 p.m.
6	Place of opening of Technical Bid	Radhakrishna Hall, Orissa University of Agriculture &Technology, Bhubaneswar-751003
7	Mode of communication to Technically Qualified bidders	By telephone, email or SMS
8	Date & time of opening of Financial Bid	To be intimated to technically qualified bidders by telephone, email or SMS
9	Place of opening of Financial Bid	Radhakrishna Hall, Orissa University of Agriculture &Technology, Bhubaneswar-751003

2. SUBMISSION OF TENDER (Group A,B, C, D , E & F)

The timelines and terms and conditions must be strictly adhered to. University will give preferences to those bidders when bids are received directly from the manufactures. However in some cases of merit, the University may take considerate view for supply by the manufacturers through the exclusive/ authorized dealers.

The tenderer has to submit the tender in two parts for each item; **(1) Part-I: Technical Bid**
(2) Part-II: Financial bid.

3. 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 firm (the manufacturer or 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 Comptroller, 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 in a particular group needs to pay tender fee once but needs to attach photocopy of tender fee payment (photocopy of demand draft or bankers cheque) in rest of the item quoted else the bid may 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 in concomitant with minimum technical specifications as in our tender document along with all supporting documents must be submitted in hard copy as well as soft copy in the form of CD/pendrive (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 CD/pendrive, else the bid may be rejected**

Table 1: Format for submission of detail specification for each item

Name of the firm with complete address, email & contact no/fax	Sl. No. of the item as per the tender document	Name of the quoted item	Make and Model	Technical specification as in the tender documents	Conformation of technical specifications in the quoted model (yes/no)	Deviation in specifications of the quoted mode	Justification for deviation	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

- a. Mention name of the bidder/firm with complete postal address, email, contact number/fax at column '1'
- b. Specify the serial number of the item as per the tender document at column '2'
- c. Mention the item's name as per the tender specifications at column '3'
- d. Specify make and full make and model name along with model number, if any at column '4'
- e. 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'
- f. In the 6th column write 'yes' against each specification of the 5th column, if the specification of the offered model confirms, otherwise write 'No'
- g. 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'
- h. In the 8th column, specify justification for deviation
- i. The additional specifications, if any along with other comments may be specified at column '9'

4. PART-II- FINANCIAL BID

1. Price should be quoted in Indian Currency only except for imported items. For imported items, bids should be submitted in two parts; (i) in Indian currency which should include cost, rate and amount of discount, packing, forwarding, transportation, all taxes and levies FOR destination (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.
2. **EMD @2% of the quoted value (inclusive of all taxes & levies FOR destination).**
3. **EMD to be submitted separately for each item.** Firms submitting one EMD for many items will be liable for rejection.
4. **An undertaking indicating that they have not quoted lower price to any other organization in India for the item for which bids have been submitted. If it is found later that have quoted lower price to any other organization, then the difference of cost shall be recovered from the bidder and the bidder may be blacklisted.**
5. Detail of basic cost of item, cost of mandatory, auxiliary and consumable parts including prerequisite parts 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**.
6. The detailed price break up for each make and model quoted should be given in separate sheet as per Table 2.
7. The price quoted should be **onsite delivery price to different offices/departments of OUAT situated throughout Odisha.**
8. 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.
9. The warranty of 3 years is not applicable for furniture and they should have a minimum warranty of 1 year. The furniture is also exempted from AMC.
10. The warranty of 3 years is not applicable for soil engaging parts like tynes, shovels, and blades etc excluding manufacturing defects.
11. Deviations of warranty for some items are mentioned against each item separately.
12. For group B items list of dealers/ service providers in Odisha who will provide after sales service, AMC etc must be attached.
13. 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.**
14. **AMC beyond warranty period** (year wise at least for 5 years beyond 3 years mandatory warranty).
15. **Clear attested copy of PAN & GSTIN** showing the registered number and photograph (where applicable).
16. Each tender should accompany clear attested copies of Sales Tax clearance certificate from the concerned Sales Tax Authority valid up to 31.03.2018.

17. The firm belonging to outside the state of Odisha should submit clear attested copies of Sales Tax clearance certificate from the concerned Sales Tax Authority of that state valid up to 31.03.2018.
18. **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 CD (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 CD), else the bid may be rejected.**
19. **Submit financial bid separately for each equipment/instrument as per the given format (Table 2).**
20. **Clubbing of many items together shall be liable for rejection.**

Table 2: Format for submission of Financial Bid

1	Name of the firm with complete address, email & contact no/fax	
2	Tender Sl. No	
3	Item with Make & model	
4	Technical specifications: same as mentioned in technical bid?	(Yes/ No)
5	Basic Price of complete unit	
6	Educational discount	
7	Price after discount	
8	GST/Customs duty (if any)	
9	Customs clearing charges (if applicable)	
10	Packing and forwarding charges up to destination (if any)	
11	Insurance charges up to destination (if any)	
12	Any other Charges (if any)	
13	On Site Delivery price	

- a. Mention name of firm with complete address, email, fax, telephone no at sl. no. '1'
- b. Mention tender sl. no. at sl. no. '2'
- c. Mention the name of item, make, model, mandatory, auxiliary and consumable parts including prerequisite parts at sl. no. '3'
- d. It is considered that the financial bid offered by the tenderer is as mentioned in technical bid submitted.
- e. Mention basic price of item quoted at sl. no. '3', at sl. no. '5'
- f. 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. '6'
- g. Calculate price after discount (sl. no. '5' minus sl. no. '6') and mention at sl. no. '7'
- h. Mention rate and amount of GST/customs duty (if applicable) at sl. no. '8'
- i. Mention rate and amount of Customs clearing charges (if applicable) to be mentioned at sl. no. '9'
- j. Mention packing, forwarding charges up to destination (if any) at sl. no.'10'
- k. Mention Insurance charges up to destination (if any) at sl. no.'11'

- l. Mention rate and amount of any other charges along with year wise AMC (Part & Labour), after 3rd year of standard warranty, for 4th and 5th year in amount or, percentage of basic price (if any) at sl. no. '12'
- m. Specify final onsite delivery price at sl. no. '13'.

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 Veterinary Science & AH, 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 overleaf 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 for Group-A Sl. No., Group B Sl. No, Group D Sl. No, Group E Sl. No or Group F 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 Veterinary Sci & A.H., Orissa University of Agriculture & Technology, Bhubaneswar-751003, Odisha on or before 26 /12 / 2017 up to 05.00 P.M. and will be opened in the Radhakrishna Hall, 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 only**. Tenders sent by other than SPEED 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. Warantee 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. The rates and the conditions of the offer will remain valid for one year from the date of rate contract by OUAT or till the next rate contract is formed, whichever is earlier.**
13. After submission of the tender bids, no change or alternation 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, alternation, 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, 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 reserves the right to call for price negotiation of any item, if the price found to be in higher side. In such cases all the technically qualified tenderers of such item shall be called for price and terms and conditions negotiation is desired.
25. Tenderers violating any guidelines shall be liable for rejection.
26. All the electrical/electronic equipments should have a provision to be operated as per Indian electricity supply

27. 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.
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.

6. GST

Orissa 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. Accordingly the GST calculation may be made on the concessional rate.

7. CUSTOMS AND EXCISE DUTY EXEMPTION

Orissa University of Agriculture and Technology, Bhubaneswar is registered with the Department of Scientific and Industrial Research (DSIR) for purposes of availing **Custom Duty exemption** and IGST-SGST exemption. The applicable amount of customs duty for our University against DSIR certificate should be mentioned in the financial bid. For detail please refer to PART-II-FINANCIAL BID as mentioned earlier of this document.

8. DISCOUNT

Our institution is a non profit, non commercial pioneer institution in the field of teaching, research and extension in the Agricultural and allied fields. As such we are availing price discount for purchase of equipment's/instruments, etc. The maximum rate of discount on each equipment/instruments may also be indicated in the tender specifically.

9. SUPPLY

Incomplete/ Part supply is allowed. No transshipment is allowed. The supply will be made to the place of destination. No advance payment can be made.

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 item's 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.

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 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 items 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)**. For wooden items and furniture, one year warranty must be included. The furnitures are also exempted from AMC. This should be taken into consideration while quoting the price. Warranty of equipment shall start from the date of successful installation and demonstration at site and not from the date of invoice or sale.

If the bid is submitted by an authorised dealer/agent, then she/he has to 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 precondition what so ever.**

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

The bidder has to provide all details including name, address, email id, phone number and mobile number who will provide the services and to whom the complaints are to be lodged. The service provider has to give a stand by equipment/ item till the equipment is restored to normal functioning. In case of very active items, the correction should be made within 24 hours and within 03 days for other items, without any additional charge. Penalty clause will be invoked if the machinery isn't brought into normal functioning within the stipulated period as above.

For supply of equipment/ machinery, costing above INR 01 Crore, a service engineer has to be deployed.

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 maintenance 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 levies) of each equipment/instrument/apparatus in shape of Bank draft/Banker's cheque duly pledged in favour of the Comptroller, O.U.A.T., Bhubaneswar – 751003, Odisha payable at State Bank of India, OUAT campus branch, Bhubaneswar – 751003 (IFSC code: SBIN0003341) 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 Orissa are exempted from deposit of EMD for particular item for which they have 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.

No one should submit a tender who is unable to furnish earnest money as indicated above and 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. PERFORMANCE SECURITY

The successful bidders awarded with order should produce Performance Security for an amount of 10% of the value of the contact. 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.

Performance security shall be invoked, when the items aren't supplied as per the purchase order or, when satisfactory service isn't provided during warranty period, AMC (Annual Maintenance Contract) or, CAMC (Comprehensive Annual Maintenance Contract).

Bid security shall be refunded to the successful bidder upon receipt of Performance Security.

16. 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 have to submit Bank guarantee equal to the advance amount (annexure II).

17. 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.

18. RIGHT TO ACCEPT/REJECTION OF TENDERS

The right of acceptance of tender 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.

19. 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 Orissa extends.

**Chairman
Central Purchase Committee
cum–Dean, C.V.Sc. & A.H.
O.U.A.T, Bhubaneswar 751003**

20. IMPORTANT INSTRUCTIONS

PLEASE READ CAREFULLY BEFORE FILLING UP THE TENDER FORM (Gr A, B, D, E & F)

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 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. Purchaser may accept any tender at any time before the date of expiry of its validity indicated in the tender form or any date up to which its validity is further extended by the tenderer.
7. 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 there in 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

**21. 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

22. BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

The Comptroller
Orissa 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

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

The Comptroller
Orissa 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 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 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 Chairman, Central Purchase Committee whose decision shall be conclusive and binding on us as guarantor. It is mutually agreed that the Chairman, Central Purchase Committee 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 Chairman, Central Purchase Committee against the Supplier and either to fore bear 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 Chairman, Central Purchase Committee or, any indulgence by the Chairman, Central Purchase Committee to the Supplier or by any such matter or thing what so ever 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)

24. MODEL CERTIFICATE OF INSTALLATION

No. _____ Dated

1. Reference Contract No. date

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).

For Tenderer

For Purchaser

Witness:

Witness:

Signature

Signature

Name

Name

Designation

Designation

Address

Address

Date

Date

25. MANUFACTURERS AUTHORIZATION CERTIFICATE

To

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

1.....

2.....

We hereby grant our authorization to M/s (complete name and address of dealer/ representative) to submit, participate and finalize bid in response to your Tender Notice No.4719/CVS, dated 01/12/2017.

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

Undertaking:

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

Authorized Signatory

(having the power of Attorney on behalf of the Manufacturer)

Name:

Designation:

Name of the Company/ Firm:

Complete Postal Address:

Telephone no(s):

Fax:

E-mail:

Website:

26. AGREEMENT

This Memorandum of Agreement hereinafter referred to as agreement signed this _____, 2018 by and between the Orissa University of Agriculture and Technology, Bhubaneswar – 751 003 (here in after 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), (here in after referred to as _____) having their registered office at _____ (address), and represented by _____ (name, designation and address) (here in after 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 damaged parts without extra cost.

SUPPLY AND DELIVERY

The materials indented would be delivered by the supplier to the indenting officers. The equipment should conform 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.

27. FORMAT FOR CHECKLIST FOR TECHNICAL BID (Please indicate Yes/No)

SL No		Yes/No	Remarks
1	Tender Document Fee		
2	Letter indicating bidder is not blacklisted/debarred by any government Department/institute		
3	Authorization letter (as per annexure IV)		
4	Participation in single or multiple tender	Single/ Multiple	
5	Bid submitted separately for each item		
6	Detail technical description as per the format (table 1)		
7	Make & model specified		
8	Printed literature with detail technical specification		
9	List of user along with contact detail (address, telephone & email of user) for the quoted item		
10	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		
11	Letter indicating the country and place of origin and assembly of the item		
12	Duly filled technical bid along with all supporting documents in hard copy as well as soft copy in the form of CD		

Signature of the Authorized person with date & seal

28. FORMAT FOR CHECKLIST FOR FINANCIAL BID (Please indicate Yes/No)

SL No		Yes/No	Remarks
1	EMD @2% of onsite delivery price		
2	Copy of PAN		
3	VAT clearance certificate		
4	GST number and certificate		
5	Quoted Price in Indian Currency		
6	Quoted Price in Foreign Currency		
7	Bid submitted separately for each item		
8	Separately submitted EMD for each item		
9	Undertaking indicating not quoting lower price to any other organization in India		
10	Detail of basic cost of item, cost of mandatory, auxiliary and consumable parts including prerequisite parts required for successful installation and demonstration		
11	Detail price break up for each make and model		
12	Onsite delivery price to different offices/departments of OUAT situated throughout Odisha		
13	3-years onsite warranty for the quoted item		
14	AMC beyond warranty period		
15	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		
16	Duly filled financial bid in hard copy as well as soft copy in the form of CD		

Signature of the Authorized person with date & seal

29.A TECHNICAL SPECIFICATION OF LABORATORY EQUIPMENTS (GROUP-A)

Sl. No	Item	Detailed technical specifications
1	Air blower with accessories	Oil free, 5 HP suitable for fish farms and laboratory aeration, 500 mts air pipe line, regulators and valves etc., including installation
2	Amino acid analyzer	Analysis using ion exchange and high-temperature post-column reaction with Ninhydrin and Data System With PC and required software Peltier, Detector : Temperature setting; 50 to 140 °C (in 1 °C steps) Filter photometer, Measures two wavelength: 570 nm and 440 nm, reference: 700 nm
3	Refrigerated Centrifuge	Max. Speed: 22,000 rpm, Max. RCF: 44,000 g Temperature Range: ambient to -20° LCD display showing all functions in real time Rotors: 24x2/1.5 ml, 4x500 ml, 6x50 ml, 24x12 ml 4 no.500 ml & 6 nos. 50 ml stainless steel matching bottle
4	Cooling Micro Centrifuge	Speed:16000 rpm Angle rotor head : 10x2 ml, Fixed angle rotor: 6 x 50 ml Upto -20 deg C Digital display with Timer
5	High speed Microcentrifuge	Speed Range:200 to 15,000 rpm Capacity: 12 X 1.5/2.0 ml tubes Timer: 20 Sec. to 99 min Large LCD Display
6	Biochemical Auto Analyser	Sample Volume: 2–15 µl/test, Reagent Volume: 150-300 µl for single/multiple reagents , Auto level sensing, auto wash and anti crash, reaction mixing Wavelengths: 300-780 nm Automatic cuvette washing
7	Trinocular Microscope	Trinocular head with sidentof observation head inclined at 30° rotatable at 360° Interpupillary distance adjustment 48mm to 75mm Objective lenses: Plan Achromat 4X, 10X, 20 X, 40X, 100X, complete with antifungal coating. Eye piece: Wide field 10X with built in pointer. Body: Co Axial Focusing system, prefocusing lever & tension adjustment system, Reverse Angle Quintuple nosepiece revolves on ball bearing Mechanical stage: size 216 mm X 150mm Condenser: swing out ABBE marked Condenser 1.25 with adjustable iris diaphragm Illumination: White bright field illumination with LED lamp (with 5 spare lamps)
8	Binocular Microscope	Interpupillary distance adjustment 48mm to 75mm Objective lenses: Plan Achromat 4X, 10X, 20 X, 40X, 100X, complete with antifungal coating. Eye piece: Wide field 10X with built in pointer. Body: Co Axial Focusing system, prefocusing lever & tension

		<p>adjustment system, Reverse Angle Quintuple nosepiece revolves on ball bearing</p> <p>Mechanical stage: size 216 mm X 150mm</p> <p>Condenser: swing out ABBE marked Condenser 1.25 with adjustable iris diaphragm</p> <p>Illumination: White bright field illumination with LED lamp (with 5 spare lamps)</p>
9	Trinocular Research Bright Field Microscope with digital camera,	<p>Trinocular head with side of observation head inclined at 30° rotatable at 360° Interpupillary distance adjustment 48mm to 75mm</p> <p>Objective lenses: Plan Achromat 4X, 10X, 20 X, 40X, 100X, complete with antifungal coating.</p> <p>Eye piece: Wide field 10X with built in pointer.</p> <p>Body: Co Axial Focusing system, prefocusing lever & tension adjustment system, Reverse Angle Quintuple nosepiece revolves on ball bearing</p> <p>Mechanical stage: size 216 mm X 150mm</p> <p>Condenser: swing out ABBE marked Condenser 1.25 with adjustable iris diaphragm</p> <p>Illumination: White bright field illumination with LED lamp (with 5 spare lamps)</p> <p>Camera: Compatible with the microscope and should be from the same brand of the microscope manufacturer. Minimum 10 megapixel colour camera with minimum pixels of 3584X 2748, Capture mode: Still & Video</p> <p>Analysis software: Compatible with the microscope and should be from the same brand of the microscope manufacturer. Should have the provision of still and video capturing mode. Measurement provisions in microns & millimeter with length, breadth, angle and different shape and perimeter measurement facilities. Report generation and printout facility.</p> <p>Branded PC with latest configuration, genuine software's, 21 inch LED monitor with branded UPS and colour printer.</p>
10	Operating microscope for ophthalmic micro surgery	<p>Stepwise magnification (0.5x to 2.5x),</p> <p>Eyepiece (10x or 12.5x)</p> <p>Dioptr adjustment (+6D to -6D),</p> <p>Working distance of 150 mm to 200 mm</p> <p>Filter (UV heat absorbing, cobalt blue and green),</p> <p>Light source (LED/ halogen bulb) with real time high resolution video recorder with LCD display</p>
11	Phase contrast Microscope	<p>Inverted Microscope with transmitted light LED illumination</p> <p>Fixed stage plate with left or right hand drive carrying standard inserts for slide or various culture plates, flasks and Petri-dishes</p> <p>A 4-fold revolving nosepiece with infinity optics, tube lens, phototubes-condenser holder including collector, aperture diaphragm and filter holder</p> <p>Illuminated on/off switch-Interface - power supply including mains cable</p> <p>Trinocular tube with 40-45° viewing angle</p> <p>Condenser with a free working distance of 35-40 mm and a numerical aperture of 0.45 or better for Bright field Phase Contrast studies</p> <p>Slider for Phase Contrast with 4 positions, 1x Bright field and 3x light rings for condenser</p>

		Plan Achromatic of 4x/5x, 10x, 20x and 40x with antifungal coating and long working distance for Bright field and Phase contrast applications 10X magnification eye pieces with minimum 20 mm field of view
12	Upright compound Microscope with accessories	CMOS Camera, Spectral Range 380-650nm with IR filter LED illumination, Trinocular observation tube Paired eyepiece of 10X magnification, Universal Abbe condenser. Software Operating System, With a complete Computer unit with CPU, monitor, laser printer UPS as suitable for the equipment 3 year AMC
13	Zeeman Effect experiment kit	Determination of e/m from Zeeman Effect and energy shift due to applied magnetic field . High resolution Fabry Perot Etalon, Neon Discharge Tube, High Voltage, Wooden stand, Heavy duty power for electromagnet. Micrometer eyepiece., Digital Gaussmeter, Condensing Lens with mount. Constant deviation spectrograph, Constant deviation Prism, A Strong Electromagnet.
14	Loop sterilizer	Electrically operated 230 V Sterilization time:5-7 seconds Temperature settings: 500-800°C Chamber diameter:14 mm Chamber length: 150 -200 mm Asbestos free core element with quick heating Should be ideal for platinum, nichrome loops, needles etc.
15	Thermal Properties Analyzer	Thermal conductivity Range : 0.02 to 2.00 (W/m.K) Accuracy: 5% from 0.2-2, 0.01% from 0.02-0.2 (W/m.K) Thermal resistivity: 50 to 5000 (°C*cm/W) Operator environment: Controller: 0 to 50°C, Sensors:-50 to +150°C
16	Ozone detector	Sensing Element: Electrochemical Sensor Temperature Sensor: NTC 5 k the distance / HS series capacitive Input Voltage : 220-240 V AC 50 Hz Warm up time : < 60 seconds Temperature measurement range ambient to 60 deg C Humidity measurement range: 0 to 99% RH Ozone measuring range: 0 to 5000 ppb Resolution: 2ppb
17	Tri- axial Accelerometer	Measurement in three perpendicular axis (X-Y-Z planes) Sensitivity: 10- 100 mV/g Measuring range:±60g Frequency response range: 0- 100 Hz
18	Torque Transducer	Contactless transmission of signal measurement Measurement of torque of rotating parts (Cylindrical shaft ends/ Flange ends) Nominal (rated) torques - up to 5kN.m Nominal (rated) rotational speed - up to 3000 rpm Accuracy class - 0.05 Torque measuring system Nominal sensitivity : ±10 V

		<p>Voltage output signal at Torque : 0 ± 0.2 V</p> <p>Power supply Nominal (rated) voltage supply range : 24-30 V (DC) Linearity error related to the nominal (rated) sensitivity: ± 0.03 % Relative standard deviation of repeatability related to the variation in signal output : ± 0.03 % Degree of protection as per EN 60529 : IP 54 Operating temperature range : 10 to 60°C Limit torque, related to M_{nominal}: 150 % Breaking torque, related to M_{nominal}: 300 % Longitudinal limit force : 50kN Lateral limit force : 1000kN Bending limit moment : 500 Nm</p>	
19	Cardioscope	PARAMETERS	ECG, NIBP, SpO2ECG, HR, resp, NIBP, SpO2, temp, pulse
		Hr display, bpm (ECG)	12-300
		Precision (wavelength, nm)	Min 1 bpm
		Number of simultaneously displayed leads (ECG)	Min 2
		Arrhythmia detect (ECG)	Yes
		power needed, vac (energy)	240
		age group	Adult and pediatric
		Kind of probe (temperature)	Finger
		Disposable/reusable (pulse oximetry)	yes
		RECORDER TYPE (AUXILIARY OUTPUT)	Thermal
		Channels (POWER NEEDED)	Min 4
		Size, cm (in) (MAXIMUM OBJECT)	15.2 (6)
		Duration, min (ECG)	60
		TECHNIQUE	Impedance
		Waveform displayed (RESPIRATION)	Yes
		Threshold control (RESPIRATION)	Yes
		Cuff size (NIBP)	Toy, small, medium, large and giant breeds with puppy
		Number of inputs (PROBE)	min 1
		Kind of probe (TEMPERATURE)	Thermistor
		Defib/synch (AUXILIARY OUTPUT)	Yes
		Dimensions (hxwxd) cm (in) (GENERATOR)	Approx. 320 x 210 x 300

		Configuration	Modular
20	Laminar Flow	Stainless steel HEPA filters up to 0.3 Microns Working area : minimum 4 ft x 2 ft x 2 ft Blower fitted with ¼ HP Motor, Pre-filters made of high grade nylon illuminated by fluorescent light; cabinets operated at 230V. Single Phase 50Hz. With AC Supply. Must be fitted with UV Germicidal lamp for sterilization. With fitted with Acrylic Front Door sliding type & Cock for Gas Connection.	
21	-20°C Lab Freezer (vertical)	Temp. range: - 18°C to -25°C Capacity: more than 230 litres Auto Defrost with Integrated controller HCFC and CFC free refrigeration system Set point : -20c Digital Display Safety feature: high temp alarm (-15 °C), low temp alarm (-30 °C) With baskets	
22	-20° C Vertical Deep Freeze	Temp Range: -15° C to -26° C. Microprocessor based temperature controller. Stainless steel inner chambers High and low temperature alarm Mobility facility No of trays: 3-4, adjustable/fixe Leak proof door lock system	
23	-80°C Premium Upright Freezer,	Internal Capacity: More than 400 lt., 18-gauge steel 1.2 mm thick., Temp Range: Programmable, to -86°C, in 1°C increments, at ambient temperature up to 32°C Control: Microprocessor-controlled temperature and alarms with non-volatile memory, Compressors: Low-noise ≤ 55dB, heavy-duty, CFC-free and HCFC-free 4-Digit Password for temperature setpoint and alarms, Built in Diagnostic Software High/low temperature, power out, system fail, battery low, filter clean and fault analysis, Molded handle with built-in removable lock, Five compartments with four adjustable-height, stainless-steel shelves, Latchable doors lift off stainless-steel hinges, without tools, outer doors need to be fitted with low temperature seals. Inclusive of 50 nos. of 2'' or/and 3'' or/and 5'' height storage box Inclusive of a suitable matching stabilizer with voltage varying from 130-290V	
24	Biological Safety Cabinet	Exhaust/Inflow Air Volume: 582 m3/h (342 CFM) Heat emission at 25°C Ambient: 0.2 kW (683 BTU/hr) Supply/Exhaust Air Filter: H14 HEPA EN 1822 99.995% (mini-pleated) Certification: NSF/ANSI 49, UL, Sound Pressure Level: 63 dB(A) Lighting power: > 120 fc, Access Ports 0.94 (24 mm) diameter: 6 (3 on each side) Service valves: Up to 6 (installed through side walled access ports) Working Height of Front Window: 10'' Maximum Opening Height of Front Window: 21'' Class II, Type A2	
25	UV-Vis	Single beam photometer	

	Spectrophotometer	Sample capacity: 1.5 µl-2 ml with quartz cuvette Receiver: CMOS photodiode array Wave length range: 190nm-830 nm Compatible PC for thermal printer.
26	BOD Incubator	Capacity 340 liters (approx.), Stainless Steel internal chamber Shelves: 3-4 Temp range ambient to 60°C Microprocessor based PID Controller
27	BOD Incubator with shaker	Temperature : 5°C - 60°C Digital Temperature Indicator cum controller With at least Fluorescent and or UV Lamps Stainless Steel Inner and outer chamber Shaking Tray with Speed Controller Digital Temperature Controller, Speed regulator, digital RPM Meter, Safety device
28	Homogenizer	Sample size: 0.2 to 100ml. Speed: 5000-35000 rpm. Stainless Steel probe Digital display
29	Analytical Balance	Capacity: 50-250 g Display: 0.01-0.1 mg With rechargeable battery
30	Binocular indirect ophthalmoscope	Stereoscopic binocular view, Real time high resolution video recorder with TFT LCD display Focus distance : 300-800 mm Inter Pupillary distance: 50-80 mm Battery: Rechargeable
31	Phaco Emulsification Unit	LCD user interface with compact machine Phacoemulsifier hand piece with 25-50 KHz frequency with ultrasonic modes Peristaltic aspiration pump with vacuum level of 5-500 mmHg and flow rate of 1-50 cc/min, Bipolar diathermy coagulator of 300-600 kHz and 5-10 watts power; Guillotine vitrectomy cutter with 50-3000 cuts/min and compatible with 20-25 gauge
32	Tonopen	Digital Applanation tonometer with micro stain gauge transducer Measurement range of 5-50 mmHg, Rechargeable battery with ophthalmic probes/ tip covers
33	Hand held portable slit lamp	Microscope with Eyepiece (10x/ 15x), Magnification (10x), Dioptre adjustment (- 7D to + 7D), Inter pupillary distance (50-70 mm variable), Working distance (50-80 mm), Slit illuminator with filters (heat absorbing, green and cobalt blue), LED/ Halogen light source with rechargeable battery
34	Operation theatre table for Ophthalmic Surgery including Surgeon chairs	Ergonomically designed, Motorised Adjustable height control (500 to 1000 mm) with foot switch, Standing or sitting position friendly, Weighing capacity (100 to 200 kg), Ergonomic cushioned pneumatic operation stools with backrest and height adjustment
35	Ophthalmic surgery	Manual phaco fracture cataract extraction set

	pack	<p>Femtosecond cataract set DALK set DMEK set Implantable contact lens set Mc Pherson tying forceps Utrara capsulorhexis forceps Sinsky manipulator and choppes Kulgen manipulator and choppes Chang micro finger phaco chopper Simcoe irrigating/ aspirating cannula Cystotome Dastoor intraocular forceps Battaquer needle hodler Barraquer wire speculum Desmarres Lid retractor solid blades Dastoor Iris retractor Sinsky lens manipulating hook Kulgen iris hook and lens manipulator Chang quick chop combo double end Jaeger lid plate Keener-Arit lens loop Hess Iris forceps Barraquer Colibri forceps MC Pherson corneal forceps 1 x 2 teeth Dastoor superior rectus forceps Eye dressing forceps serrated delicate Wills Hospital Utility forceps Beer cilia forceps Arruga capsule forceps Snellen entropion forceps Lambert chalazion forceps Shepard lens holding forceps 3mm lower jaw and 1.5mm upper jaw Utrata capsulorrhesis forceps Akahoshi capsulorrhesis forceps Halsted mosquito forceps delicate (5.25") Castroviejo corneal scissors curved blunt Castroviejo corneal transplant scissors Micro iros scissors De wecker iris scissors (sharp-blunt) Westcott tenotomy scissors curved (blunt) Iris scissors (straight and curved) Stitch scissors Castroviejo needle holder Bowman Lacrimal probe Mc Intyre Lacrimal cannula blunt tip Simcoe irrigating/Aspiratin cannula Cystotome Silicone bulb with adaptor Schiotz tonometer McPherson straight bipolar forceps</p>
36	Fundus Camera	<p>Rechargeble battery with minimum 1 hour of use, High resolution (minimum 2560 x 1920 pixels) TFT-LCD display, Minimum 2 GB SD memory card storage for image / video storage,</p>

		<p>Bayonet connector for attachment of optic modules, integrated lens for imaging, Minimum 5 megapixel image sensor with autofocus & manual adjust, connectivity with PC through USB port, Fundus imaging camera with a 40° field of view with White and blue LEDs white/ infrared light capture, Minimum 6x digital zoom</p>
37	Standalone Ultrasound system with color Doppler and 4D application	<p>17" LCD monitor Integrated HDD (500 GB or higher) On board thermal B/W Printer USB 2.0 or above ports Alphanumeric keyboard, Modes like B, B+B, B+M, M Harmonic imaging Advanced 4D with compatible software Coded contrast imaging Auto optimization Echo (0-250dB to pick up echoes) Colour Doppler Tissue Doppler imaging Directional power Doppler, Doppler auto-trace, Colour flow, Pulse wave Doppler Continuous wave Doppler Digital zoom facility, Multi frequency (1-15 MHz) probes like Cardiac (1-5 MHz), Linear array (5-10 MHz), Micro convex (5-10 MHz), Convex (2-5 MHz), Volumetric convex transducer probes 2 KVA online UPS with one hour backup CE and USFDA certified</p>
38	Ultrasonic instrument cleaner	<p>Power 100 W or Higher Suitable resonator, Output frequency 30 Kz or higher Auto tuning microprocessor Basic equipment comprising of generator, ultra sonic converter, horn, tips/probles, power cables and suitable capacity pump Adjustable pulse duration (ON/OFF time) ranging from 1 sec to 1 h (Minimum) Programmable timer, Temperature controller system Different sizes of probles/microtips to sonicate minimum volume 50 ul to 500 ml Suitable flow cell made of stainless steel with cooling arrangement Detachable stainless steel rotator with thermcable All required cables, connector, spare parts</p>
39	Veterinary multiparameter non-invasive monitor	<p>Portable, veterinary specific algorithms, monitor parameters like ECG, SpO₂, NIBP, Respiration rate, Temperature. Patient information features, easy software upgradability, Power supply : 110-230 V, AC 50-60 Hz</p>
40	Small animal anaesthesia workstation	<p>Electrical Precision vaporizer [Isoflurane (mandatory) and sevoflurane (optional)], Oxygen Flowmeter (0-5 LPM), Pressure gauge (-10 to + 75cm H₂O),</p>

		Flush Valve (10-20 LPM oxygen flow), Pop – off valve, inspiratory/ expiratory valves, CO ₂ absorber (upto 1000cc canister), Battery Backup (upto 4 hours), Rebreathing bags (1.5 to 4 lit), Bulk Oxygen cylinder (46 lit)
41	Computerized radiography (CR) system	Image Recording System with Cassettes & Image Plates of 14” x 17” (2 Nos), 10” x 12” (2 Nos), 8” x 10” (2 Nos), image Reader (CR Reader) / Digitizer, advanced workstation provided with minimum 17” LCD/LED high-resolution (Min 1280X1024) monitor, Image processing database, analysis, Image printing facility through paper printers networked to the main workstation. Veterinary specific measurement tools are optional. PC compatibility of at least 2GB RAM, 500 GB or above Hard Disc. Facility for Multi patient Printing on Single Film, A dry laser printer/imager of latest technology not less than 300 DPI, with 2 KVA UPS, CE and USFDA certified. Supplier must provide 3 packets of 10” x 12” films for printing purpose
42	X-Ray Machine	600 mA and 125kv, 40 kW generator, 36 kV to 125 kV radiographic voltages LED display 40 to 90 kV range, mA range 0-3 mA, Focal Spot of 1.2 x 1.2 mm and 2.0x2.0 mm, 5 position X-ray examination Table including Trendlenburg (.12degree), Diaphragm with grid having grid ratio 8:1; 40 lines/cm, Floor to ceiling tube column stand with x-ray tube assembly mounted
43	Thermo cycler	Peltier Block Memory: Minimum 500 programs Sample capacity : 96 wells x 0.2ml Gradient facility with range 30-100°C and accuracy ±0.5°C Temp Range : 4 to 100 °C (Accuracy : +/- 0.5 °C) Maximum Ramp Rate : 4.0 °C/s (Average Ramp Rate : 2.5 °C/s) Supplied with suitable UPS (min. 2 KVA) with 1hour battery backup
44	Image analyzer	Bench top dark room with epiwhite and epi UV inbuilt Resolution range 800 x 500 pixels Lens zoom range 10-80 mm filter 20 x 25 cm Software for Densitometry, 2D spot and blot analysis, colony counting, 1D gel analysis
45	Water bath with shaker	Temperature Range: 30- 100°C Volume: 35-40 L Shaker Speed Range: 20 to 400 rpm
46	Portable ultrasound scanner	Portable ultrasound scanner with multi frequency ultrasound transducers ranging between 2.0 to 10.0 MHz B mode, M mode, Pulsed wave Doppler and color Doppler mode, directional power Doppler, Table for mounting
47	Small animal “V” top	Durable stainless steel construction with adjustable “V” top,

	operation theatre table	Foot paddle operated hydraulic system to adjust height, 2 way inclination and inclination of “V” top
48	Orthopaedic drill and accessories	Orthopaedic drill with oscillating saw [One hand piece, One bone drill adapter, One canulate drill adapter, One oscillating saw adapter with two blades, One sternum saw adapter with two blades with drill speed 0-1000 rpm, Torque= 6-10 N.M. Oscillating saw 0-12500ocs/m; Range of swing:3-5 degree and sternum saw 0-12500ocs/m; reciprocation distance: 2-4 mm 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 bail fixation accessories like drill-guide jig, extension pieces, nails, reamer, trocar, wire cutter, wire tensioner, osteotome, hand guided jacob’s chuck and key, periosteal elevators, bone curette, bone nibbler)
49	Modified Phantom box	TANUVAS model for Veterinary Gynecology use
50	Sausage filler	Capacity 9 ltrs S.S. frame and. complete with rack & pinion Material S.S. cylinder piston and other parts mild steel
51	Tissue Homogenizer	Motor speed 3000- 25,000 rpm, volume range- 1 -2000 ml, LED display
52	Nano UV/VIS Spectrophotometer	High-speed microfluidic slide based spectrophotometer based on UV/VIS spectrometry capable of DNA, RNA, and protein quantification Optical principle of the system should be based on ultrasensitive photodiode array spectrometer with Xenon flash lamp as the light source System should function on variable wavelength ranging between 230–750 nm with wavelength resolution of <3 nm, wavelength accuracy of 0.5 nm and wavelength reproducibility of 0.1 nm, System should work within a photometric range of 0.0005–2.0 OD with an absorbance precision of 0.003 OD with data output through USB, direct print, or TCP/IP, Should have in-built computer based software
53	Automated Nucleic Acid Purification System	The instrument should be able to perform fully automated walk away system for the purification of nucleic acids and proteins, Should be capable to process a minimum of 12 samples per run using silica membrane or 96 sample using magnetic particle technology, including a pipetting system and a robotic gripper, Integrated TFT touchscreen and clear on-screen messages to guide the user PC requirement should be optional to operate the system, Sensor to automatically detect the number of samples in the shaker and to check the reagent bottle rack, Fully integrated centrifuge equipped with a minimum of 12 swing-out buckets or reaction chambers, each of which can hold a disposable rotor adapter
54	Microplate Reader with Microplate washer	Wavelength: 200–900 nm, Photometric range: 0.0–3.5 OD Linearity $\leq 1.0\%$ from 0.0–2.0 OD; $\leq 2.0\%$ from 0.0–3.0 OD Filter wheel capacity: 8 Wheel with 6 preinstalled filters with 415, 450, 490, 595, 655, and 750 nm Plate shaking: 3 speeds: low, mid, high; duration: 0–999 sec

		<p>Read time: 2-6 sec at single wavelength, Data output Onboard graphical thermal printer PC suitable compatible to the licensed software of the instrument USB2 interface with PC or Mac data stations Flexible configurations with ability to read flat, U, or V-bottom microplates or 8- or 12-well strip plates Variable-speed plate-shaking capability LCD display Automatic microplate washer approx. 35x43x20 cm</p>
55	Tissue homogenizer	<p>Saw tooth stainless steel probe for 50 ml centrifuge tubes Speed: up to 35000rpm (approx.)</p>
56	Vertical Laminar Flow	<p>Approx. 4 feet bench length. Side and rear walls of the cabinet with coved corners. Opening height: 10 degree angle sash with 8-10'' opening of sash with alarm. HEPA filters Automatic whole unit controlled by microprocessor. Must be provision for DOP test to check filter leakage. Shatterproof sash with unobstructed viewing area. The sash should be made of ¼ inch thick toughened glass. Spares: minimum two UV lamps, two florescent lamps and electrical fuses for each cabinet</p>
57	Waterbath with 2 KVA stabilizer	<p>Stainless steel, 10 litres (approx) Temperature: 0 to 100° C Temperature control : Digital PID/microprocessor control Low level water indicator, over temperature alarm</p>
58	Nanodrop Spectrophotometer	<p>For sample size (0.5–2.0 µL) Temperature control at 37 ° C Xenon Flash Lamp / LED/ Halogen Wavelength Range 170-900 nm Computer and accessories as suitable for the equipment Laser printer and UPS With 3 years AMC</p>
59	Real Time PCR Detection System	<p>Aluminum alloy 96 well with 0.1 - 0.2 ml. LED light source of 400-750 nm. The temperature control speed 5 Dye compatibility new dye accommodation facility For Data application Gene Expression, SNP genotyping, PCR quantification with standard curve, allelic discrimination. Online UPS with at least 30 minutes backup With a complete Computer unit with CPU, monitor, laser printer UPS as suitable for the equipment 3 years AMC</p>
60	Remote Data Logging Station	<p>Operating Temperature Range: -30° to 55°C Smart Sensor Data Channels : 15 or more Smart Sensor Network Cable Length: 25 m or more Memory: 25000 measurements or more Power Source: Solar Panel Mounting: Mast mount Weather proof enclosure Communications: GSM/GPRS Quad-band (850/900/1800/1900 MHz) for use worldwide</p>
61	Smart Soil Moisture	<p>Accuracy: Soil Volumetric Water Content (VWC): <i>Using</i></p>

	Sensors	<p><i>standard calibration equation: $\pm 0.035 \text{ m}^3/\text{m}^3$ ($\pm 3.5\%$ VWC)</i> <i>typical in soils having electrical conductivity up to 10 dS/m</i> <i>Using soil specific calibration: $\pm 0.02 \text{ m}^3/\text{m}^3$ ($\pm 2\%$ VWC)</i> Resolution: $0.0005 - 0.0010 \text{ m}^3/\text{m}^3$ VMC (0.08% VWC) Range: up to $0 - 0.57 \text{ m}^3/\text{m}^3$ (Vol/vol) Sensor Type: Frequency Domain Volume of Influence: 1 Litre Operating Temperature: $0 - 50^\circ \text{ C}$ Cable Length: 10 meter</p>
62	Theta probe for soil moisture measurement	<p>Temperature Accuracy: $\pm 0.5^\circ \text{ C}$, 0 to $+40^\circ \text{ C}$ $\pm 0.75^\circ \text{ C}$, -20 to $+60^\circ \text{ C}$</p> <p>Water content Accuracy: $\pm 0.01 \text{ m}^3.\text{m}^{-3}$ (1%) Range: 0 to $0.5 \text{ m}^3.\text{m}^{-3}$ Salinity: range: 50 to $500 \text{ mS}.\text{m}^{-1}$ $< 0.035 \text{ m}^3.\text{m}^{-1}$</p> <p>Output 0 to 1.0 V differential Power: 5 to 14V, 18 mA for 1s Sample vol: $60 \times 30 \text{ mm}$ diameter Overall size: $170 \times 40 \text{ mm}$ diameter Environmental: IP68, -40 to $+70^\circ \text{ C}$</p>
63	Digital Theodolite	<p>Telescope: Length: $140-160 \text{ mm}$; Objective lens: $40-45 \text{ mm}$; Magnification: 30x or more; FoV: 130 degree; Resolving power: $2.5-3.0''$; Minimum focus: $90 -100 \text{ cm}$; Stadia ratio: 100</p> <p>Electronic angle measurement: Horizontal - 2 sides & Vertical - 2 sides; Minimum reading: $1''/ 5''$; Accuracy - 2</p> <p>Laser pointer: Focusing with 633 nm (approx.) wavelength Display: 2 sides with LCD 7 segments Data output: RS-232C port Tilt sensor: Vertical Compensating range: $3'$ Optical plummet telescope: Magnification - 3x; FoV - 3 and Focussing - 0.5 m to infinity Safety measure: Water protection standard IP6 Power supply: Rechargeable batteries with charge adapter Tribrach Type: Detachable</p>
64	Hand held GPS	<p>Screen: $3.0''$ or more touch screen WQVGA Display: Color: 240×400 Transflective Chipset: High Sensitivity GPS SiRFstarIII Camera: 3MP or more with Auto Focus Geo-Tagging: Geo-tagging to associate voice, photos & videos Internal Memory/ Expandable Memory: SD Card Slot with 2 GB internal memory and 16 GB with micro expandable memory Waypoints/Track Logs/ No. of Track Points: $2000/200/10,000$ Routes/Legs per Route: $200/500$ GPS Interface Software: Supplied with desktop software Pre-loaded Maps: Base map should be there to represent the major roads, rivers, water bodies, village locations, drainages etc. Maps: Capacity to upload any maps Dr.B.C. Sahoo 9439257482</p>

		<p>Satellite Images: Capability to add color satellite Image</p> <p>Multimedia: Picture Viewer; Audio Player Video Viewer; Integrated speaker & Microphone</p> <p>GPS Accuracy: 3-5 meters</p> <p>User Interface: One Touch™ Menu, customizable hard buttons</p> <p>Connectivity: mini USB</p> <p>Power: Rechargeable battery with adapter</p> <p>Battery Saver: Turn off the device but maintain GPS tracking (suspend mode)</p> <p>Waterproof & Rugged: IPX 7 Standards, Should be 1 m drop to concrete proof</p>
65	Differential Global Positioning System (DGPS)	<p>Receiver Type: Single frequency geodetic, real-time RTK Receiver, combined antenna and receiver</p> <p>Channels: Minimum 120 channel Receivers for Tracking L1 frequency from GPS, GLONASS</p> <p>Upgrade: Should be possible to upgrade the sensor on L2 frequency of GPS and GLONASS Should be possible for Galileo and BeiDou (Price should be quoted separately)</p> <p>L1 Measurements (GPS & GLONASS): Carrier phase full wave length C/A Narrow code</p> <p>Receiver Technology: Low elevation tracking , low noise and inbuilt multipath mitigation</p> <p>Time to initialization: Typically 4 s or better</p> <p>LED status indicators: For Power, tracking, memory, blue tooth</p> <p>Ports: 1 RS232 Serial and power port, 1 Bluetooth Port, 1 Internal GSM Slot</p> <p>Memory: Internal or removable at least 1 GB</p> <p>Base Type: Touch Sensitive controllers</p> <p>Display: VGA color display with 640 x 480 pixels (very good visibility in broad daylight)</p> <p>Keyboard: Alphanumeric hard keyboard and soft QWERTY keyboard</p> <p>Operating System: Win CE 6.0 or Higher</p> <p>Graphical Display: Capable of creating complete points, Lines and Polygons in the field which will be displayed graphically on the screen</p> <p>Processor & Memory: 500 MHz or better with 512 MB or better RAM with Internal memory 1 GB or more</p> <p>Position latency: 0.02 sec or better</p> <p>Recording Rate: 0.05 to 300 s</p> <p>Base: Integrated GSM/GPRS.</p> <p>Internal Battery: Rechargeable batteries with charge adapter</p> <p>Safety measure: Full protection against water, sand and dust</p> <p>Drops: Withstands 1 m or more drop onto hard surface</p> <p>Rover Type: Single frequency geodetic, real-time RTK Receiver, combined antenna, receiver and display for GIS work</p> <p>Channel: Minimum 120 or more channel receivers for Tracking L1 frequency from GPS, GLONASS.</p> <p>Upgrade: Provision to upgrade on L2 frequency of GPS and GLONASS including Galileo and BeiDou</p> <p>Ports: 1 x USB 2.0 port, Micro USB Client for data transfer and charging integrated Audio and Microphone</p> <p>Display: Color Display with 850 x 480 pixels</p> <p>Operating System: Win Mobile 6.5 or Higher, or Android</p>

		<p>Processor & Memory: 1.5 GHz or more Dual core, 1 GB or more RAM, 4 GB or more external memory with provision to expand the internal memory upto 32GB</p> <p>Real Time RTK: Provision for 50 cm positional accuracy or better in handheld mode with Internal Antenna and 30 cm or better with External Antenna on pole setup with respect to base</p> <p>Post process: Horizontal: 3 mm + 0.5 ppm (rms), Vertical: 6 mm + 0.5 ppm (rms)</p> <p>Rover: Capacity to receive base correction transmitted over GSM/GPRS in RTK mode</p> <p>Internal Battery: Rechargeable batteries with adapter</p> <p>Safety measures: Protection against water, sand and dust</p> <p>Drops: Must withstand 1 m drop or more onto hard surface</p> <p>Camera: 8 MP or better with auto focus</p> <p>Accessories: Integrated 3-Axis electronic compass, accelerometer, barometric altimeter and integrated compatible field and office software</p>
66	Total Station	<p>Range with single Prism: 3500 m or more</p> <p>Accuracy/Measurement time with reflector: Precise+ : 1.0 mm + 1.5 PPM, Precise fast : 2 mm + 2 PPM, Tracking : 3 mm + 2 PPM</p> <p>Range without Reflector: > 500 m</p> <p>Accuracy/ Measurement time without reflector: 2 mm + 2 PPM</p> <p>Range with Reflective sheet: > 500 m</p> <p>Long Range with Prism: > 10,000 m</p> <p>Measuring Time: 1.0 sec (minimum)</p> <p>Internal memory: 100,000 fix points and 60,000 measurements (approx)</p> <p>Extended memory: USB Stick</p> <p>Interfaces: Serial (baud rate 115,200 bits/s), USB Type A and mini B, Bluetooth wireless</p> <p>Display & Keyboard: Full alpha-numeric keyboard with high resolution Black & White display, Graphics, 160 x 288 pixels, display illuminated, 5 brightness levels</p> <p>Telescope Magnification: 30x or more</p> <p>Telescope Resolving Power: 3"</p> <p>Safety measures: Full protection against dust, water</p>
67	Spectro-radiometer	<p>Spectral Range: 350-2500 nm</p> <p>Spectral Resolution: 3 nm@700 nm, 10 nm@1400/2100 nm</p> <p>Spectral bandwidth: 1.4 nm@350-1000 nm, 1.1 nm@1001-2500 nm</p> <p>Scanning Time: 100 milliseconds</p> <p>Stray light specification: VNIR (0.02%), SWIR 1 & 2 (0.01%)</p> <p>Wavelength reproducibility: 0.1 nm</p> <p>Wavelength accuracy: 0.5 nm</p> <p>Maximum radiance: VNIR 2X Solar, SWIR 10X Solar</p> <p>Detectors: VNIR detector (350-1000 nm) - 512 element silicon array, SWIR 1 detector (1001-1800 nm) & SWIR 2 detector (1801-2500 nm)</p> <p>Input: 1.5 m fiber optic (25° FoV)</p> <p>Noise Equivalent Radiance (NEdL): VNIR: 1.0×10^{-9} W/cm²/nm/sr @700 nm, SWIR 1: 1.2×10^{-9} W/cm²/nm/sr@1400 nm, SWIR 2: 1.9×10^{-9} W/cm²/nm/sr@2100 nm</p> <p>Computer: Compatible laptop (instrument controller) with all accessories</p>

68	Mirror Stereoscope	Swing-in Magnifier: 1.5x or more Field of View of 3x Binoculars: 70 mm or more Field of View Stereoscope: 18 cm x 24 cm Inter-pupillary Adjustment Range: 55–75 mm Stereometer Parallax Bar Minimum Graduation: 0.05 mm Stereometer Parallax Bar Range: 50 mm
69	Mobile X-ray Unit 63 mA	2.5 kW high frequency mobile X-ray Unit Stationary Anode X-ray tube mA output = 10 - 63 mA kVp output= 40-100 kVp (step wise mode) mAs range = 0.30 – 200 mAs Exposure time = 20 msec to 5 secs Main ON, Overload and X-ray ON indicators, Voltage compensator, mobile stand, Collimator, Voltmeter and mA meter must be provided Power requirements: 230 volt ($\pm 10\%$), AC, 50-60 Hz, Single phase
70	Upgradation of Cardiac probe for Desktop Ultrasound machine	Prosound α 6 cardiac probe – 1 to 4 MHz for upgradation of existing Desktop Ultrasound Machine (Aloka Hitachi)
71	Estrous detector for cow and Mare	Should be easier to determine an optimum mating time for females with atypical oestrous cycles Should enable users to detect an asymptomatic oestrous period (silent heat) and make insemination more effective Should be easy to clean and disinfect Length of the probe - 40-45 cm for cattle and 15-25 cm for sheep and goat Power input - about 18 Ma Measurement control - single chip microcomputer Display- LCD Measuring range – between 0-2000 units Measurement resolution - 10 units
72	Ovulation detector for canines	Should detect the best mating time for bitches, Should help to identify 'silent heat' and ovarian cycle disorders, Should eliminate the stress related with repeated attempts at mating, Length of the probe – 10 - 15 cm Power input – 12 - 15 mA Measurement control - single chip microcomputer Display- LCD Measuring range – between 0-2000 units Measurement resolution - 10 units
73	Complete Production Unit for Liquid Biofertiliser on a turn-key basis	A. SS Fermenter 300 Lts Capacity 300 L working volume fermenter (S.S) with inner body 5mm thick of S.S 316 and outer jacket of S.S 304 of 5mm thick all inner connect parts shall be S.S 316 including strainer etc. Fixed at above ground with self ladder facility for inoculation and cleaning. <u>Technical specifications:</u> 1. Fermenter should be jacketed type for cooling, steam heating with Max. working temperature of 150°C with dished top and bottom. 2. Pressure in between 5-20 psi.

		<p>3. Pressure gauges : Shell , jacket 4. Agitator-turbine type with fixed blades and variable speed of 60 to 150 rpm with a foam breaker. 5. All ports should be of S.S. 6. Ports on top dish : For Safety valve, water inlet to shell, Temperature with thermo-well, pressure guage, Air inlet with ring sparger system with holes in the bottom, Air outlet, inoculation, view glass, one view glass shall be fitted with an illumination lamp in an enclosed chamber 7. Ports on Bottom dish : For broth outlet, total drain 8. Air filters should be cartridge type primary filter with rating: <0.1 micron with operating pressure of 5kg/cm. 9. Digital temperature indicator cum controller must be provided with probe. 10. Aeration system: Dehumidifier with 2Lit. Capacity. With vessel made of 2mm SS-304 polished sheet and provision for replacement of Silica gel as and when required. Micro filter with 0.01 microns and operating pressure of 5kg, Air outlet shall be extended with 6mm SS tubing</p>
		<p>B. Steam Generator</p> <ol style="list-style-type: none"> 1. Electrically operated with suitable 27 KW (3x 9KW) 3 phase power suitable for sterilization of 150L, 300L and 500 L fermenter. 2. It should be fitted with drain valve, steam valve, pressure gauge, safety valve, water level indicator, piping and electrical control panel with all safety devices. 3. Facility to operate heating elements individually should be provided. 4. Max steam output: 35-50 kg/hr. 5. Operating pressure: 4 bar. 6. Should be mounted on wheels for easy portability. 7. Automatic water level maintenance with boiler feed pump and automatic cut off if water level is low
		<p>C. Mixing Vessel 500 Lts Capacity Liquid storage tank with a quality 316 S.S. leak proof, noncorrosive body with</p> <ol style="list-style-type: none"> 1. Shape : Cylindrical 2. Installation : Above ground at a height of 4 feet with ladder facility. 3. Tank capacity : 500L. 4. Orientation : vertical. 5. Agitator-turbine type with fixed blades and fixed rpm. 6. With all necessary ports made of 316 S.S 7. Ports : Two at bottom, one at top
		<p>D. Air Compressor Capacity of 3Hp 3 phase current AC Pressure with starter and 100 L tank. Pressure : 8Kg CFM : 6.6</p>
		<p>E. Automatic Liquid Bottling and packing machinery to fill 250ml to 1000 ml. PP bottles with inner cap bottles Contact parts in stainless steel 304/316 quality, with S.S. Slate</p>

		<p>conveyor. Flame proof, Power 230 volts, 50Hz. Minimum Available heads for filing : 4 With variable bottle holders.250-1000ml capacity Include: Turn table, Filling machine, inner plugging machine, Screw capping, Stickers machine</p>
		<p>F: SS Seed Fermenter 50 Lts. Capacity</p> <p>G. R.O. Water unit from a reputed brand suitable for the production unit.</p> <p>H. Chiller unit as per the requirement</p> <p><u>Terms and conditions:</u></p> <ul style="list-style-type: none"> • Should be on a turnkey basis. • Complete site preparation, installation, production and demonstration of the functional units. • Onsite and offsite training for maintenance and production of biofertilizer to the technicians, <p>CMC for 3 years</p>
74	Autoclave vertical	<p>Capacity 90 - 120 Lit (approx.) Pressure: adjusted from 5 Psi to 20 Psi Can withstand upto 40 Psi Tripled walled with steam jacket and heater Inner material SS304 SS Basket. Digital timer, pressure gauge, safety bulb (Spring loaded) No steam released valve, Water drain cock Low water level cut off High pressure cut-off switch,</p>
75	Horizontal Cylindrical Autoclave	<p>Should be a Triple walled type Horizontal Steam Sterilizer Should be a Direct Steam type Sterilizer Chamber Capacity: Atleast 280 liters should be square type Should be Full Stainless Steel body with inner chamber made of SS 316 (atleast 4mm thick) and outer chamber (Jacket) should be made of SS 304 (4mm thick) Jacket is to be insulated with Mineral Wool and cladded with SS 304 Sheet of 1mm thick Solid Door is to be made of Stainless Steel SS 316 (atleast 12mm thick) Door to be provided with hinges made of SS 304 with Radial locking mechanism for Door closing Door is to be designed in such a way that under no circumstance the Door should open when the chamber is under pressure. Door is to be provided with Single piece Moulded Silicone gasket for long life. Radial Locking mechanism is made of SS 304 Chamber is to be mounted on Tubular Stand made of SS 304 with height adjustable bolts Integrated Steam Generator is to be provided beneath the chamber Steam Generator has to be made of Stainless Steel SS 304 atleast with 6mm thick sheet Water Level indicator for safety both Digitally as well as Gauge Glass indication to be provided, critical level cut off to be provided to safeguard the heaters</p>

		<p>Automatic Water feed with pressure pump, Automatic Water level maintenance using Float sensor should form the part of basic supply</p> <p>Steam generator should be provided with 18KW capacity of ISI mark immersion heaters to comfortably support the autoclave chamber.</p> <p>Automatic pressure relief valve is to be present</p> <p>Automatic Pressure cut off is also to be present</p> <p>Pressure transmitter to be present to indicate the pressure in the chamber digitally</p> <p>Hydro testing of all Jacket, Chamber and Steam Generator to be done at 1.5 times of the operating pressure and necessary test certificates are to be submitted.</p> <p>Pneumatic valves are to be provided for automatic operation</p> <p>Control system: Should have a IP 55 control panel with PLC's, Contactors, 4.3" Color Touch Screen HMI etc for automatic operation.</p> <p>All parameters settings are to be done in the color touch screen HMI.</p> <p>Heavy Duty ISI mark heating coils for faster heating</p> <p>Temperature Control range from ambient to 200° C</p> <p>Control accuracy: $\pm 0.1^{\circ} \text{C}$</p> <p>Operating pressure: 1.2 to 1.5bar</p> <p>Timer facility to be in-built atleast upto 999mins</p> <p>Realtime Trend graph of Temperature vs Time should be visible online in the Touch Screen HMI</p> <p>Datalogging of the parameters used namely Temp, Pressure, Time should be logged and the same should be exportable to PC for printing / editing.</p> <p>Should work in normal Indian voltage of 415v,50Hz Three Phase AC Supply</p> <p>Necessary circuit breakers, fuses are all to be incorporated in the system.</p> <p>SS Carriage for loading the materials with MS trolley to load the SS carriage are also to be offered.</p> <p>Additional spares: Heaters - 2nos and Silicone Gasket: 2nos to be supplied along with the machine.</p>
76	Double Deck Orbital Shaker	<p>Should be a Floor Standing type orbital Shaker with Double Deck platform</p> <p>The Equipment should have a Triple eccentric counter balanced Drive mechanism for Soft Start and Stop operation</p> <p>Drive Mechanism is to be of fully casted one piece mechanism and not to be made of Mild Steel sheets.</p> <p>Should use a Maintenance Free AC Induction motor preferably of a branded company</p> <p>Motor is to be capable of taking up the load of the Double Deck Platform</p> <p>Equipment exterior is to be made of Mild Steel neatly epoxy powder coated</p> <p>Should have Variable Speed Control with Digital Display</p> <p>Speed control range: 20 to 180rpm Accuracy: $\pm 1\text{rpm}$</p> <p>Speed control is to be done using a Variable Frequency Drive preferably of Toshiba / Delta make for better control accuracy</p> <p>Equipment should be function both in Timed or continuous operation</p>

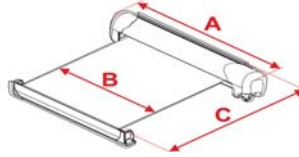
		<p>Selector switch to be provided to choose either timed or continuous</p> <p>Timed Mode: Digital Timer should be present, timer facility atleast to 999mins</p> <p>Digital Display for timer to be present.</p> <p>Universal Platform of Size 3 feet x 3feet (900 x 900mm) – 2nos is to be provided</p> <p>Platform is supposed to suit all types of conical flask clamps starting from 100ml to 5liters</p> <p>Maximum loading capacity of each platform should be 32nos of 1L / 6nos of 5L conical flask.</p> <p>Equipment should be supplied along with 64nos of 1Liter conical flask lotus clamps made of SS with Springs (32no for each platform)</p> <p>Should work in 220V,50Hz Single phase AC Supply</p>
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**29.B TECHNICAL SPECIFICATION OF FARM EQUIPMENTS/ IMPLEMENTS
(GROUP-B)**

SL No	Name of the Equipment	Technical Specification in detail
1	Mobile vehicle unit	<p>Engine Type DDiS Diesel Engine Displacement 1200-1500 cc No of Cylinders 4-6 No of gears 5 Mileage 20-30 kmpl Ground Clearance 150 -200 mm approx. No of Doors 4 Seating Capacity Maximum-5 Tyre Type Tubeless Power Steering Yes (Mobile Unit to carry Kit bags along with experts to field)</p>
2	Mobile Veterinary Ambulatory Bus (MVAB)	<p>The net interior dimensions of MVAB body (excluding the driver cabin): Approximately 7500 mm x 2000mm x 2000mm. (LxBxH) Power: 100 hp (Approx.)</p> <p>Norm: BS IV with CMVR compliance Power steering, the side extension of the medical compartment should permit viewing through the rear view mirrors, foot rest support during awning.</p> <p>Laboratory Compartment Inter-frame Work should be made of minimum 4mm thick steel complying with ST 52 or equivalent Grade rolled / folded cross member and long member channels. The Body should be made from GRP sandwich construction of minimum 45mm. The floor should have additional layers of marine grade ply. All the body panels should have the required reinforcements to accommodate the necessary fitments, devices and accessories, The inner space of the vehicle should be divided into two compartments one for accommodating 24 seats and the other as a medical area with an internal access door.</p> <p>Entrance / Access Door: The LH doors should permit access one each for the medical and sitting area. The RH door should provide access to medical area. The door hinges should be completely concealed in construction so that when the door is closed it is not possible to open the door should be locked at its fully open position. The lock must have two locking points (dual lock system for passenger vehicle use) at both the ends vertically (top and bottom) operated / actuated by the one handle.</p> <p>Emergency equipment-Fire Extinguisher</p>

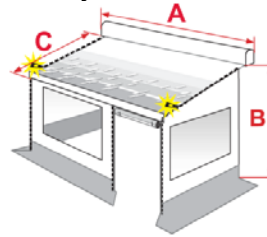
	<p>The MVAB equipped with three fire extinguishers of 2 Kg capacity each. The fire extinguisher with ISI certification 1 generator of 20 KW for indoor and outdoor power supply.</p> <p>Window The MVAB should have two CMVR / AIS certified windows with sliding glasses.</p> <p>Interior Storage Compartments & Furniture Storage compartments should be furnished to accommodate essential equipment / accessories / consumables, as required in the van. All cabinet shall be firmly anchored to the base structure of the MVAB.</p> <p>Wash Basin The internal furniture layout must include a washbasin made up of SS / ABS material. The water tap of the washbasin should be operated with a 12V DC foot switch The capacity of the water tank should be at least 100 L.</p> <p>AC System The MVAB must be provided with transport grade split air conditioning system of minimum 6.5KW each with matching condenser capacity. There should be a separate air conditioning system for the laboratory area. This system should operate with the generator (20 KW) provided with the MVAB with cooling capacity of minimum 6.5KW with matching compressor and condenser.</p> <p>Power Supply & Management Solution The system must include an adequate battery backup with inverter ensuring at least 30 minutes of power back up for essential devices including the refrigerator but excluding the air conditioning system in case of no generator power output. There should be a minimum IP65 rated external charging socket for connecting the van to an external power grid / source.</p> <p>Staircase: All the entrance doors should be provided with foldable / retractable stair case. The staircase must have locks to keep it in folded condition when not in use and fully protected from any accidental opening when the MVAB is in motion.</p> <p>Electrical Distribution Points & Lighting There shall be adequate number of power sockets and lighting elements. There should be two each 12V DC operated minimum 6” wall mounted fans in the laboratory and sitting area. The driver cabin should be supplied with a FM Radio and CD Player with four speakers each in driver area and laboratory area.</p> <p>Awning</p>
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The MVAB shall have two sturdy, 12V DC motorized transport grade and retractable awning with extra strong lightweight structure.
Fabric shall be Vinyl UV resistant waterproof and washable.



Tent

MVAB shall have a sturdy and dismantable tent.



Oxygen System

Medical / Veterinary Equipment, V top OT table

Operating Light source for tent area and indoor OT area

Microwave Oven

Microscope: To be provided free of cost

Provision of space for Portable Ultrasound

Provision of space for Mobile X-Ray unit

Boiling water type open sterilizer - 1 No.

General Equipment

Refrigerator of minimum 100L capacity minimum zero degree C cooling.

LCD TV, 32” - 2 Nos. in Sitting and outside area

CCTV System with recorder for RH side tent area& Medical

Compartment, GPS Tracking System

Technical specification

Emission Norms	BS-IV
Engine Cylinders	4
Max Power	100-150 bhp
Transmission	Manual
Gearbox	6-Speed
Fuel Tank (Litres)	150-200 approx.
Turning Radius (mm)	10500-11500
Wheel Base (mm)	4900
Chassis Type	Chassis with Driver cabin
Engine Location	Front
Axle Configuration	4x2
Steering	Power steering with adjustable driver seat
Front Suspension	Semi Elliptical Leaf

		<p>Springs Suspension.</p> <p>Parking brake Yes</p> <p>Power steering Yes</p> <p>Fog lights Yes</p> <p>Special Conditions</p> <p>This should abide the rules promulgated by the Govt. of India regarding ambulance services</p> <p>Supplier have to delivery fully furnished vehicle incorporated with aforementioned seats, equipment, instruments and other accessories along with valid registration, insurance for on-road duty.</p>
3	Bullock operated rotary system	<p>Gear ratio: 1:30 with gear box</p> <p>Including all accessories with standard main shaft (20 feet long minimum x 2 inch dia mild steel), counter shaft with all attachments and fittings, installation cost, transportation FOR Baripada (Mayurbhanj) and R.Udayagiri, (Gajapati) (Bidders may visit existing rotary gear complex at CAET, Bhubaneswar campus)</p>
4	Whole straw combine harvester	<p>Type: Self Propelled, Track type</p> <p>Straw discharge: Whole straw</p> <p>Operating width: Minimum 1.2 m</p>
5	Happy Seeder	<p>Hitch type: Three-point linkage of tractor</p> <p>Working width of machine : 2.0-2.5 m</p> <p>Row to row distance : 225 mm & adjustable</p> <p>No. of rows : 9</p> <p>Type of Furrow openers : Inverted 'T' type</p> <p>Types of flail blades : Reversible straight gamma type</p> <p>Flails length from rotor surface : 240-250 mm</p> <p>Flail Blade length : 165 mm</p> <p>Bottom width of flail blade : 85-100 mm</p> <p>Top width of blade : 50 mm</p> <p>Blade overlap with furrow openers : 60 mm</p> <p>Horizontal clearance between edges of blades : 75 mm</p> <p>No. of Depth wheels : Two nos. with adjustable depths</p> <p>Minimum Diameter of Ground Wheel : 550 mm</p> <p>Hopper: Separate for Fertilizer and Seeds with mechanism for feed rate control.</p> <p>Seed metering: Fluted roller (As per IS 6813:2000)</p> <p>Seed and metering tubes: transparent plastic.</p> <p>With one extra attachment of seed box (detachable) with set of inclined plates for paddy and maize</p>
6	Two stage rice mill	<p>Capacity: 500 to 700kg/h, one set of rubber rollers, polisher (abrasive/impact/shearing), with husk and bran separation system.</p> <p>Power: 10-15 hp, 3 Phase</p>
7	Brush cutter	<p>a) Engine: 4-stroke, single cylinder, petrol run, power: 1.1 kW to 1.3 kW with rope head attachment and extra two teeth steel blade attachment with all</p>

		<p>accessories.</p> <p>b) Engine: 2-stroke, single cylinder, petrol run, power: 1.9 hp with rope head attachment and extra two teeth steel blade attachment with all accessories.</p>
8	Power Tiller	12-13 hp with cage wheel, tail skid, hitch bracket for trolley and one extra set of hatchet blades
9- a	Tractor	42 hp, Power steering, dual clutch with cage wheel, hitch bracket and hood
9- b	Tractor	55 hp ,dual clutch, power steering with cage wheel, hitch bracket and hood
10	Hydraulic Tractor trailer	Tractor drawn, 4 ton capacity with spring leaf suspension, 9” x 16” tyre
11- a	Rotavator	Size: 4 ft., Multi speed gear type with L-type blade, suitable for 540 & 1000 PTO RPM with cardan shaft.
11- b	Rotavator	Size: 6 ft., Multi speed gear type with L-type blade, suitable for 540 & 1000 PTO RPM with cardan shaft.
12	Zero-till drill	Tractor mounted, Adjustable spacing <ul style="list-style-type: none"> a) 9 row b) 11 row
13	Seed-cum fertilizer drill	9-row, tractor mounted, adjustable row spacing, Cup type metering (set of cups for different crops)
14- a	Mini Oil Expeller	Capacity 70-80 kg oil seed per hour 6 Bolt, heavy duty oil bath system Filter press 16” X 16” 12 plates with suitable boiler and steam kettle with 10 hp motor and miscellaneous electrical items Filter cloth Channel foundation frame and fittings
14- b	Mini Oil Expeller	Capacity 30-35 kg oil seed per hour 4Bolt, heavy duty oil bath system Filter press 12” X 12”, 12 plates with suitable boiler and steam kettle with suitable 5 hp motor and miscellaneous electrical items, Filter cloth, Channel foundation frame and fittings
15	Submersible Solar pump	Power: 1.0 hp DC, discharge: 3000 l/h, Max. head: 60 m, with compatible charge controller, solar modules and all

		accessories.
16	MB plough	a) 2-bottom , tractor mounted b) 3-bottom, tractor mounted
17	Tractor mounted paddy reaper	Tractor front mounted, suitable for operation with 35 hp tractor
18	Axial flow paddy thresher	Tractor operated, Capacity: 10-25 q/hr with cardan shaft with safety covers over moving parts, Feeding chutes should confirm BIS specifications
19	Rice trans planter (Riding type, 8 rows)	Power: 2.5 - 3.0 kW diesel engine, Self-propelled riding type, 8 rows, adjustable hill spacing, row-to-row spacing: 23.8 cm with all accessories.
20	Rice transplanter (walk behind type, 4 rows)	4 - 5 hp, 4-stroke petrol engine, adjustable hill spacing, row-to-row spacing: 30 cm with all accessories.
21	Power reaper	3-4 hp, petrol start, diesel/kerosene run, walk behind type, operating width : 1.2 m
22	Power sprayer	Power 1.0-1.5 hp, two-stroke petrol engine, Knapsack type Mist blower cum duster
23	Multi crop thresher	Suitable for operation by 35 hp tractor, for green gram/ black gram, groundnut etc., with all attachments with safety covers over moving parts, Feeding chutes should confirm BIS specifications.
24	Seed processing unit for pulses (a) with gravity separator (b) without gravity separator	Capacity 500-700 kg/hr. Consists of three screen seed grader, total screening area not less than 1.5 m ² , variable screen deck, fixed/ variable screen inclination, No. of aspirations: Two, Single phase Operating on 230V, single Ph., 50 hz., A.C. Supply: blower not less than 1.5 hp, sieve deck and feed 0.5 hp, all moving parts are to be covered with safety guard. Cyclone Dust Collector with feeding elevator with motor, starter and switch, Gravity separator: made up of compact & sturdy steel channel frame with high quality wooden/ aluminum rectangular deck with dynamically balanced fans (at least 2 Nos.) with individual adjustable air control, variable oscillation, lengthwise & sidewise inclination of deck, regulated feeding, built in air filters with 3 hp electrical drive with good quality motor, starter with elevator to feed

		<p>gravity separator complete with motor starter and switch, service platform ladder, one length of spouting and complete with all standard features</p> <p>Electrical control panel equipped with main on/off switch, voltmeter, change over switch, ammeter, phase indicators, emergency switches motor, contactors with protective relays and fuses etc</p> <p>Additional screen sets at least 5 sets for different pulses</p> <p>Complete with transportation, installation and commissioning in different research stations, KVKs of the University.</p> <p>The cost of the complete system without the Gravity separator (along with its accessories) also be mentioned separately in case the indenter would avoid gravity separator.</p>
25	<p>Mobile Seed processing Unit for pulses (Capacity: 250-300 kg/hr)</p> <p>(a) with gravity separator</p> <p>(b) without gravity separator</p>	<p>Capacity: 250-300 kg/hr. consists of two/ three screen seed grader, total screening area not less than 0.70 m², variable screen deck, fixed/ variable screen inclination, No. of aspirations: one,</p> <p>Operating on 230V, single Ph., 50 hz., A.C. Supply complete with electric motors electrical drives: all moving parts are covered with safety guard. Cyclone Dust Collector with feeding elevator with motor, starter and switch.</p> <p>Gravity separator: made up of compact & sturdy steel channel frame with high quality wooden/ aluminum rectangular deck mounted on metalon bushings dynamically balanced fans (at least 2 Nos.) with individual adjustable air control, variable oscillation, lengthwise & sidewise inclination of deck, regulated feeding, built in air filters with 3 hp electrical drive with good quality motor, starter with elevator to feed gravity separator complete with motor starter and switch, service platform ladder, one length of spouting and complete with all standard features</p> <p>Electrical control panel equipped with main on/off switch, voltmeter, change over switch, ammeter, phase indicators, emergency switches motor, contactors with protective relays and fuses etc</p> <p>Additional screen sets at least 5 sets for different pulses</p> <p>Complete with transportation, installation and commissioning in different research stations, KVKs of the</p>

		<p>University</p> <p>Mobile trolley (all the above shall be installed on a trailer complete with piping, ducting etc. Necessary to achieve an efficient flow of material through the plant. Trailer of all steel construction with off-road capability for towing by tractor) Fitted with product discharge and reject discharge spouts and bag holding clamps.</p> <p>With Silent Genset 10 kVA for operating the complete above all machines as a mobile seed processing plant Complete with transportation, installation and commissioning in different research stations, KVKs of the University</p> <p>The cost of the complete system without the Gravity separator (along with suitable genset & its accessories) also be mentioned separately in case the indenter would avoid gravity separator.</p>
26	Seed processing Unit (Capacity: 1–1.25 ton per hour)	<p>Capacity: 1-1.25 ton/hour pulses comprising of three screen grader</p> <p>No. of Screens: Three (Flat, oscillating type with one screen for scalping and two for grading with interchangeable screens sections)</p> <p>Total screening area of less than 4 m², variable screen deck, fixed/ variable screen inclination,</p> <p>No. of aspirations : Two</p> <p>Operating on 440V, 3 phase, 50 c/s, A.C. supply</p> <p>Electrical drives: blower at least 4 hp, Cradle at least 1 hp, rejects at least 0.5 hp, all moving parts are covered with safety guard.</p> <p>Cyclone Dust Collector with suitable feeding device</p> <p>Gravity separator: Approximately 2400-2450 mm L X 1400-1450 mm W X 2000-2200 mm H; made up of compact & sturdy steel channel frame with high quality wooden/ aluminum rectangular deck with dynamically balanced fans (3 Nos.) with individual adjustable air control, variable oscillation, lengthwise & sidewise inclination of deck, regulated feeding, built in air filter with a least 4 hp electrical drive for fans and 1 hp for deck, with good quality motor, stator operating on 3 phase 50 Hz supply with elevator to feed gravity separator complete with motor starter and switch, service platform ladder, one length of spouting and complete with all standard features.</p> <p>Electrical control panel equipped with main on/ off switch, voltmeter, change over switch, ammeter, phase indicator, emergency switches motor, contractors with protective relays and fuses etc</p>

		Additional screen sets at least five sets for different pulses.
27	Seed dryer	a) Capacity: 100 kg/batch b) Capacity: 200 kg/batch With electrical heating system, tray type operated with single phase/ 3 phase power supply complete with motor control panel, digital temperature recorder-controller and safety features
28	Pulse thresher	(a) Tractor operated, capacity: 2 - 4 q/hr (green gram & black gram), with safety covers over moving parts, Feeding chutes should confirm BIS specifications (b) Electric motor operated(single phase), capacity : 1-1.5 q /h
29	Cleaner cum grader	Capacity: 250kg/hr Fitted with 2 nos. sieves and aspiration system Power requirement: 1 hp, single phase electric motor Suitable for food grains like, paddy, wheat, black gram, green gram etc.
30	Destoner	Capacity-300-400 kg/hour, fitted with suitable single phase electric motor, starter and all accessories, 1 hp
31	Multi crop planter	Tractor drawn, 9-row, metering mechanism: inclined plate type for seed with set of inclined plates for different seeds and fluted roller type for fertilizer, adjustable row spacing.
32	Tractor operated groundnut thresher	Capacity: 500 kg/h Tractor PTO operated, with safety covers over moving parts, Feeding chutes should confirm BIS specifications
33	Power paddy weeder (wet land)	Power source: 1.50 – 2.50 hp, petrol engine, two rows, suitable for row spacing of 25 cm
34	Power weeder (dry land)	Power source: 2-3 hp, petrol engine, 30-45 cm width of cut (adjustable), fitted with hatchet type blades , 4 strokes
35	Power operated Post hole digger	Power-3-5 hp Petrol / Diesel engine operated, Augur dia : 8 inch (20 cm)
36	Sprinkler set	63mm dia delivery pipe for 1 hectare (41 nos pipes, 9 risers) with pump set (3.5 – 4 hp diesel/kerosene run) with all attachments.

37	Laser land leveller	Tractor operated, With laser transmitter, laser receiver, control box, hydraulic system, bucket and all attachments
38	Rotary tiller/Mini tiller	Power source: 5-6 hp petrol/diesel engine, Width: 45 to 60 cm (18 to 36 inch)
39	Roto till Drill	Tractor operated rotary unit with 9 rows sowing attachments, fitted with all attachments
40	Raised Bed planter	Tractor mounted planter fitted with fluted roller/inclined plate seed metering mechanism, bed width adjustable, Nos of beds 2 and 3
41	Mini Combine Harvester	Power source: 13 - 15 hp diesel engine, self-propelled, walk behind type, track type
42	Power operated Chaff cutter	Power: single phase electric motor Capacity: 100-150 kg/h with safety covers over moving parts, Feeding chutes and blade locking arrangement should confirm BIS specifications
43	Solar Fruit & Vegetable Dryer	Capacity: 100 kg, tray type, temperature controller (40, 50, 60 °C), exhaust blowers, regulator with all attachments
44	Solar Pump	Discharge: 3000 l/h, Total head: 20-60 m, 1.00 hp DC pump with controller, solar modules and all attachments.
45	Solar cool chamber 2 and 5 tons 24 hour backup Intelligent control	Capacity: 2.0 and 5.0 tons, temperature control: 4-10 °C, humidity control: 80-95 % with all attachments, portable, 24 to 30 hours back up. remote monitoring, with grid and DG set hybrid, solar module and all attachments, No battery for refrigeration,
46	Mini Dal Mill	Capacity 75-125 kg/hr, suitable for Gram, Pigeon pea, Urd bean, Mung bean, Pea, Lathyrus 2.0 hp Single phase electric motor Dal recovery%: 77 – 82 Milling unit type: Rubber steel disc Feeding: Auger type Clearance: Adjustable Material: Mild steel Complete with Emery rotter for pitting aspiration and grading facility Sieves for different pulses
47	Self propelled reaper binder	Minimum 1.2 m operating width, diesel engine operated, riding type with extra pulse harvesting attachment.

29.C GROUP-C: Annual Rate Contract For Supply of Laboratory Chemicals & Fine chemicals /biochemicals and kits, Laboratory Glass wares, Plastic wares and Filter aids

The Orissa University of Agriculture and Technology, Bhubaneswar-751003, engaged in teaching, research and extension activities, is intending to enter into Annual Rate Contract for supply of substantial quantity of Laboratory Chemicals & Fine chemicals / bio-chemicals and kits, Laboratory Glass wares, Plastic wares & Filter paper/ aids etc. for use in different colleges/Departments/Laboratories/Research projects located at Bhubaneswar and different offices of the University throughout the state. Accordingly, the undersigned is authorized to finalize the rate contract for the above items for one year from the date of finalization of rate contract or till the next rate contract is finalized whichever is earlier.

Only the manufacturers/ Indian marketing agents of the required items that can execute the purchase order at Bhubaneswar/different locations of the state under the University are eligible to enter into rate contract with the University. The eligible firms are required to furnish the following documents/information in a sealed envelope, on or before 16/12/2017 by 5 PM and the bids shall be opened on 21/12/2017 at 11 AM. The other terms and conditions are as below.

- a) The detailed printed price list books (Hard copy in original) of all types of chemicals (LR/GR/AR/ER/MB/A.C.S./ U.S.P. grade including HPLC, AAS solvents, media and bio-chemicals/ kits), Glassware/ plasticware (complete Laboratory range), lab wares and filter papers (of high quality), declaration towards possessions of certificate of analysis (only for chemicals), copy for certificate towards materials safety data sheet (MSDs only for chemicals) must be supplied along with the bid.
- b) Document regarding registration /Certificate of incorporation of the firm issued by the appropriate agency must be supplied with the bid.
- c) The attested copies Certificates of registration for GST issued by appropriate agency for the required services with the seal of the tenderer must be supplied with the bid.
- d) Letter of authorized dealership/supplier from the Principal/Manufacturer. The manufacturer/firm/ Indian marketing agents shall furnish the names and address of their local stockist/dealer, who can execute the purchase order and make expeditious supply. Clear indication is also required to be appended whether such local agency can raise the bill by them. The role of the Dealer/Stockist to be specified. Orders can be placed with the local dealer having GST registration/ IT clearance up-to-date and valid PAN Card.
- e) The firm should submit Income Tax returns of previous 3 financial years i.e., 2014-15, 2015-16 and 2016-17
- f) Self certification to the effect that the supplier/firm has not been blacklisted by any Govt./ Pvt./ Autonomous organization. If no certificate is submitted, it will be assumed that the firm has been blacklisted and will be rejected at the bid evaluation stage.
- g) Quantum of discount to be provided under rate contract for the whole year
- h) The prices are to be quoted on FOR basis and should be door delivered. Materials should be door delivered at different colleges/departments/laboratories/research projects located at Bhubaneswar and different offices/units of University throughout the state.
- i) The details of taxes and duties, if any, are to be specified clearly.

- j) The price lists must be accompanied with printed catalogue/leaflets and the term and conditions of the rate contract.
- k) The rate contract shall be valid for a period of one year or till next rate contract is finalized, whichever is earlier.**
- l) Under no circumstances, the prices charged under rate contract should exceed the lowest price of which the party sells the items of identical, description to any other persons or organization during the period of contract. If the firm found to have supplied such items at lower rates to any other buyer then, the difference shall be recovered.
- m) There will be no change in price structure during the period of contract except, if the statutory levels, taxes are otherwise made applicable, by the Government through Notification/regulation.
- n) Delivery must be made within stipulated period from the issue of the order either directly or through their dealer network unless otherwise specified.
- o) If the supplier fails to deliver the stores within the allotted delivery period as specified above, the purchaser may procure goods or services similar to those undelivered upon such terms and in such manner as it deems appropriate, from any other firm and the supplier will be liable to the purchaser for any excess cost.
- p) Firms not providing with complete information/document shall not be considered for rate contract.
- q) Submission of required document/information after the due date will not be accepted.
- r) The Orissa University of Agriculture and Technology reserves the right to enter into parallel rate contract for similar items at any time during the period of rate contract with one or more parties.
- s) The rate contract can be terminated at any time by giving one month notice by OUAT.
- t) The items to be supplied will have to be of high quality and grade and in the event the supplied materials are found to be of inferior quality, the supplier is liable to be blacklisted.
- u) The firms must ensure the compliance of all the above mentioned terms and conditions and attach the requisite certificates/documents/declaration asked for the rate contract failing which the rate contract offer will be liable to be rejected as non-responsive.
- v) The acceptance of the rate contract will rest with the undersigned and reserves the right to reject/accept partially or wholly the rate offers received, without assigning any reason.
- w) The supplies must be confirming to the specification of our supply order. If the same is found defective the same must be replaced immediately free of charge
- x) The bill should be presented in triplicate.
- y) The empanelment can be terminated without any notice in case the performance of the party is found consistently unsatisfactory or due to the serious lapse on the part of the

bidder. Where lapses are of serious nature, in addition to termination of OUAT will forfeit their EMD.

Documents/ Certificates to be submitted with the Bid

The following documents must be submitted with the bid. Non-submission of the documents will lead to rejection of the bid and no communication will be entertained in this regard.

1. Scanned copy of EMD deposited, If exemption claimed ,the scanned copy of NSIC/SSI certificates registered with NSIC (if applicable) or START UP certificate must be submitted.
2. Document regarding registration /Certificate of incorporation of the firm issued by the appropriate government department.
3. Certificates of registration for GST issued by appropriate Government department for the required services with the seal of the tenderer.
4. The firm should submit Income Tax returns of previous 3 financial years i.e., 2014-15, 2015-16 and 2016-17
5. Letter of authorized dealership/supplier from the Principal/Manufacturer/ Indian agent.
6. Self certification to the effect that the supplier/firm has not been blacklisted by any Govt./ Pvt./ Autonomous organization. If no certificate is submitted, it will be assumed that the firm has been blacklisted and will be rejected at the bid evaluation stage.
7. Photocopy and signed copy of the PAN Card.
8. Quality certificate issued by the appropriate agency
9. Price list in soft and hard copy.
10. An undertaking stating for adhering the price list: Price list once submitted will not be changed during the period of Rate Contract
11. A certificate is also to be given by the firm that the current effective price list supplied is the only one in circulation and is same for all departments/Dealers/franchises throughout India.
12. Undertaking on discount: Discount, if any on the ruling prices (price list 2017-18 or the latest available) must be mentioned clearly with trade discount certifying that higher discount is not given to any other Department as offered.

Right To Accept/Rejection of Tenders:

The right of acceptance of tender 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.

Jurisdiction of High Court of Orissa:

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 Orissa extends.

29.D Group D: Computer with accessories, ICT materials

SL No	Name of the Equipment	Technical Specification in detail
1-a	Desktop	<p>Processor: 7th Gen. Intel Core i5-7500 6 MB Cache 3.4-3.8 GHz 65 W</p> <p>Memory: 1 x 8 GB DDR4-2133/2400 SDRAM with two Memory Channels</p> <p>Graphics: Intel HD Graphics 630</p> <p>Graphics: 2GB(Additional)</p> <p>OS: Factory pre-loaded Windows 10 pro 64 bit</p> <p>Monitor: 23.8" LED-Backlit Display with Wide Viewing Angle (IPS).</p> <p>HDD: 1 TB 7200 rpm Hard Drive</p> <p>Optical Drive: Tray load DVD Drive (Reads and Writes to DVD/CD)</p> <p>Ports: 4 x USB 3.0, 4:1 MCR, (1) Microphone/ Headset jack; 2 x USB 2.0, RJ-45, Audio Line Out, DC Power Wired integrated 10/100/1000 Gigabit Ethernet LAN</p> <p>Cabinet: Mini-Tower/Tower - Tools less Chassis Cabinet</p> <p>Sound Card: Integrated Audio Feature</p> <p>Wireless: 802.11ac + Bluetooth 4.0, Intel Dual Band Wireless</p> <p>Keyboard: 104-key USB Keyboard - US International (QWERTY)-Black</p> <p>Mouse: USB Interface mouse</p> <p>Accessories: All required cables, connectors, drivers/software for motherboard & add-on cards etc.</p> <p>Warranty & Service: 3 years comprehensive onsite warranty</p>
1-b		<p>Processor: Latest Generation Vpro enable Intel core i7, 6700 processor 8 MB Cache with minimum base clock speed of 3.4 GHz or higher.</p> <p>OS: Microsoft Windows 10 Professional 64 Bit. The Quoted model Hardware Drivers must be available in OEM website for easy download. Latest Service Pack Preloaded License, OEM Media in form of DVD/CD containing OS and drivers, OS Recovery Media must be provided.</p> <p>Chipset: Intel® “Q”series or Higher</p> <p>System memory: std/max 4 GB RAM/ Max Up to 32GB of DDR 4 2133 Mhz.</p> <p>Mother Board : Motherboard make from the same Desktop OEM (OEM Logo sticker in the motherboard will not accepted)</p>

		<p>Hard drive: Min.1 TB Serial ATA 7200 rpm Optical drive: InternalDVD RW Expansion bays : Minimum 4 expansion Bays Graphics: Intel® HD graphics 530 or better Monitor: Minimum20” LED Monitor (Minimum resolution 1920 x 1080 with tco certified same OEM make/brand as system) Audio: High-definition intregreated audio with internal speaker Networking: Integrated Gigabit Ethernet withWake-on-LAN and IPV6ready. I/O ports:4Six External USB 3.0 ports and FourExternal USB 2.0 ports; 1 RJ-45; 1 Serial; 1 VGA/HDMI; 2 DisplayPort; 2 PS/2; 2 Line-in (stereo/microphone) or Universal Audio Jack, oneLine-out (headphone/speaker) I/O expansion: 2 PICe x16 and 1 PCI and 1 PCIe X1 Key board & Mouse: USB key board with optical Scroll mouse.(Same OEM make/brand as system) Form Factor: Mini Tower Security features : security lock option to lock both PC and Monitor. Trusted Platform Module (TPM) 1.2 or Higher with 4KB on chipset, Chassis with Chassis Intrusion Switch. Product Certification :For OEM: ISO 9001 and 14001.For quoted model : UL,FCC ,EPEAT registration in INDIA & ENERGY STAR 6.0 Power supply: Minimum 240 W (92% energy efficient power supply with Energy star 6.0 compliant) 80 plus platinum rating. Graphics: 2GB (Additional) Warranty & Service: 3 years comprehensive onsite warranty</p>
02	Workstation	<p>Processor: 2 x Intel® Xeon® E5-2650V4 (12 core, 2.2 GHz, 30MB L3, 105W) or higher Memory: 64 GB 2133 DDR4 RAM using 16 GB DDR4 modules. Hard drive: 4 x 1 TB SATA (7200 rpm) HDD or higher. RAID Controller: SATA Controller with RAID supports 0 & 1 Operating System: Windows-10 Pro or higher. Graphics: NVIDIA Quadro M5000 or better PCI Slots: 1 x PCIe Gen3 x 4, 2 x PCIe Gen3 x 8, 2 x PCIe Gen3 x 16, Monitor: 24-inch IPS LED Backlit Monitor, Native Resolution of 1920 x 1200 or above (same OEM) LAN: 1 x Gigabit Ethernet 10/100/1000, 1 x 10GbE SFP + Interface along with SFP+ Module DVD drive: R/RW</p>

		<p>USB: USB 2.0/3.0 4 or more ports</p> <p>Key board: USB Keyboard</p> <p>Mouse: USB Optical mouse</p> <p>Accessories: All required cables, connectors, drivers/ software for motherboard & add-on cards etc.</p> <p>Warranty & Service: 3 years comprehensive onsite warranty</p>
03	Laptop with carry case	<p>Processor: 7th Generation Intel® Core™ i5 Processor (3 MB Cache, up to 3.1 GHz)</p> <p>RAM: 8 GB Single Channel DDR4</p> <p>Hard drive: 1 TB SATA (7200 rpm) HDD</p> <p>Operating System: Windows 10 pro and Linux 64 bit</p> <p>Hardware drivers: Must be available in OEM website for easy download. Latest Service Pack preloaded License, OEM media in form of DVD containing OS and drivers and OS Recovery Media must be provided</p> <p>Display: 15.6-inch FHD (1920 x 1080) IPS True life LED-Backlit Display</p> <p>Graphics: NVIDIA® GeForce® 940MX with 4GB GDDR5 graphics memory</p> <p>Camera: Standard Widescreen HD (720p) with Digital Microphone</p> <p>Ports: One HDMITM 1.4a, One USB 3.0, One USB 3.0 with Power Share, One USB 2.0, One Noble lock slot, One SD card (SD, SDHC, SDXC)</p> <p>Accessories: All required cables, connectors, A/C Adapter, drivers/ software etc.</p> <p>WARRANTY & SERVICE: 3 years comprehensive onsite warranty</p>
04	Community Computer All in One Device	<p>Intel core i3 processor 6th Generation, 4GB RAM, 1 TB Hard Disc, wireless key board mouse, Universal Wi-Fi Remote with mouse & microphone, inbuilt 30 watt speaker with audio system, interactive, auxillary audio & video code, inbuilt wi-fi, DVD writer, Ethernet port, TV tuner card, six USB port, short through projector, projector lamp 5000 hr, Windows 10 Pro O/S Original license, Open office, 3 years comprehensive onsite warranty</p>
04-a	Desk top-All in one PC (CPU, Monitor, key board, UPS & mouse)	<p>Processor-Intel i7,6200 processor 8MB, Speed 3.8Ghz or higher</p> <p>OS-Window 10,professional 64bit</p> <p>Chipset- Intel Q series or higher</p> <p>RAM -8 GB, DDR 4, 2133 Mhz.</p> <p>Hard drive-Minimum 2 TB, SATA, 7200 RPM</p> <p>Graphics- Intel HD Graphics 530</p>

		<p>Monitor- 19" LED display with camera & sound (1920 x 1080) resolution</p> <p>Keyboard- Full Size, spill resistant, Hit key board, Mouse-Optical universal supply</p> <p>Warranty & Service: 3 years comprehensive onsite warranty</p>
05	A0 size plotter	<p>Printer Type: 5 color Dye/pigment reactive ink printer (Cyan, New Magenta, Yellow, Black, Matt Black-2)</p> <p>Print Resolution: 1200/ 2400 dpi x 1200 dpi (<i>Quote rate separately</i>)</p> <p>OS compatibility: (i) Windows 32 bit – XP/ Vista/ 7/ 8/ 8.1/ 10 Server 2003/2003R2, Server 2008; (ii) Windows 64 bit – Vista/ 7/ 8/ 8.1/ 10 Server 2003/2003R2, Server 2008/2008R2, Server 2012/2012R2; (iii) Mac: OSX 10.6.8 – 10.10.x</p> <p>Printer Language: GARO (Graphic Arts language with Raster Operations), HP-GL/2, HP RTL, Adobe PS III, PDF, PCL 3 Win, JPEG, TIFF etc.</p> <p>Standard build-in interfaces : Hi-Speed USB and Gigabit Ethernet 10 / 100 / 1000 Base-T/TX</p> <p>Printing speed: (i) Plain paper (CAD DRAWINGS) 42 sec (Fast economy mode), 45 sec (Fast mode), 1 min 12 sec in standard mode; (ii) Coated Paper (Poster) Fast Mode 1 min 12 sec, Standard Mode 2 min 19 sec, High Quality Mode, 3 min 37 sec.</p> <p>Standard memory: 16 GB/ 32 GB (<i>Quote rate separately</i>)</p> <p>Hard Disc memory: 320 GB</p> <p>Media Handling: plain paper, coated paper, glossy paper</p> <p>Media width: minimum 42"</p> <p>Media thickness support: 0.07 mm to 0.8 mm thickness paper</p> <p>Minimum Media Role outer diameter: 150 mm</p> <p>Paper feed method support: Roll paper and cut sheet</p> <p>Accuracy: minimum 0.02 mm line width and $\pm 0.1\%$ accuracy</p> <p>Printer should include printer stand</p> <p>Accessories: All required cables, connectors, drivers/ software etc. including 2.0 m long USB2/USB3 and Gigabit Ethernet cables</p> <p>WARRANTY & SERVICE: 3 years comprehensive onsite warranty</p>

06	A0 size scanner	<p>Scan Speed: minimum 1.0 in/sec for color and 3.0 in/sec for grey-scale Optical Resolution: minimum 600 dpi Scan resolution: 1200/ 2400 dpi x 1200 dpi (<i>Quote rate separately</i>) Extended Resolution Linear interpolation: 100 to 9600 dpi in dpi steps Scan Width: minimum 42” Scan length: minimum 100” Media thickness support: Up to 15 mm (0.6 inch) Scan Accuracy: +/-0.1% +/-1 pixel Interface: USB 3.0 data transfer rates up to 85 MB/sec. Optimised USB2 transfer rates up to 35 MB/sec, Gigabit Ethernet network ready. Host Platform: Windows 10 pro 64 bit Power: suitable power supply Accessories: All required cables, connectors, drivers/software etc. including 2.0 m long USB2/USB3 and Gigabit Ethernet cables WARRANTY & SERVICE: 3 years comprehensive onsite warranty</p>
07	A0 size printer with plotter cum scanner	<p>Printer Type: 5 color Dye/pigment reactive ink printer (Cyan, New Magenta, Yellow, Black, Matt Black-2) Media Size supported: A0-A4 Print Resolution: 1200/ 2400 dpi x 1200 dpi/ (<i>Quote rate separately</i>) OS compatibility: (i) Windows 32 bit – XP/ Vista/ 7/ 8/ 8.1/ 10 Server 2003/2003R2, Server 2008; (ii) Windows 64 bit – Vista/ 7/ 8/ 8.1/ 10 Server 2003/2003R2, Server 2008/2008R2, Server 2012/2012R2; (iii) Mac: OSX 10.6.8 – 10.10.x Printer Language: GARO (Graphic Arts language with Raster Operations), HP-GL/2, HP RTL, Adobe PS III, PDF, PCL 3 Win, JPEG, TIFF etc. Standard build-in interfaces : Hi-Speed USB and Ethernet 10 / 100 / 1000 Base-T/TX Printing speed: (i) Plain paper (CAD DRAWINGS) 42 sec (Fast economy mode), 45 sec (Fast mode), 1 min 12 sec in standard mode; (ii) Coated Paper (Poster) Fast Mode 1 min 12 sec, Standard Mode 2 min 19 sec, High Quality Mode, 3 min 37 sec. Standard memory: 16 GB/ 32 GB (<i>Quote rate separately</i>) Hard Disc memory: 320 GB Media Handling: plain paper, coated paper, glossy paper</p>

		<p>Media width: minimum 42”</p> <p>Media thickness support: 0.07 mm to 0.8 mm thickness paper</p> <p>Minimum Media Role outer diameter: 150 mm</p> <p>Paper feed method support: Roll paper and cut sheet</p> <p>Accuracy: minimum 0.02 mm line width and $\pm 0.1\%$ accuracy</p> <p>Printer should include printer stand</p> <p>Scan Speed: minimum 1.0 in/sec for color and 3.0 in/sec for grey-scale</p> <p>Optical Resolution: minimum 600 dpi</p> <p>Scan resolution: 1200/ 2400 dpi x 1200 dpi (<i>Quote rate separately</i>)</p> <p>Extended Resolution Linear interpolation: 100 to 9600 dpi in dpi steps</p> <p>Scan Width: minimum 42”</p> <p>Scan length: minimum 100”</p> <p>Media thickness support: Up to 15 mm (0.6 inch)</p> <p>Scan Accuracy: $\pm 0.1\%$ ± 1 pixel</p> <p>Interface: USB 3.0 data transfer rates up to 85 MB/sec. Optimised USB2 transfer rates up to 35 MB/sec.</p> <p>Communication: Gigabit Ethernet network ready</p> <p>Host Platform: Windows 10 pro 64 bit</p> <p>Accessories: All required cables, connectors, drivers/ software etc. including 2.0 m long USB2/USB3 and Gigabit Ethernet cables</p> <p>WARRANTY & SERVICE: 3 years comprehensive onsite warranty</p>
08	Laser Printer (Color) (A3)	<p>Print speed: Up to 22 pages of text per minute (PPM) (A3), upto 46 PPM (A4)</p> <p>Duplex print option: Automatic (standard)</p> <p>Technology: Laser</p> <p>Resolution: 1200 x 1200 dpi (approx.)</p> <p>Standard print language: PCL 6 PCL Sc, Post script level 3 emulation</p> <p>Standard connectivity: Two Hi-speed USB 2.0 Host, One Hi-speed USB 2.0 device; One gigabit Ethernet 10/100/1000 network; One Hardware integration Pocket (HIP), Two internet USB Host</p> <p>Network ready: Standard (Built-in Gigabit Ethernet)</p> <p>Memory: 1.5 GB or more</p> <p>Processor speed: 800 MHz or higher</p> <p>Paper handling: Input: 100 sheet main paper tray, 500 sheet input tray, Output: 500 sheet face down bin</p>

		<p>Control panel: LCD with touch screen with all functionality</p> <p>Accessories: All required cables, connectors, drivers/ software etc.</p> <p>WARRANTY & SERVICE: 3 years comprehensive onsite warranty</p>
09	Printer-cum-photocopier machine	<p>GENERAL</p> <p>Continuous output speed: 20 pages per minute</p> <p>Memory: Standard : 256 MB</p> <p>Power source: 220-240V,50/60Hz</p> <p>Category: Duplex</p> <p>PRINTER</p> <p>Printer language: Standard: GDI</p> <p>Resolution: 600dpi</p> <p>Interface: Standard: USB 2.0</p> <p>Option: Ethernet 10 base-T/100 Base-TX(DDST Unit)</p> <p>Network protocol: TCP/IP(IPv4)</p> <p>SCANNER</p> <p>Scanning speed:</p> <p>Colour: Min. 6 originals Per minute</p> <p>B/W: Min. 15 originals per minute</p> <p>Resolution: Min. 600 dpi</p> <p>Bundle drivers: TWAIN,SANE, Network TWAIN (Option)</p> <p>Interface: Standard:USB 2.0</p> <p>Option: Ethernet 10-base-T/100 Base-TX (DDST Unit)</p> <p>File format: TIFF,JPEG,PDF</p> <p>Scan to: Email / Folder</p> <p>COPIER</p> <p>Copying process: Laser beam scanning & electro Photographic printing</p> <p>Multiple copying: Min. 99 copies</p> <p>Resolution: Min. 600dpi</p> <p>Zoom: From 50% to 200%</p> <p>PAPER HANDLING</p> <p>Recommended paper size: Standard paper tray(s):A3,A4,A5</p> <p>Bypass tray: A3,A4,A5,A6</p> <p>Paper input capacity: Standard: 350 sheets</p> <p>Paper output capacity: Standard:250 sheets</p> <p>Paper weight: Standard paper tray(s) 52-105 g/m2</p> <p>Bypass tray:52-216 g/m2</p> <p>Duplex: 64-105 g/m2</p> <p>WARRANTY & SERVICE: 3 years comprehensive onsite warranty</p>
10	Laser printer (Multifunction Black & White)	<p>Mono chrome laser, resolution (600-1200) DPI</p> <p>2 sided printing (Duplex)</p> <p>Paper weight 60 to 163 g/m2</p>

		<p>Paper key A4, B5, A5</p> <p>Warranty & Service: 3 years comprehensive onsite warranty</p>
11	Mono colour laser printer	<p>Processor Speed: Min. 400MHz or more Memory: 64MB or More Interface: High speed USB 2.0 Speed: Up to 20 PPM or better</p> <p>Warranty & Service: 3 years comprehensive onsite warranty</p>
12	Flatbed scanner	<p>Scanner Type: Flatbed Color Image Scanner Optical Sensor: CIS (Contact Image Sensor) Optical Resolution: Min. 4800 dpi</p> <p>Hardware Resolution: Min. 4800 x 4800 dpi Effective Pixels: Min. 40,800 x 56,160 pixels (4800 dpi)</p> <p>Color Bit Depth: 48-bits per pixel internal / 24-bits per pixel external</p> <p>Grayscale Bit Depth: 16-bits per pixel internal / 8-bits per pixel external</p> <p>Maximum Scan Area: Flatbed 8.5” x 11.7” Light Source: Three-color RGB LEDs</p> <p>Scanning Speed: • Color 300 dpi approximately 10 seconds (via USB 2.0) • Color 600 dpi approximately 30 seconds (via USB 2.0)</p> <p>Scanner Interface: Hi-speed USB 2.0</p> <p>Operating Systems supports: Windows10.0/Windows 8/Windows 7 Mac OS X 10.6.x, 10.7.x, 10.8.x, 10.9.x, 10.10.x</p> <p>Power Supply: USB Interface Bus Power (Micro-B connector)</p> <p>Warranty & Service: 3 years comprehensive onsite warranty</p>
13	LCD projector	<p>Colour reproduction: Up to 1.07 billion colours</p> <p>Colour and White light output: 2700 – 1890 lumen</p> <p>Resolution: XGA, 1024 x 768, 4:3</p> <p>Contrast ratio: 10,000:1</p> <p>Technology: 3 LCD</p> <p>Projection ratio: 1.4-1.8:1</p> <p>Zoom: Manual, Factor: 1:2</p> <p>Projection size: 30 – 300 inch</p> <p>Projection distance (wide/Tele): 1.8 m – 2.17 m (60”screen)</p> <p>Offset: 8:1</p> <p>Connectivity: USB display function (3 in 1: Image/ Mouse/ Sound)</p> <p>Accessories: Carry bag, computer cable, main unit, power cable, remote control including batteries, user manual,</p>

		ceiling mount attachment etc. Warranty & Service: 3 years comprehensive onsite warranty
14	Projection Screen (Motorized)	Type: Wall mount Motorized with remote control Size: 8x6 ft (High gain) with wall hanging Warranty & Service: 3 years comprehensive onsite warranty
15	DSLR Camera	Pixel: 24.2 MP DX-format or more Lens: AF-S 18-140 mm VR Kit Lens Resolution: 1920 x 1080 Full HD Video capability: 60 p Auto focus: 39-point auto focus Shooting rate: At least 5 Frames per second (continuous) Other features: GPS enabled, Touch screen, built-in Wi-Fi, Smartphone compatibility, image processor, sensor etc. Accessories: 32GB (Class 10) SD Card + Carry Case Warranty & Service: 3 years comprehensive onsite warranty
16	4K Handicam	4k Ultra HD Optical steady shot provision Built in projector and USB cable 9.3 still image Dual video recording 30X Optical Zoom 35 X digital zoom LCD screen with angle adjustment Video recording AVCHD format 2.0 compatible Built-in zoom microphone Wifi composite video out HDMI terminal Projector input facility Warranty & Service: 3 years comprehensive onsite warranty
17	Ink CPI-10	Gestetner Machine 6123CP
18	Master Roll for Ricoh Gestetner copy printer	Gestetner Machine 6123CP
19	0.6 KVA off line UPS	Capacity (VA/W) 600/360 Input Voltage-160-290VAC, single phase Frequency 50/60Hz (auto sensing) Frequency Range (50Hz/60Hz) 45 – 55Hz ±1Hz / 55 – 65Hz ±1Hz Output Voltage (Utility Power Normal) 220VAC/ 230VAC/ 240VAC, single phase Output Voltage (Battery Operation) + / -10% On-Battery Wave Form Stepped sine wave Output Frequency Battery Mode 50Hz (60Hz) ±1Hz Battery Type – VDC x Ah x Quantity 12V x 7 Ah x 1 Typical Recharge Time 4 hours to 90% Battery Runtime – Half Load 4 minutes Operating Temperature, °C (°F) 0 to 40 (32 to 104) Storage Temperature, °C (°F) -20 to 50 (-4 to 122) Operating

		/Storage Relative Humidity 0 – 90%, non-condensing Outlet type and numbers IEC C13 x 4 NEMA/EU x 4 Warranty & Service: 3 years comprehensive onsite warranty
20	Off line UPS	Capacity (VA/W): 1100/660 Input Voltage and Frequency: 150-280V AC Single phase, 50/60Hz ± 5 Hz Output Voltage and Frequency: 230 V AC ± 10%, 50/60 Hz ± 1 Hz (auto sensing) On-Battery Wave Form: Stepped sine wave Battery Type(VDC × Ah × Quantity): 12V × 7 Ah × 2 Alarm: Visual (LED) and audible Warranty & Service: 3 years comprehensive onsite warranty
21	Online UPS	Rating:5 kVA Input: Voltage: 180-265V AC, Single phase Frequency: 50 Hz±6% Output: Voltage: 230V ±2% AC, Single phase Frequency: 50 Hz Transient response: <3% for 100% load change Transient recovery: IN < 20 msec Power factor: 0.8 THD: <3% (Linear load), <5% (Non-linear load) Bypass transfer time in case of failure: < 5 msec Battery bank: To cater 50% UPS load for 10 hrs of back up time Panel: LCD display: I/P & O/P voltage, DC volt, O/P amps, frequency, % battery backup etc. LED indicator: Mains on, battery on charge, low battery imminent, load on Inverter, load on auxiliary supply etc. Electrical protection: Input/output/under volt, over temp, overload, short circuit & battery low trip, surge protection, inbuilt overvoltage cut off device etc. Isolation: Isolation transformer between ups output and supply mains Inverter technology: IGBT Provision of separate un interrupted maintenance bypass: Yes Protection class: IP41 Alarm: Audible alarm in case of any failure Efficiency: Minimum 85%

		Warranty & Service: 3 years comprehensive onsite warranty
22	Stabiliser	Servo Rating : 20 KVA stabilizer 6 KVA to 2000 KVA Warranty & Service: 3 years comprehensive onsite warranty
23	Inverter battery(2nos.)	150AH for New Insta Brite Inveter UPS
24	RS & GIS Software	Standard Remote sensing & GIS software for 20 users (Stand-alone License) 1. GIS 2. Image Processing 3. Advanced Extensions <ul style="list-style-type: none"> • RISAT-1 SAR/ Microwave Module • Network Analysis • Terrain Analysis • 3D Analysis • Tracking Analysis • Raster GIS Analysis • Hydrology Modules • Neural Network Classification • Meteorology GIS • Hyper-spectral Analysis 4. SDK/ API for Customization 5. Training <ul style="list-style-type: none"> • Online product support • Software Installation
25	Hydrological modeling software	Visual MODFLOW latest version (2 users) and Hydrus-2D latest version (2 users) including installation, commissioning, integration and training with 3 years onsite warranty (Two licenses from each one)
26	Server	<ul style="list-style-type: none"> • Form Factor 1U/ 2U Rack Server • Processor: 2 x Intel® Xeon® E5-2650V4 (12 core, 2.2 GHz, 30 MB L3, 105 W) or • Memory: 64 GB DDR4 RAM using 16 GB DDR4 modules • Internal hot pluggable SAS Hard disk drives 4 Nos. X 600 GB 10K RPM or higher • Integrated SAS RAID Controller with RAID 0 and 1 • Integrated Graphic controller • 2 x 10/100/1000 Mbps Gigabit Ethernet Ports • Dual port 8/16 Gbps FC HBA adapter populated with SFP modules along with two -10m optical fiber patch (MM) cables • Dual port 10 GbE SFP+ network cards (NIC) - 2 nos. (10G Base SR) populated modules and ports with four compatible – 10 m optical fiber patch cables Internal DVD writer

		<ul style="list-style-type: none"> • All power supplies and cooling fans should be fully populated for redundancy • Operating System Support: RHEL, SUSE Linux, Windows server 2012 etc. • Rack mount/ rail kit should be provided along with cable arms to mount the server on rack • Input Power 230V/ 50Hz with power cord suitable to Indian system <p>Terms & Conditions:</p> <ul style="list-style-type: none"> • Each server must be provided and configured with the latest version of Windows Server 2016 Standard Edition OS with the required no of licenses/ no. of core packs to accommodate all the above specified cores (24 cores in total) • Only reputed and standard brands to be supplied. The brand, make and model no. should be specified • Onsite supply, installation and integration of all items is to be done • Three year onsite comprehensive warranty, maintenance and technical support must be provided after installation • The vendor must be a reputed system integrator & authorized partner of the OEM and provide OEM authorization letter specific to this enquiry • The technical support/ maintenance includes operating System/ software reinstallation (based on need), hardware/ software problem diagnosis & resolution, site visits as required to be provided by the vendor • The vendor must take the responsibility of attending to the reported problems, conduct problem diagnosis onsite as required and if necessary source the required replacements from principals and resolve the issues • All disks and batteries in the server must be covered under the comprehensive warranty & support • During the warranty period, the faulty parts including disks must be replaced with new ones carrying warranty up to the total system's warranty end-date. • Disks found defective and replaced during warranty will not be returned to the vendor. No disk retention charges will be paid • All required cables, connectors, drivers, etc. to be supplied. Power cables must be compatible with standard Indian type sockets and power supply • The quote must be completed in all respects. Incomplete quotes are liable to be rejected <p>Item-wise compliance to be provided for all the points</p>
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27	3D Mouse	<p>Controls: One thumbwheel for Z-axis positioning, Four side buttons (two front and two back) and Six color-coded top buttons</p> <p>Resolution: X,Y movement - 400 to 1600 CPI, Z control thumbwheel - 1200 counts per revolution</p> <p>Certifications: USB-IF certified FCC Part 15B & EN 55022:2006 + A1 :2007, and Class B</p> <p>Accessories: Teflon® treated mouse pad, CD with software and user manual with Quick installation guide</p> <p>Warranty & Service: 3 years comprehensive onsite warranty</p>
28	Veterinary specific hospital management system software	<p>Supply, Installation, Commissioning & Development of customized Software for Veterinary Hospital Management System inclusive of Software support service to be implemented on LAN basis to each section and rooms of TVCC</p> <p>Specifications :</p> <p>a) Graphical user interface to make the design user friendly and enable the existing staff to utilize the system with minimal training.</p> <p>b) Registration of outdoor and indoor patients with generation of unique registration ID with facilities to incorporate information like owner name and address/contact number, breed, age, sex, owner's complaint, history, clinical/physical examination (Medicine, Surgery and Gynaecology), patient parameters monitoring, Laboratory investigation reporting (Pathology. Biochemistry, Microbiology, Parasitology), Diagnostic investigation reporting (X ray, C-Arm, USG, Endoscopy), referral facilities, surgery appointment, medical consumable and drug requisition</p> <p>c) Facility to Add, View/Edit. Delete and Search patient record.</p> <p>d) Facility to Save, View and Print of report.</p> <p>e) Facility to record revenue collected with receipt number and date.</p>
29	Network Switch	<ul style="list-style-type: none"> • It should be populated and enabled with, 24 numbers of 10/100/1000 Ports and should have 2 x 10 Gbps uplink ports populated with Multimode SFP modules and LC-LC cables • Shall have minimum of 88 Gbps or more forwarding bandwidth and shall have minimum forwarding rate of 68 Mbps or more • Shall support up to 32,000 MAC addresses and up to 24,000 unicast routes • The Switch should be 1RU and provided with rack

		<p>mountable kit</p> <ul style="list-style-type: none"> • The switch should have support for Stacking. Stacking should enable in each switches to function as a single unit • Shall support STP and Per-VLAN STP features • Shall support remote port mirroring to remotely monitor ports in a layer-2 switch network from any other switch in the same network • Shall support SNMPv1, SNMPv2c, and SNMPv3 <p>Shall support both IPv4 and IPv6</p> <p>Warranty & Service: 3 years comprehensive onsite warranty</p>
30	Microsoft Office Educational Version	<p>Paper License</p> <p>Features: Microsoft Word, Microsoft Excel, Microsoft Power point, Microsoft Access, Microsoft Outlook</p> <p>Single User Five User Ten User Fifty User One Hundred User</p>
31	Microsoft Operating System Educational version	<p>Paper License</p> <p>Features: Windows 7 Professional / Windows 8.1 Professional / Windows 10 Professional</p> <p>Single User Five User Ten User Fifty User One Hundred User</p>
32	Antivirus Software (Enterprise Edition)	<ul style="list-style-type: none"> • 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

		<ul style="list-style-type: none"> • 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 scan 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 IP addresses (Subnets), • Antivirus solution Should have a Single, Configurable Installation with centralized configuration & policy management & Should have a Common Distribution Mechanism via combination of push & pull Technology for better BW management • Anti virus 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) • Antivirus 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
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		<p>automatically to clients and servers from a central location</p> <ul style="list-style-type: none"> • Antivirus should provide a feature for the roll back 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 & Meessages 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 mesaging applications: ICQ,MSN,AIM,MAIL.RU AGENT & IRC • Solution should provide a webconsole feature that works via a browser (The websole should be used for creating reports and performing simple operations with computers I.e viewing the status,relocating,Installing Antivirus • Solution should provide Application privilege control to regulate the activitiesof 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 featutres i.e user who does not know the password may not 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's network traffic.
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		<ul style="list-style-type: none"> • The solution should have HIPS module, which could protect the endpoint from network based attacks. The signatures for HIPS should be regularly updates 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, Untrusted 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 webcontrol 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 supports 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 provide rapid protection against new and emerging threats. • Solution should provide Multi-level defence technologies for mobile devices (E.g. Anti-spam technology to filter out unwanted calls and text messages) it sholud 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 containerisation 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 he can
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		<p>also choose to wipe corporate data from the device and return the device to its original factory settings.</p> <ul style="list-style-type: none"> • Solution should have Self-Service Portal for Anti-theft, So users can rapidly respond to loss of a device and reduce the risk of data loss and avoid load on administrators • Soutlion should have a feature which can help administrator in Controlling a lost device... even when its SIM has been changed • Soutlion 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. • Soutlion should have boosting systems management capabilities plus an array of security technologies that can be managed and controlled from one management console. • Soutlion 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. • Soutlion should have a Application provisioning feature E.g. Administrator can deploy third party software on command or can schedule it for outside normal office hours.The software deployment process should be entirely transparent to users. • Soutlion should have a License Provisioning and Control feature (E.g. centralised licence provisioning and tracking of any breaches of licence conditions) • Soutlion 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.) • Soutlion should have Patch Management features - Advanced in-depth scanning for vulnerabilities combined with the automated distribution of patches. • Soutlion 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. • Soutlion should have a Remote troubleshooting and deployment tool I.e it should help administrator to resolve problems efficiently. Furthermore, when he need 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. • Soutlion should have full-disk , file level & removeable 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
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		<p>systems like, HP ArcSight & IBM QRadar</p> <ul style="list-style-type: none"> • 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 pre-boot 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 be ICSA (International computer security association), Check Mark(West coast Labs) , AV Comparitives & VB 100 certified. • Vendor should be Top Rated Products for last 3 years in AV Comparitives Test • Proposed Solution should be a ' Leader ' in the Magic Quadrant for Endpoint protection Platform.
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COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT

1	DESKTOP COMPUTER CPU WITH MONITOR	<ul style="list-style-type: none"> i) CORE I5 CPU WITH 20’’ LED MONITOR ii) CORE I3 CPU WITH 18.5/19’’ LED MONITOR i) CORE 2 DUO CPU WITH 17’’ TFT MONITOR ii) DUAL CORE CPU WITH 17’’ TFT MONITOR iii) DUAL CORE CPU WITH 17’’ CRT MONITOR iv) PENTIUM IV CPU WITH 15’’ CRT MONITOR
2	PRINTER	<ul style="list-style-type: none"> i) RICOH Aficio SP C220N ii) HP CP 1525N iii) Samsung ML 2570 iv) Samsung ML 2526 v) Samsung ML 2010 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 iv) Ricoh Aficio MP2000L2 v) Sharp AR 5618 vi) Ricoh MP2001L vii) HP Laser jet M 5025 MFP viii) Ricoh MPC 2051 ix) Xerox WC 5225 x) Xerox WC 5325 xi) Xerox WC 5335 xii) 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 Scanjet 3500C iii) HP Scanjet 2400

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 carryout 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 24 Hrs.
- 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 them and 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. BREAKDOWN MAINTENANCE

- 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 breakdown 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.

RESPONSIBILITIES OF THE BIDDER

- i. Vendor shall be responsible for any/all of the above activities and towards maintenance, etc.
- ii. **Troubleshooting:** 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 **preventive maintenance**.
- 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:

Date	Equipment	Type of work	Tasks done	Status after work	Special Remaks

- ix. Vendor has to send the **certificate** of conduct of satisfactory systems performance.
- x. Vendor shall do all necessary coordination regarding system maintenance with user agency at site in consultation with user.

INSTRUCTIONS TO BIDDER

Experience Certificate: The bidder should have a minimum of 03 years experience in 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 (indicating CAMC status) duly signed by the officer-in-charge.

29.E Group E: Furniture items

Sl. No.	Name of items	Specification
1.	Dining table with granite top	Dimension: (L) 2439 x (W) 914 mm x (H) 762 mm, Stainless steel tubular frame of 1.651 mm thick (16 gauge), Prepolished Granite top (19 mm thick)
2.	Laboratory table	Size: (L) 3048 mm x (D) 915 mm x (H) 915 mm, Made up of seasoned Sal wood frame, With Good quality Prepolished Granite top (19 mm thick), With Cup Board, Top Rack, Two shelves, Two basins of size (L: 610 mm x W: 457 mm x D: 254 mm), Chemical resistant.
3.	Training hall table	Dimension: (L) 610 mm x (W) 458 mm x (H) 762 mm, Frame: Sal wood, Top: 19 mm water proof ply (ISI Mark) laminated with 1 mm mica, Colour polishing and finishing
4.	Takhtaposh cot	Takhtaposh Cot made out of Sal wood frame Non-Sal wood bed plank top, Size – 78” (L) X 36” (W) X 18” (H).
5.	Student Table	Student Table made of Sal wood frame with 19 mm., DWR Ply / Block board top fix up with 1 mm. thick Sunmica top along with wooden biddings around the top with complete polishing and furnishing etc. in complete.
6.	Student chair	Student Chair with arm made of Sal wood frame with 12mm. DWR ply seat top with complete polishing and finishing etc. in complete.
7.	Mattress	Dimension: (L)1829 mm × (W) 889 mm ×(H) 102 mm, Bonded Foam, Reversible Mattress, Single Bed Mattress

29.F Group F: Miscellaneous items

Sl. No.	Name of items	Specification
1.	Automatic Demand feeder	Fish Feeder with a 12 volt rechargeable battery, varmint guard, solar panel, and programmable timer that can be set for up to 6 feedings per day. The four float design ensures stability even in the strongest storms. An optional remote control simplifies the fish feeding process. 44" high and is 6' from the outside edges of the pontoons, All-aluminum, welded, Capacity: more than 10 kg fish food pellets up to 3/4" diameter
2.	Silent DG Set with installation and commission	Diesel operated 62.5 kVA power rating, 3 phases, minimum 400V output voltage, Frequency 50Hz and 1500 RPM, radiator cooled engine, dry type air handling system, 4 cylinders, 4 stroke, brushless alternator, weather proof control panel with indicator lamps, 12 V DC electrical starting, within latest emission norms, silencer Ambient temp 50 deg C 100% load 12 hours operation Integrated microprocessor based controlling system Mounting arrangement should be bourne by dealer
3.	Floor Cleaning Machine	Traction driven model for cleaning around And underneath obstacles Brush Speed : up to 180 rpm Brush type: Disc Number of brush : 1 150 W drive motor Working speed: 2 to 3 km per hour
4.	Food dispenser	Made of Stainless steel Frame Size: 72"x 24"x 31" and containers (12" x 21" x 9") of 304 grade along with accessories i.e. 18 g sheet container, 24 g water tanks, 2 nos. heater coil
5.	4 station gym	Pipe 12 gauge of 4" x 2" with complete attachment (wings / chest extension machine, arm curl machine, triceps machine, sitting and standing twister, Hip flexor, chin bar)
6.	Pedestal Slim tower AC	3T cap, split, cooling capacity-36000Btu/hr, scroll type compressor, (605x1900/330mm), input power-4058w, 6.8amp, refrigeration type – R22 type.
7.	Inverter	Capacity-1600-1650 VA Output power:0.23-0.25 KVA Wave form: TPZi wave/Sine wave Output voltage -200-220±25V Battery-Tubular, 12 V, 120AH-200AH Load factor-0.8 minimum Inverter stand
8.	AC 1.5 ton 3 star	Nominal Capacity : 1.5 ton Cooling capacity : 5 - 5.25kW ± 2% (4500 kcal/h) Compressor: Rotary type with R 22 refrigerant Condenser coil: copper/aluminium High ERR Rotary type antifreeze thermostat Compressor , single phase Air flow rate : 700 m3/h to 900 m3/h Function modes : Auto/Cool/Fan/Dry – shall have sleep and power

		<p>saving modes</p> <p>Other features : - Automated vertical swing for horizontal louvers - Body surface finish : powder coated/high quality paint finish Air filtering unit : Activated carbon cartridge, dust proof and anti bacteria filter Length of tubings : 15 m or as per the installation requirement Remote handset : LCD display with night glow BEE rating: 3 star Voltage Stabilizer : Stabilizer having ISI quality certification and power rating that matches with the power rating of the A/C unit (at least 4 kVA), working voltage:110 V – 290 V Specify Make & model with Company Printed Catalogue/web site link Mention installation charges</p>
9.	AC 1.5 ton 5 star	<p>Nominal Capacity : 1.5 ton Cooling capacity : 5 - 5.25kW ± 2% (4500 kcal/h) Compressor: Rotary type with R 22 refrigerant Condenser coil: copper/aluminium High ERR Rotary type antifreeze thermostat Compressor Electricity in put : 230V/50Hz/Single Phase Air flow rate : 700 m3/h to 900 m3/h Noise level Indoor unit : Less than 45 db Outdoor unit : Less than 55 db Function modes : Auto/Cool/Fan/Dry – shall have sleep and power saving modes</p> <p>Other features : - Automated vertical swing for horizontal louvers - Body surface finish : powder coated/high quality paint finish Air filtering unit : Activated carbon cartridge, dust proof and anti bacteria filter Length of tubings : 15 m or as per the installation requirement Remote handset : LCD display with night glow BEE rating: 5 star Voltage Stabilizer : Stabilizer having ISI quality certification and power rating that matches with the power rating of the A/C unit (at least 4 kVA), working voltage:110 V – 290 V Specify Make & model with Company Printed Catalogue/web site link Mention installation charges</p>
10.	1.5 ton split Inverter AC 5 star	<p>Nominal Capacity : 1.5 ton Cooling capacity : 5 - 5.25kW ± 2% (4500 kcal/h) Compressor: Rotary type with R 22 refrigerant Condenser coil: copper/aluminium High ERR Rotary type antifreeze thermostat Compressor Electricity in put : 230V/50Hz/Single Phase Air flow rate : 700 m3/h to 900 m3/h Noise level Indoor unit : Less than 45 db Outdoor unit : Less than 55 db Function modes : Auto/Cool/Fan/Dry – shall have sleep and power saving modes</p> <p>Other features : - Automated vertical swing for horizontal louvers - Body surface finish : powder coated/high quality paint finish Air filtering unit : Activated carbon cartridge, dust proof and anti bacteria filter Length of tubings : 15 m or as per the installation requirement</p>

		Remote handset : LCD display with night glow, intelligent eye, power chill operation with steamer discharge technology BEE rating: 5 star Voltage Stabilizer : in built Specify Make & model with Company Printed Catalogue/web site link Mention installation charges
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**LIST OF DIFFERENT STATIONARY ARTICLES FOR THIS YEAR 2017-18
SCHEDULE-I**

Sl No	Name of Articles	Annual Requirement (App)	Schedule	Rate
1.	Packing paper with size, Brand name & weight (51 kg/1 Ream (500 sheets	200 pkt.		
2.	Duplicating paper weight 2.5 kg (Good quality) packing cont.500 sheets	100 pkt.		
3.	Pitch Board 2 ½ LB (1 pkt.) (2 kg)	50 pkt.		
4.	D.F White paper, Ream Cont. 500 sheet M.B 7.9 kg west coast 8.2kg “Rama Chandra” 8.2 kg	800 (R)		
5.	Type paper packet cont. 500 sheet (Emami)	50 pkt.		
6.	Conquest paper (Azur laid) D.F size Ream Cont. 500 sheet Mention brand name and weight (11.9 kg)	20 (R)		
7.	Conquest paper(Rulled) (Azur laid) D.F size Ream Cont. 500 sheet Mention brand name and weight (11 kg)	11 (R)		
8.	D.D.Glossy Cover White paper 130 GSM	50 pkt.		
	D.D.Glossy Cover White paper 170 GSM	50 pkt.		

Sl No	Name of Articles	Annual Requirement (App)	Schedule	Rate
	D.D.Glossy Cover White paper 220 GSM	50 pkt.		
	D.D.Glossy Cover White paper 250 GSM	50 pkt.		
9.	D.D White paper J.K M/L weight 21.3 kg/ Ream Cont. 500 sheets	100 (R)		
10.	D.D.Colour M/L 27 Kg (Ream Cont. 500 sheets)	10 (R)		
11.	Xerox paper J.K size –A/4 (75 GSM)	1000 pkt.		
12.	Alpin (100 Gm) Bell	200 pkt.		
13.	Budkin	50 nos.		
14.	Correcting Fluid (Kores) white	130 nos.		
15.	Carbon paper(Type) Kores, one side Black/Blue	20 pkt.		
16.	Cotton thread 100 gms per bundle or more	300 nos.		
17.	File Board(Good Quality)	10,000 nos.		
18.	Gum 300 Ml (Camel)	500		
19.	Gum 50 Ml (Camel)	500		
20.	Gum 700 Ml (Camel)	50		
21.	James Clip Kores /(Plastic)	100 pkt.		
22.	Jute thread 100 gm per bundle or more	200 pkt.		
23.	Pencil (Short hand)/ Apsara	50 pkt.		
24.	Pencil Black Lid. Natraj	150 pkt.		
25.	Paper cutter (Knife) Good quality	100 nos.		
26.	Pin cushion (plastic)	100 nos.		

Sl No	Name of Articles	Annual Requirement (App)	Schedule	Rate
27.	Seassor Medium size	5 nos.		
28.	Short hand note book (Oxford)	50		
29.	Ink for Stamp pad Graphs	100		
30.	Stapler Pin No.24/6 (Kangaroo)	500 pkt.		
31.	Stapler Pin No.10 (Kangaroo)	500 pkt.		
32.	Sealing Wax (Graps)	100 pkt.		
33.	Tag (Good Quality)(per 50 nos.)	1000 bundle		
34.	Waste paper basket (plastic)	20		
35.	Candle-Packet Cont.6 stick (Good quality)	100 pkt.		
36.	Envelop-10"x4.1/2 (Manila)100 nos. per pkt.	15,000		
37.	Envelop-11"x5" (Manila)100 nos. per pkt.	15,000		
38.	Envelop-(Craft) 26cm x 12 cm)100 nos.	20,000		
39.	Envelop "28x23" cm (Craft)100 nos. per pkt.	5000		
40.	Envelop "23x13" cm (Craft)100 nos. per pkt.	5000		
41.	Guard file "14x10" 2LB pitch Board (Pesting of voucher)(Good quality	200		
42.	Chalk white (Kores) 100 pc in a pkt.(Good quality)	1000 pkt.		
43.	Chalk (Colour) (Kores) 100 pc in a Pkt.(Good quality)	10 pkt.		

Sl No	Name of Articles	Annual Requirement (App)	Schedule	Rate
44.	Duster for Black Board (Good quality)	200 nos.		
45.	Computer Guard file "15x12" with hard board (Lever arch File)	100 nos.		
46.	Computer paper "15x12" part-I (80 GSM)	10 pkt.		
47.	Computer paper "15x12" part-II (80 GSM)	10 pkt.		
48.	Computer paper "15x12" part-III (80 GSM)	60 pkt.		
49.	Computer paper "10x12" part-I (80 GSM)	60 pkt.		
50.	Computer paper "10x12" part-II(80 GSM)	10 pkt.		
51.	Computer Ribbon(Rex)	100 nos.		
52.	Scale (Plastic)	50		
53.	A/3 size J.K. paper xerox (75 GSM)	100 pkt.		
54.	Dak pad cover file (Big size)(Good quality)	300		
55.	Plastic quoted colour paper (per piece) 1 (R) (100 sheet)	10(R)		
56.	Poly lying 30x25 Envelop	5000 nos.		
57.	Poly lying 35x27 Envelop	5000 nos.		
58.	Full Scape Xerox paper(JK)75 GSM	100 pkt.		
59.	Correcting Fluid tube	50 nos.		
60.	Use and through due pen (Red, Blue, Black, Green)	100 nos.		
61.	Refill (Red, Blue, Black, Green)	100 pkt.		

Sl No	Name of Articles	Annual Requirement (App)	Schedule	Rate
62.	Rubber	100 nos.		
63.	Poly line Envelop 11x5	5000 nos.		
64.	Highlighter Marker pen	50 nos.		
65.	Single punching machine	20 nos.		
66.	DD White paper	50 Ream		
67.	Stapler Machine Big size (Kangaru) HD-235-17	10		
68.	Stapler pin 23/17H (Kangaru) (17mm 5/8)	50 pkt.		
69.	Subsidiary Cash Book Register (Good quality)No.20	25 nos.		
70.	Subsidiary Cash Book Register (Good quality)No.12	25 nos.		
71.	Cash Book Small size-8	100 nos.		
72.	Dak pad cover file white cloth	200 nos.		

LIST OF BOUND REGISTER FOR THE YEAR 2017-18

SCHEDULE-II

Sl. No.	Name of Articles	Mark in Nos.	Annual Requirement
1.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-6	250 nos.
2.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-8	250 nos.

3.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-10	250 nos.
4.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-12	250 nos.
5.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-14	250 nos.
6.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-16	250 nos.
7.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-18	250 nos.
8.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-20	250 nos.
9.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-24	250 nos.
10.	Bound Register (Conquest paper Rolled) 1 no-8 sheets	No-30	50 nos.
11.	Subsidiary Cash Book Register(Quality) Conquest paper Rolled (1 no-8 sheets)	No-20	250 nos.
12.	Subsidiary Cash Book Register(Quality)	No-12	250 nos.

	Conquest paper Rolled (1 no-8 sheets)		
13.	Subsidiary Cash Book Register(Quality) Conquest paper Rolled (1 no-8 sheets)	No-08	200 nos.
14.	Stock Register of Stationary	300 pages	10 nos.
15.	Main Cash Book	200 pages	30 nos.
16.	Daily collection register for students	200 pages	10 nos.

N.B: The above registers shall carry University name and Logo the Book of outside of the cover page.

The corners and the outer edge shall be of Rexin binding.

LIST OF PRINTER AND XEROX MACHINE INSTALLED IN OUAT(P)

SCHEDULE-III

1.	Printer Cum Xerox SCX-4521-FS	ONE	Register's Office
2.	Fax Machine-4521-F	ONE	Comptroller's Office
3.	Printer Cum Xerox SCX-4321	ONE	Comptroller's Office
4.	Printer Samsung ML-1866	ONE	Asst. Registrar(Adm)
5.	Printer Samsung ML-1866	ONE	Asst. Registrar (Estt.)
6.	Printer Samsung ML-2581	ONE	Asst. Registrar (Acad.)
7.	Printer Samsung 2010	ONE	LFA (Audit Section)
8.	Printer Cum Xerox SCX-4321	ONE	Cash Section
9.	Printer Samsung ML-1676	ONE	Estt-II Section
10.	Printer Samsung ML-1676	ONE	CCR Cell
11.	Printer Samsung ML-2526	ONE	Acad- I Section
12.	Printer Samsung ML-1676 small	ONE	Acad-II Section
13.	Printer Samsung ML-2010	FOUR	Issue Section

(B) E-STUDIO-161-TOSHIBA

14.	Xerox Machine E-Studio-161	ONE	Account's Officer-III
15.	Xerox Machine E-Studio-161	ONE	Central Store
16.	Xerox Machine E-Studio-161	ONE	GA-I Section
17.	Canon A-3 size Digital Photo Copier – ONE-SO(T)	ONE	Accounts Section

(C) H.P LASER PRINTER

17.	H.P. Laser Printer	ONE	Account's Officer-I
18.	H.P. LaserJet (M-5025)	ONE	Budget Section
19.	H.P. Laser Jet (M-1136)	ONE	Pension Section
20.	H.P. Laser Jet (M-1136)	ONE	Estt-I Section

(D) PRINTER (RICOH MODEL)

21.	Ricoh Colour Printer MP-C-2551	ONE	V.C's Office
22.	Ricoh Xerox Machine-Aficio-MP-2000L2	ONE	GA-I Section
23.	Ricoh Xerox machine-MP-200IL	ONE	Issue Section

(E) PRINTER (SHARP MODEL)

24.	Sharp Xerox Machine –AR-556-D	TWO	V.C's Office
25.	Fax Sharp Ribbon	ONE	V.C's Office
26.	Xerox Machine(Sharp)-AR-5316	ONE	Acad-III Section
27.	Printer –cum-Xerox (Sharp)	ONE	Budget Section
28.	Xerox Machine (Sharp)-AR-5618	ONE	Pension Section
29.	Xerox Machine(Sharp)-AR-56185	ONE	Funds Section
30.	Printer –cum-Xerox –Colour (Sharp)-AR-5618-D	ONE	Acad-II Section
31.	Xerox Machine (Sharp)	ONE	Issue Section
32.	No.W.C-5330/5335 Tonner Xerox Machine	ONE	Academic-I

33.	Duplicating Machine Digital	ONE	Issue Section
34.	Postal Franking Machine	ONE	Issue Section