



**TENDER DOCUMENT**

**FOR**

**COMPLETION OF LABORATORY ANIMAL FACILITY (HVAC,  
ELECTRICAL, IBMS, PLUMBING, DRAINAGE, PUF PANEL PARTITION,  
FINISHING, FURNISHING, REMAINING CIVIL WORK)**

**AND**

**PROCUREMENT, SUPPLY, INSTALLATION, TESTING AND  
COMMISSIONING OF LABORATORY ANIMAL FACILITY EQUIPMENT  
AT AIIMS-RISHIKESH**

**ON**

**TURNKEY BASIS**

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS)**

**VIRBHADRA ROAD, NEAR BARRAGE, RISHIKESH, UTTARAKHAND-249203**

**INDIA**

<b>Ref. No.</b>	<b>:</b>	<b>24/Pharma/429/2018-Rish(Admn)</b>
<b>Publishing Date</b>	<b>:</b>	<b>24-08-2018 at 9.00 AM</b>
<b>Pre-Bid Meeting</b>	<b>:</b>	<b>06-09-2018 at 3.00 PM</b>
<b>Bid Submission Start Date</b>	<b>:</b>	<b>11-09-2018 at 9.00 AM</b>
<b>Last Date of Bid Submission</b>	<b>:</b>	<b>24-09-2018 at 3.00 PM</b>
<b>Bid Opening</b>	<b>:</b>	<b>25-09-2018 at 3.30 PM</b>

**TENDER NOTICE**

**Laboratory Animal Facility (Animal House) for  
AIIMS, Rishikesh, Virbhadra Marg, Rishikesh, Dehradun**

**Dated: 24-08-2018**

1. E-tenders on turnkey basis in Two Bids (Technical & Financial) are invited on behalf of the Director, All India Institute of Medical Sciences, Rishikesh from interested and eligible manufacturer or their authorised distributors/dealers, for establishment of **Laboratory Animal Facility (Animal House)**, AIIMS Rishikesh.
2. Bids shall be submitted online only at CPPP website: <https://eprocure.gov.in/eprocure/app>.
3. The complete bidding process is online. Bidders should be possession of valid digital Signature Certificate (DSC) for online submission of bids. Prior to bidding DSC need to be registered on the website mentioned above. For any assistance for e-bidding process, if required, bidder may contact to the helpdesk at 0135-2462915.
4. Tenderer/Contractor/Bidders are advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer/Bidders for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at <https://eprocure.gov.in/eprocure/app>'.
5. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
6. Hard Copy of earnest money deposit and tender fee etc. must be delivered to AIIMS, Rishikesh on or before last date/time of Bid Submission as mentioned above. The bid without EMD and tender fee will be summarily rejected. The scanned copy of the EMD and Tender fee should be attached in the technical bid.
7. The tender shall be submitted online in two part, viz., technical bid and financial bid. All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

**The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.**

8. Any future clarification and/or corrigendum(s) shall be communicated through <https://eprocure.gov.in/eprocure/app> or through our website: [www.aiimsrishikesh.edu.in](http://www.aiimsrishikesh.edu.in). The bidders are required to regularly check the website to know about any/all such corrigendum(s) as only these bids, taking care of such corrigendum(s) shall be considered for finalisation of the tender. The technical bids shall be opened on the same day at 03.30 PM at Tender Opening Room, AIIMS, Rishikesh. In the event of any of the above mentioned date being declared as a holiday / closed day, the tenders will be opened on the next working day at the appointed time.

5. Bidder should necessarily enclose a covering letter mentioning a summary of applied document with proper numbering. Secondly, bid should also attach a compliance sheet as per specification mentioning that they are complying to all specification or have any variation.

6. The pre bid conference would be held on **06-09-2018 at 03.00 PM** in the office of Tender Opening Room, AIIMS, Rishikesh. All firm's representative who are attending the pre bid meeting, shall produce an authorization letter from their firm on the firm's letter head. They are required to put their query in writing before the committee and submit the same in writing on its letter head.

7. All the duly filled/completed pages of the tender should be given serial /page number on each page and signed by the owner of the firm or his Authorized signatory. In case the tenders are signed by the Authorized signatory, a copy of the power of attorney/authorization may be enclosed along with tender. A copy of the terms & conditions shall be signed on each page and submitted with the technical bid as token of acceptance of

terms & conditions. Tender with unsigned pages/incomplete/partial/part of tender if submitted will be rejected out rightly.

8. Any omission in filling the columns of Financial Bid form (Schedule of Rates) shall debar a tender from being considered. Rates should be filled up carefully by the tenderer. All corrections in this schedule must be duly attested by full signature of the tenderers. The corrections made by using fluid and overwriting will not be accepted and tender would be rejected.

9.(i) **Bid Security:** -The bidder shall pay the respective amount of Bid Security (EMD) as mentioned in table-I along with the Technical Bid by way of demand draft/FD/TD/CD in favour of “AIIMS, Rishikesh” drawn on any Nationalized Bank/ Scheduled Bank and payable at Rishikesh and must be valid for (6) six month. Bids received without tender fees and Earnest Money deposit (EMD) shall stand rejected and thus shall not be considered for evaluation etc. at any stage. The original EMD will be put in cover-I containing with Technical bid.

- a) The Public Sector Undertaking of the Central/State Govt./MSEs/MSME/Registered with Central Purchase Organization are exempted from furnishing Earnest Money along with tender, **subject to submission of its valid proof.**
- b) The firms Registered with DGS & D/SSI and any approved source of Centre/States Govt. are not exempted from furnishing Earnest Money in so far as this institute is concerned.
- c) Earnest Money deposited with AIIMS, Rishikesh in connection with any other tender enquiry even if for same/similar material / Stores by the tenderer will not be considered against this tender.

(ii) EMD is required to protect the purchaser against the risk of Bidders conduct. The EMD will be forfeited if the bidder withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to the notice that the information/ documents furnished in its tender is incorrect or false.

10. The bid security (EMD) without interest shall be returned to the unsuccessful bidders after finalization of contract with successful bidder.

11. Bidders are not allowed to submit more than one bid for the same/similar tendered item else all his bids shall be cancelled thereby making him disqualified in addition to the forfeiture of the EMD.

12. The successful bidders have to execute a contract on Indian non judicial stamp paper of Rs.100/- (Rupees one hundred only) within twenty-one (21) days from the date of award of this tender in his favour and also required to furnish the **Security Deposit @ 10%** of contract value in the form of FD/BG/TD/CD for **three months extra of the contract period** from any Nationalised/Schedule bank duly pledged in favour of AIIMS, Rishikesh & payable at Rishikesh only. The EMD deposited by successful bidder may be adjusted towards Security Deposit as demanded above after its validation for the required period. If the successful bidder fails to furnish the full security deposit or difference amount between Security Deposit and EMD within 21 (twenty-one) days after the issue of **Letter of Award** of Work, his bid security (EMD) shall be forfeited and award of tender in suppliers favour automatically stands terminated at his cost & liability, unless time extension has been granted by AIIMS, Rishikesh.

13. The EMD/PBG shall be forfeited if successful bidder fails to supply the goods/equipment in stipulated time or fails to comply with any of the terms & conditions of the contract or fail to sign the contract.

14. The bid shall be valid and open for acceptance by the competent authority of AIIMS Rishikesh for a period of 180 (one hundred eighty) days from the published date of opening of the tenders and no request for any variation in quoted rates and / withdrawal of tender on any ground by bidders shall be entertained. The unilateral withdraw at any stage will cause forfeiture of EMD in addition to any remedy that the purchaser may have under the law.

15. To assist in the analysis, evaluation and computation of the bids, the Competent Authority, may ask bidders individually for clarification of their bids. The request for Clarification and the response shall be in writing but no change in the price or substance of the bid offered shall be permitted.
15. After evaluation, the work shall be awarded normally to the Agency fulfilling all the conditions of the contract and who has quoted the lowest rate as per financial bid after complying with the all the Acts / provisions stated / referred to for adherence in the tender.
16. The competent authority of AIIMS, Rishikesh reserves all rights to accept or reject any/ all tender(s) without assigning any reason. It can also impose/relax any administrative term and condition/specifications of the tender enquiry after due discussion in pre-bid conference. This will be communicated and shown over the website of the Institute. No representation will be considered after pre-bid meeting and **bidders may ensure its queries only in pre-bid meeting.** AIIMS, Rishikesh also reserves the right to reject any bid which in his opinion is non-responsive or violating any of the conditions/specifications without any liability to any loss whatsoever it may cause to the bidder in the process.
17. Tender must be submitted on the prescribed Tender Form otherwise tender will be cancelled straightway.
18. The tender form is not transferable.
19. Canvassing in any form is strictly prohibited and the tenderers who are found canvassing are liable to have their tenders rejected out rightly.
20. It is required by all concerned, namely the Bidders/Suppliers, as the case may be to observe highest standard of ethics during the procurement and execution of this Tender.
21. Installation at consignee's site should be free of cost immediately on arrival of equipment at consignee's site.
22. In case the quality of goods supplied are not in conformity with the standard given in tender and as per the samples supplied or the supplies are found defective at any stage these goods shall immediately will be taken back by the supplier and will be replaced with the tender quality goods, without any delay. The competent authority reserves all rights to reject the goods if the same are not found in accordance with the required description / specifications and liquidates damages shall be charged in addition to the cost of re- tender. The supplier is required to provide the demonstration of equipment at AIIMS premises to the AIIMS representatives for its evaluation as per the specification & desired functionality standard. However, a submission of videography displaying functionality as per tender specification may also be considered by the AIIMS, representative.
23. In case the bidder on whom the supply order has been placed, fails to make supplies within the delivery schedule and the purchaser has to resort risk purchase, the purchaser (AIIMS, Rishikesh) may recover from the tender the difference between the cost calculated on the basis of risk purchase price and that calculated on the basis of rates quoted by tenderer. In case of repeated failure in supplying the order goods the supply order may be cancelled and bid security deposit will be forfeited.
24. Where the specifications are as per tenderer's range of products the tenderer's offer should mention that the item meets all specifications as per the tender enquiry and if there are improvements/deviations the same should be brought out on separate Letter Head of the firm. It would be discretion of the competent authority of the institute to accept or reject such deviations which are not in accordance with our required specifications as given below the financial bid.
- 25.** It must be mentioned clearly whether bidder is a manufacturer/sole distributor/ sole agent for the items for which he is quoting.

- a. **Manufacturer** must add a certificate that item(s) is manufactured by them as per range of products.
- b. **Sole Manufacturers** must add a certificate that they are the sole manufacturer of the Item for which they are quoting in this tender enquiry & item is /are their proprietary Item in India. The rate certificate is also required from the sole manufactures that the Rates quoted are the same as they quote to other State/Centre Govt./reputed Private Organisation and DGS&D rate for the similar item(s) and these are not higher than those quoted by them.
- c. **Authorized agents** must add authority letter from their Manufacturer/Principals on the letter head of the manufacturer/principals signed by a competent person and comes in proforma given in attach must duly supported by a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- (Rupees ten only) that they are quoting Rates on behalf of them. The authorization letter must give/mention the purpose for which it is allowed. The validity period of the authorization letter must be mentioned in the authority letter otherwise tender will be liable to rejection.

26. The bidders should have furnished a copy of GST/S.T. /C.S.T./VAT registration number, the State / U.T. of registration and the date of such registration. Tenders not complying with this condition will be rejected.

27. **Turnover provisions:** - (i) The tenderers should submit along with the tender, a photo state copy of the last three years Annual Accounts with Audit certificate by Chartered Accountant, Income Tax returns and a copy of current valid income tax clearance certificate (IT CC), otherwise bidder will not be considered for administrative evaluation (in evaluation of Technical bid) and will be declared **disqualified** in technical evaluation.

(ii) In case of bidder falls under Section 44AD/44ADA/44AE of Income Tax shall be required to submit turnover certificate verified by Chartered Accountant with his Registration number issued by Institute of Chartered Accountants of India.

(iii) In case of supplier is an Indian Agent, the firm can submit copies of purchase orders issued in favour of firm (*As the payment is made through LC directly to foreign manufacturer and equipment payment does not exist in the book of account of the supplier*) in support to its turnover whatever amount is getting short.

(iv) There will be relaxation on turnover on *case to case* basis for **Start-up firms** registered by Government of India under Start-ups scheme as per orders of Ministry of Commerce, Government of India.

28. **Sample/demonstration:** - In case, the item required prior submission of sample/ performing demonstration, tenderer will have to submit sample/perform demonstration of the equipment/item to the competent authority of the institute, the bidder will have to born all the expenses for the same. Non submission of sample/non performing demonstration will **disqualify** the bidder in the technical bidding process and financial bid of the bidder will not be opened.

29. The tenderer hereby guarantees that the equipment supplied to the Institute (purchaser) under the Contract shall be of the best quality/latest version and workmanship and new in all respects and shall be strictly in accordance with the specification and particulars contained/ mentioned in the Tender Document. The date of manufacturing of the equipment/goods supplied will not be more than 3 (Three months) old. The tenderer will have further guarantees that the said equipment would continue to conform to the description and quality aforesaid for a period of five (5) years guarantee period (As per MoH&FW guidelines), from the date of installation of the said equipment to the purchaser and notwithstanding the fact that the Purchaser (Inspector) may have inspected and /or approved the said equipment, if during the aforesaid period of five years the said equipment be discovered not to conform to the description and quality as required as per specification or not giving satisfactory performance or have deteriorated, the decision of the Purchaser in that behalf shall be final and binding on the tenderer and the Purchaser shall be entitled to call upon the tenderer to rectify the equipment or such portion thereof as is found to be defective by the purchaser within a reasonable period or such specified period as may be allowed by the purchaser in his discretion on/an application made thereof by the tenderer and in such an event, the above mentioned warranty period shall apply to the equipment replaced from the date of replacement thereof. In case of failure of the tenderer to rectify or replace the equipment, within specified time,

the purchaser shall be entitled to recover the cost with all expenses from the tenderer for such defective equipment.

30. Full description & specifications, make/brand and name of the manufacturing firm must be clearly mentioned in the tender, failing which, the tender will not be considered. The tenderer must also mention whether the goods are imported / indigenous. Descriptive literature / catalogues must be attached with the tender in original, failing which, tender may be disqualified.

**31. Force Majeure:** Any failure or omission to carryout of the provisions of this supply by the supplier shall not give right for any claim by supplier and purchaser to one against the other, if such failure or omission arise from an act of God which shall include all acts of natural calamities from civil strikes compliance with any statistics and or requisitions of the Government lockout and Strikes, riots, embargoes or from any political or other reasons beyond the suppliers control including war (whether declared or not) civil war or state of incarceration provided that notice of the occurrence of any event by either party to the other shall be within two weeks from the date of occurrence of such an event which could be attributed to force majeure. Any delay due to Force Majeure will not be attributable to the either of the parties.

32. The equipment installed should be up for 95% of the total warranty time. If the equipment is down for more than 5% suitable action shall be taken against the supplier including imposition of penalty as deemed fit.

33. If there is a close system the tenderer shall ensure and will have to submit an affidavit on Indian Non Judicial stamp paper of Rs.10/- along with technical bid that spare parts and consumables for these equipment's/instruments/item will be available at reasonable fixed rates for next 10 (ten) years, such rates should not be more than the rates supplied to institutes of national importance.

34. The successful Bidder shall at all times agree to indemnify and keep indemnified the purchaser against all losses, damages which may arise in respect of action/inactions of such Bidder or breach of any term of this tender by such Bidder. All claims regarding indemnity shall survive the termination of the contract with such Bidder.

35. In case the vendor fails to supply the spare parts or fails to provide the agreed maintenance during the prescribed period, as per the terms of contract, the purchaser is automatically entitled to procure the required parts and hire services from the market at the risk and cost of the vendor, such inability of bidder will entail forfeiture the security deposit. The purchaser also reserves the right to terminate the contract on immediate notice, if the vendor fails to comply with this clause for more than one instance.

**36. Liquidated damage/demerge:** - The time for the date of delivery/ dispatch stipulated in supply order shall be deemed to be the essence of the contract and if the supplier fails to deliver or dispatch any consignment within the period prescribed for such delivery or dispatch in the supply order, liquidated damages may be deducted from the bill @ 0.5% per week subject to maximum of 10% of the value of the delayed goods or services under the contract. The competent authority of the institute may also cancel the supply at the cost & liability of the supplier. In such a case, bid security of the supplier shall stand forfeited. The supply of equipment must be in single consignment, inclusive of all parts & accessories in adherence to the specification so as to make the equipment fully functional at the time of the installation. No installation repeat shall be signed in case of absence of any part as per the specification.

**37. Legal Jurisdiction:** -The Courts at Rishikesh/ Dehradun alone and no other Court will have the jurisdiction to try the matter, dispute or reference between the parties arising out of this tender/supply Order/contract.

**Applicable Law:**

38. The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings / processing.

39. Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Rishikesh/Dehradun, Uttarakhand India only.



40. Except as otherwise provided under this Contract for immediate termination of the Contract, in the event of a disputes which may be arising out of the execution of the tender contract, the matter will be referred to the Deputy Director (Administration). Appeal against the decision of the DDA will lie to the Director, AIIMS Rishikesh and his decision shall be final and binding upon both the parties.

I / We hereby accept the terms and Conditions given in the tender

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*(Signature & Stamp of the bidder)*

*Note- Please sign each page of document including terms & conditions & tender*

**(B) Financial terms and conditions**

1. Rates are strictly required to be offered/quoted on the prescribed **“Financial Bid format”**. Financial bid submitted without prescribed format may not be considered and will be deemed improper subject to the condition that there is a requirement to mention other item which are not mentioned in the said format.
2. Rates quoted should be inclusive of all applicable taxes, packing, forwarding, postage and transportation charges at for AIIMS Rishikesh (Site of installation/Use). To sum up the rates should be quoted for establishment of complete Laboratory Animal Facility (Animal House). Rates should be mentioned both in figures and in words. The offer should be typed or written in Ink Pen/ Ball Pen without any correction. Offers in pencil will be cancelled. Telegraphic/ Telex/ Fax offers will not be considered and cancelled straightway.
3. The supplier has to submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that the bidder has not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in recent past. Therefore, if at any stage it has been found that the supplier has quoted lower rates than those quoted in this tender; the Institute (the purchaser) would be given the benefit of lower rates by the Supplier and any excess payment if any, will become immediately payable to the AIIMS, Rishikesh. If such affidavit is not submitted, tender will be out rightly rejected.**(Part of technical bid)**
4. If the price of the contracted articles is/ are controlled by the Government, in no circumstances the payment will be higher than the controlled rate.
5. Tender will be regarded as constituting an offer open to acceptance in whole or in part at the discretion of the competent authority of the institute for a period of 180 days (6 months) valid from the date of opening of the tender by the committee.
6. The corrections made by using fluid and overwriting will not be accepted and tender would be rejected.
7. Tenderer shall have to provide complete warranty for all equipment’s for 5 (five) years & followed by CMC for 5 (five) years of the equipment’s and other items installed in the Laboratory Animal Facility (Animal House). Financial bid should be quoted accordingly. In this regard, the tenderer shall submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that bidder will provide complete warranty for entire equipment’s installed in the Laboratory Animal Facility (Animal House) for 5 (five) years & CMC for 5 (five) years of the entire items and equipment’s.
7. **Tender Currencies:**
  - a. The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees. Further, imported goods to be imported and supplied by the bidder are also required to be quoted in Indian Rupees.
  - b. For imported goods, if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any, required with the goods, the same shall be quoted in Indian Rupees only, if such services are to be performed /undertaken in India.
  - c. Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.
8. **Tender Prices:** While filling up the columns of the Financial Bid, the following aspects should be noted for compliance: -
  - I- ***For domestic goods or goods of foreign origin located within India, the prices in the corresponding Financial Bid shall be entered separately in the following manner: -***



- a. The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like sales tax, GST/CST/ VAT, CENVAT, Custom Duty, Excise Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc.;
- b. Any sales tax or other taxes and any duties including excise duty, which will be payable on the goods in India if the contract is awarded;
- c. Charges towards Packing & Forwarding, Inland Transportation, Insurance, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Financial Bid;
- d. The price of Incidental Services, as mentioned in List of Requirements and Financial Bid;
- e. The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Financial Bid; and
- f. The price of CMC **after warranty period**, as mentioned in List of Requirements, Technical Specification and Financial Bid.

**II- For goods offered from abroad, the prices in the corresponding Financial Bid shall be entered separately in the following manner: -**

- a. The price of goods quoted FOB port of shipment, as indicated in the List of Requirements and Financial Bid;
  - b. The price of goods quoted CIF port of entry in India as indicated in the List of Requirements and Financial Bid;
  - c. The price of goods quoted for delivery at AIIMS, Rishikesh as indicated in the List of Requirements, Financial Bid and Consignee List;
  - d. Wherever applicable, the amount of custom duty with CDEC applicable on CIF value on the goods to be imported;
  - e. The charges for Loading/Unloading, Inland transportation, Insurance and other local costs, Incidental cost to delivery of the goods from the port of entry in India to AIIMS, Rishikesh, as specified in the List of Requirements and Financial Bid;
  - f. The charges for Incidental Services, as in the List of Requirements and Financial Bid;
  - g. The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Financial Bid; and
  - h. The price of annual CMC, after warranty period as mentioned in List of Requirements, Technical Specification and Financial Bid.
9. Additional information and instruction on Duties and Taxes: If the Bidder desires to ask for excise duty, sales tax/GST/CST / VAT/ CENVAT, Custom Duty, Service Tax, Works Contract Tax etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

**10. Excise Duty:**

- a. If reimbursement of excise duty is intended as extra over the quoted prices, the supplier must specifically say so also indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation it will be presumed that the prices quoted are full and final and no claim on account of excise duty will be entertained after the opening of tenders.
- b. If a Bidder chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation, if any, in the excise duty during the time of supply, the Bidder must clearly mention the same and also indicate the rate and quantum of excise duty included in its price. Failure to indicate all such details in clear terms may result in rejection of that tender.
- c. Subject to sub clauses (i) & (ii) above, any change in excise duty upward/downward as a result of any statutory variation in excise duty taking place within contract terms shall be allowed to the extent of actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall be reimbursed to the AIIMS Rishikesh by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

11. **Sales Tax:** - If a bidder asks for sales tax/GST/CST / VAT/CENVAT, Service Tax and Works Contract Tax to be paid extra, the rate and nature of sales tax applicable should be shown separately. The GST/CST / VAT/CENVAT, Service Tax and Works Contract Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to sales tax/ GST/CST / VAT/CENVAT, Service Tax and Works Contract Tax and is payable as per the terms of the contract.

12. **Octroi Duty and Local Duties & Taxes:** - Normally, goods to be supplied to Government departments against Government contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. However, on some occasions, the local bodies (like town body, municipal body etc.) as per their regulations allow such exemptions only on production of certificate to this effect from the concerned Government department. Keeping this in view, the supplier shall ensure that the goods to be supplied by the supplier against the contract placed by the AIIMS, Rishikesh are exempted from levy of any such duty or tax and, wherever necessary, obtain the exemption certificate from the AIIMS, Rishikesh. However, if a local body still insists upon payment of such local duties and taxes, the same should be paid by the supplier to the local body to avoid delay in supplies and possible demurrage charges and obtain a receipt for the same. The supplier should forward the receipt obtained for such payment to the AIIMS, Rishikesh to enable the AIIMS, Rishikesh reimburse the supplier and take other necessary action in the matter.

13. **Customs Duty:** In respect of imported goods offered from abroad, the bidder shall specify the rate as well as the total amount of customs duty payable with Custom Duty Exemption Certificate, if applicable, on the quoted goods in the Financial Bid. The bidder shall also indicate the corresponding Indian Customs Tariff Number applicable for the goods.

- a. For transportation of imported goods offered from abroad, relevant instructions as incorporated shall be followed.
- b. For insurance of goods to be supplied, relevant instructions as provided shall be followed.
- c. Unless otherwise specifically indicated in this NIT document, the terms FCA, FOB, FAS, CIF, CIP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris.
- d. The need for indication of all such price components by the bidders, as required in this clause is for the purpose of comparison of the tenders by the purchaser and will no way restrict the AIIMS, Rishikesh right to award the contract on the selected bidder on any of the terms offered.

14. **Indian Agent:** - If a foreign bidder has engaged an agent in India in connection with its bid, the foreign bidder, in addition to indicating Indian agent's commission, if any, shall also furnish the following information:

- a. The complete name and address of the Indian Agent and its Permanent Account Number as allotted by the Indian Income Tax authority.
- b. The details of the services to be rendered by the agent for the subject requirement.
- c. Details of Service outlets in India, nearest to the AIIMS, Rishikesh to render services during Warranty and CMC period.

**Firm Price:-**

- a. Unless otherwise specified in the NIT, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
- b. However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated will apply.

15. **Conversion of tender currencies to Indian Rupees:** - In case the bid document permits the bidders to quote their prices in different currencies, all such quoted prices of the responsive bidders will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the closing exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Opening Date of Financial Bid'.

16. **Payment terms:** -If the supplier supplied the requisite item within stipulated time and installation is pending on the part of AIIMS Rishikesh on various reasons, up to 90 *per cent* payment against supply can be made by the AIIMS Rishikesh on the case wise only, but will not be considered as precedence in all cases.

**(A)Payment Term for Imported goods:** For imported goods payment shall be made in the following manner:

a) On shipment: 75 % payment of the contract price shall be paid 60 days after presentation of shipping documents { goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country} and upon the submission of the following documents: -

- i. Four copies of Supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- ii. Original and four copies of the clean, on-board Bill of Lading/ Airway bill, marked freight prepaid and four copies of non-negotiable Bill of Lading/Airway bill.
- iii. Insurance Certificate;
- iv. Certificate of origin by the chamber of commerce of the concerned country;
- v. Certificate of country of origin;
- vi. Manufacture's / Supplier's warranty certificate;
- vii. Manufacturer's own factory inspection report.

b) On Acceptance: 25 % payment would be made after satisfactory installation, commissioning, demonstration and training, if required on issuance of Inspection certificate by the AIIMS, Rishikesh.

**B) PAYMENT TERMS FOR INLAND GOODS**

(Seventy-five) 75% Payment of the contract price shall be paid on receipt of goods condition and upon the submission of the following documents: -.

- (i) One Original and Four Copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount.
- (ii) Final Acceptance as per Inspection report issued by faculty.
- (iii) Two copies of packing list identifying contents of each package.

- (iv) Inspection Certificate issued by the user concerned department.
- (v) Final Acceptance Certificate issued by the Institute

**On Acceptance: -**

- (i) Balance Twenty-Five (25) % payment would be made against 'Final Acceptance Certificate' as per Para (B) (i) &(v) of goods to be issued by the consignee's subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise.

17. **Guarantee / Warrantee Period:** The Tenderers must quote for 5 years' comprehensive warranty (Including all Spares, Accessories software application, if any and Labour) from the date of completion of the satisfactory installation. The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected. Also the bidders are requested to submit their quote (Rates) for subsequent 5 years Comprehensive Maintenance Contract (CMC) (Including All Spares, Accessories software application, if any and Labour). Failure to comply this condition will entail the rejection of the bids. The price comparison shall be taken into account on basic price and post warranty CMC.

18. **Custom Clearance:** For the Goods to be imported and supplied, the Institute will provide Custom Duty Exemption Certificate (CDEC) to successful bidder for availing concessional rate of duty as per prevailing Custom Tariff. In case, the bidder requires CDEC certificate, then the same should be specifically mentioned in the bid. The supplier is solely responsible for getting the material clearance from customs. Institute will provide all custom documents for custom clearance on the demand of supplier. The supplier undertakes to fully co-operate to avoid any fine, demurrage or other charges and shall indemnify AIIMS Rishikesh in case of any such failure. Transportation of goods up to AIIMS, Rishikesh and its successful installation and commissioning demonstration (and training, if required) is also the responsibility of the supplier. All charges/ expenses incurred in this process will be borne by the supplier and after submission of deposit slips of custom clearance and transportation charges will be reimbursed to the supplier if said provisions are to be shown separately in the financial bid.

19. **L1 Clause:** *L1 will be decided on the basis of total cost of equipment in addition to CMC value of 5 years and turnkey cost, where applicable including all applicable taxes at time of financial bid evaluation of individual equipment. The rates should be quoted separately in .pdf formt*

NO DEMURRAGE / WHARFAGE CHARGES WILL BE PAYBALE BY THE INSTITUTE UNDER ANY CIRCUMSTANCES. NO ADVANCE PAYMENT WILL BE PAYABLE FOR CUSTOM CLEARANCE/ FREIGHT/INSURANCE ETC

**Note: In case of any dispute regarding award of tender, decision of AIIMS Administration would be final.**

I / We hereby accept the terms and Conditions given in the tender

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(Signature & Stamp of the bidder)

*Note- Please sign each page of document including terms & conditions & tender*

AIIMS Rishikesh tender Enquiry No. F.No 24/Pharma/429/2018-RISH (ADMN)  
**Establishment of Laboratory Animal Facility (Animal House)**

at AIIMS, Rishikesh

**TECHNICAL BID**

**(In separate sealed Cover-I super scribed as “Technical Bid”)**

1. Name & Address of the manufacturer and their authorised dealers/ distributors/Agency with phone number, email, name and telephone/mobile	
2. Specify your firm/company is a manufacturer/ authorised dealer/ distributor/ Agency	
3. Whether the signature on each page has been made by the bidder or not.	
4. Name, Address & designation of the authorized person (Sole proprietor/partner /Director)	
5. Have you previously executed such type of turnkey works like establishment of Laboratory Animal Facility (Animal House) works to any government/ reputed private organization? If yes, attach the relevant poof thereof.	
6. Please provide a notarised affidavit on Indian Non Judicial stamp paper of Rs. 10/- that you have not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in last one year. If you don't fulfil this criteria, your tender will be out rightly rejected.	
7. Please attach copy of last three years' of Income Tax Return	
<b>8. Turnover</b> <ol style="list-style-type: none"> <li>a. Please attach balance sheet (duly certified by Chartered Accountant) for last three (3) years (Attach copy of average minimum turnover for three years should not be less than 5 crores duly certified by the Chartered Accountant)</li> <li>b. The bidder falls under Section 44AD/44ADA/44AE of Income Tax Act shall be required to submit turnover certificate verified by Chartered Accountant with his Registration number issued by Institute of Chartered Accountants of India.</li> <li>c. Indian Agent can submit its copy of POs of LC cases, in support of its amount getting short in required turnover.</li> <li>d. Start-ups may submit its Start-up Registration for consideration (<i>Relaxation in turnover can be considered as the case may be, subject to fulfilment of other conditions. However, it will not mandatory</i>)</li> </ol>	
9. PAN No. (Please attach copy)	
10. GST/VAT/Service Tax Registration Number. (Please attach copy)	
11. Acceptance of terms & conditions attached (Yes/No). Please sign each page of terms and conditions as token of acceptance and submit as part of tender document with technical bid. Otherwise your tender will be rejected.	
12. Power of Attorney/authorization for signing the bid documents (Not required in case of sole-proprietorship.)	
13. Please submit a notarised affidavit on Indian Non judicial stamp paper of Rs. 10/- that no case is pending with the police against the Proprietor/firm/partner or the Company (Agency). Indicate any convictions in the past against the Company/firm/partner.	
14. Please declare that proprietor/firm/company has never been black listed/debarred by any organization. An oath certificate to this effect may be enclosed on Rs.10 notarised stamp paper.	
15. Please submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that they will provide complete warranty for all equipment's/items for 5 (five) years followed by CMC for further 5 (five) years of these equipment's/items.	
16. Please furnished a notarised affidavit on Indian Non judicial stamp paper of Rs.10/- that they will supply spare parts for next 10 years at reasonable price by submission of suitable benchmarks.	
17. Please submit two performance certificate from your two different customers to whom you have supplied such type of equipment in previous 3 years	

<p>18. Details of the FD/DD/TD/CD of bid security (EMD)</p> <p>FD/DD/TD/CD No:</p> <p>Date:</p> <p>Payable at-</p>	<p>Detail of cost of Tender for Rs. 1180/- (if downloaded from website)</p> <p><b>DD No.</b></p> <p><b>Date:</b></p> <p><b>Payable at-</b></p>
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**Undertaking**

1. I/We have read and understood the contents of the Tender and agree to abide by the terms and conditions of this Tender.
  
2. I/We shall supply the items of requisite quality and quantity at given rate in timely manner.
  
3. I/We also confirm that in the event of my/our tender being accepted, I/we hereby undertake to furnish within 15 days, Bank Guarantee/ Performance Security after the issue of Purchase Order, as applicable, in the format to be provided by AIIMS Rishikesh in addition to execution of a Contract as pre-condition for obtaining the supply orders.
  
4. I/We further undertake that none of the Proprietor/Partners/Directors of the firm was or is Proprietor or Partner or Director of any firm with whom the Government have banned /suspended business dealings. I/We further undertake to report to the AIIMS Rishikesh immediately after we are informed but in any case not later 15 days, if any firm in which Proprietor/Partners/Directors are Proprietor or Partner or Director of such a firm which is banned/suspended in future during the currency of the Contract with you.
  
5. I/We undertake that the information given in this tender are true and correct in all respect and I/We hold the responsibility for the same.

(Signature of the Bidder)

Name:

Designation with Seal of the Firm:



**“Laboratory Animal Facility (Animal House) for”  
AIIMS, Rishikesh**

**Chapter-II (Schedule of requirements & EMD)**

**Table-I**

**Details of items & their tentative quantity and EMD**

The following work of Establishment of complete Laboratory Animal Facility on turnkey basis manufactured by Indian/International firms/agencies of repute are required.

S.No.	Item	Quantity	EMD
1	<b>Establishment of Laboratory Animal Facility (Animal House)</b>	As per specifications	INR 4,50,000.00

**MANUFACTURER'S / PRINCIPAL'S AUTHORIZATION FORM**

(Clause 11 (c) of **other terms and conditions** of the tender)

To

The Administrative Officer,  
All India Institute of Medical Sciences  
Rishikesh

Dear Sir,

TENDER: \_\_\_\_\_.

we, \_\_\_\_\_, who are established and reputable  
manufacturers of \_\_\_\_\_, having factories at \_\_\_\_\_  
and \_\_\_\_\_, hereby authorize Messrs. \_\_\_\_\_ (*name and address  
of agents*) to bid, negotiate and conclude the contract with you against Tender No. \_\_\_\_\_  
for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per the conditions of tender contract for the  
goods offered for supply against this tender by the above firm.

The authorization is valid up to \_\_\_\_\_

Yours faithfully,

(Name)

For and on behalf of Messrs. \_\_\_\_\_  
(*Name of manufacturers*)/Principal.

AIIMS Rishikesh tender Enquiry No. F.No 24/Pharma/429/2018-RISH (ADMN)  
**BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC**  
**SECURITY**

To

**The Administrative Officer**

All India Institute of Medical Sciences  
Rishikesh,  
Virbhadr Marg,  
Rishikesh-249201

WHEREAS \_\_\_\_\_ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract 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 contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with the contract; AND WHEREAS we have agreed to give the supplier such a irrevocable bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you unconditionally, on behalf of the supplier, up to a total of. \_\_\_\_\_ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the 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 you to first demanding the said amount of guarantee from the supplier before raising the demand with us. You may directly raise the demand with us, without asking the supplier for the same.

We further 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.

This guarantee will not be changed due to change in the constitution of the bank or the supplier.

This guarantee shall be valid up to 65 months from the date of satisfactory installation of the equipment i.e. up to ----- (indicate date).

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

.....  
Name and designation of the officer

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

**Instructions for Online Bid Submission:**

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

**REGISTRATION**

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “Online bidder Enrollment” on the CPP Portal which is free of charge.
- As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC’s to others which may lead to misuse.
- Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

**SEARCHING FOR TENDER DOCUMENTS**

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

**PREPARATION OF BIDS**

- Bidder should take into account any corrigendum published on the tender document before submitting their bids.

- Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
- Please note the Number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG Tender No. : .....formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

### **SUBMISSION OF BIDS**

- Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- The documents being submitted by the bidders would be encrypted using PKI encryption all techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields

is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key

- Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid Tender No. : ..... will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

**ASSISTANCE TO BIDDERS**

- Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk number 0120-4200462, 0120-4001002.

Name of items with full specifications & required accessories	Quantity
---------------------------------------------------------------	----------



	<b>(in figures and words)</b>
<p><b>1. IVC SYSTEM FOR MICE</b>                      4 ventilators, 16 racks, 192x 4 Cages with Spare cages complete with water bottles etc.-300 Nos, Spare cage lids-300 Nos, Spare HEPA Filters for Air-Handling Units-5 Nos., Spare Disposable cage filters-1000 Nos.</p> <p><b>Specification:</b></p> <p><b>1.1 AIR HANDLING UNITS (IVC Ventilator)</b></p> <ul style="list-style-type: none"> <li>+ Filters: Pre-filters H4, H14 HEPA filter</li> <li>+ Fresh air supply system comprising of Fan with speed regulator with Pre-filter size 380 x 305 mm, HEPA filter size 380 x 305 mm</li> <li>+ Exhaust air evacuation system comprising of Fan with speed regulator with Pre-filter size 380 x 305 mm, HEPA filter size 380 x 305 mm</li> <li>+ Air delivery to cages: Easy adjustment of number of air changes on the basis of type and number of cages attached to the system</li> <li>+ Maximum air speed 0.05m/sec</li> <li>+ One AHU should be capable of serving to 2 nos. double sided or 4 nos. single sided racks with the option of easily setting the number and the type of cages via the control panel.</li> <li>+ Stand-alone system physically separable from the racks.</li> <li>+ Microprocessor controlled system for setting and control of parameters. HMI, TFT LCD 16 bit colour display with software, High Intensity Touch screen, virtual keypad</li> <li>+ Temperature and humidity sensors.</li> <li>+ Monitoring, programming of set limits, fault indication (with audio, video alarm) and data logging of all basic parameters. Easy selection of positive or negative pressure mode.</li> <li>+ Run Hour Counter with time based 'change filter' notice, Alarm on clogging of HEPA filter, USB port.</li> <li>+ Multiple ventilator connectivity with PC for remote monitoring, control and data download</li> <li>+ DOP test certification for HEPA filters both supply and exhaust.</li> <li>+ Dry contact for alarm connection to integrate with the building management software.</li> <li>+ Low noise Units (&lt; 50 dB).</li> <li>+ Easy access to the pre-filters.</li> <li>+ Provision to exhaust air out of the room.</li> <li>+ Necessary electrical with internal wiring.</li> <li>+ Castor wheels in special grade nylon construction with SS housing, 2 Nos. free moving, 2 Nos. with pad lock</li> <li>+ Should be supplied with the following test reports:                         <ol style="list-style-type: none"> <li>a. Air flow tests in both positive and negative pressures</li> <li>b. Filter integrity</li> <li>c. Calibrated sensors</li> </ol> </li> <li>+ Equipment manufacturer should have standard certifications like ISO 9001 and ISO 14001</li> </ul> <p><b>1.2 IVC CAGE RACK FOR MICE</b></p> <ul style="list-style-type: none"> <li>+ Rack with system of vertical plenums which feature easily demountable air nozzles for the supply and exhaust of air individually to each cage, both positioned on the top of the cage.</li> </ul>	<p>04 Unit</p>

<ul style="list-style-type: none"> <li>✚ Suitable for cage loading from single side for 48 nos. IVC cages for mice comprising of, Frame structure, supply and exhaust air headers with air distribution system in SS 304 construction</li> <li>✚ Cage runners in special grade nylon construction.</li> <li>✚ Duct couplers, endcaps, Cage Pressure sensor pipe with QRC</li> <li>✚ AISI 304 stainless steel rack structure, indicators for cage properly docked. Heavy duty, fully autoclavable</li> <li>✚ The main horizontal plenums should facilitate the equal air distribution and have to be easy demountable.</li> <li>✚ Castor wheels with SS 304 casing and special grade nylon wheels, 2 nos. free moving and 2 Nos. lockable</li> <li>✚ Flexible air hose for supply air &amp; exhaust air connections</li> </ul> <p><b>1.3 IVC CAGES FOR MICE</b></p> <ul style="list-style-type: none"> <li>✚ IVC Cage Assembly for mice, in polysulphone construction</li> <li>✚ Floor area approx. 530 cm<sup>2</sup></li> <li>✚ Approximate Cage height: 14 cms approx.</li> <li>✚ The ventilated cage should have provision for positive or negative pressure mode with facility to change the air pressure via the AHU control panel.</li> <li>✚ Cage body should be strong to withstand rigorous washing and frequent autoclaving.</li> <li>✚ Cage grill in SS 304 construction with nylon gasket filter retaining grill, lid clamps</li> <li>✚ Caging system should have proper sealing mechanism.</li> <li>✚ Cage body should have provision for water bottle, microbiological filter (filtration efficiency 99.99% referred to 0.2μ particles size or better), supply and exhaust valve for air ventilation and latches.</li> <li>✚ Calibrated Polycarbonate/polysulfonate transparent water bottle with a stainless steel 316 cap with nozzle.</li> <li>✚ Inlet and outlet air nozzles must prevent cross-contamination.</li> <li>✚ Inlet and outlet air nozzle of the cage should not cause air drafts.</li> <li>✚ All components are to be autoclavable and washable.</li> <li>✚ Autoclavable plastic card holder with SS hook.</li> <li>✚ Overall Dimension: L 365 x W 207 x H 190mm</li> <li>✚ Cages should be compatible with IVC rack mentioned in Item No. 1.2</li> </ul>	
<p><b>2. RABBIT CAGES</b></p> <ul style="list-style-type: none"> <li>✚ Cages: AISI 304 quality stainless steel with excreta tray. 500ml capacity water bottle with gasket and cap with nipple in SS 304 and food hopper with a card holder.</li> <li>✚ Cage Size: L 760 x W 650 x H 380 mm</li> <li>✚ Racks: AISI 304 quality stainless steel, heavy duty castor wheels with SS housing, 2 Nos. free moving type and 2 Nos. with pad lock, stoppers on the backside of the angles to prevent cage falling from the back, joints with Argon Arc welding with glossy finish, suitable to house 6 Nos. rabbit cages of above size.</li> <li>✚ Cage Rack Size: L 1500 x W 660 x H 1770 mm</li> </ul>	<p>02 racks with 12 cages</p>

<p><b>3. METABOLIC CAGES</b></p> <ul style="list-style-type: none"> <li>✚ Vertical type, Autoclavable, Stainless steel, holds up 12 metabolic and diuresis cages</li> <li>✚ Urethane rubber casters in Stainless Steel caster bodies, lock for safety.</li> <li>✚ Dimensions: 1240 x 480 x 1900 mm</li> </ul>	01
<p><b>4. BEDDING DISPOSAL SYSTEM</b></p> <ul style="list-style-type: none"> <li>✚ Reverse laminar flow filter - horizontal flow</li> <li>✚ Fan blower with motor</li> <li>✚ Supply air: HEPA Filtered, HEPA supply/exhaust filters with 99.99% minimum efficiency in capturing 0.3 µm particulates</li> <li>✚ 4' wide Biological Safety Cabinet</li> <li>✚ Should include integrated receptacle for waste disposal</li> <li>✚ Portable unit on casters with lift and it should fit in standard doorway in lowest position for increased mobility</li> <li>✚ 12" view screen sash opening</li> <li>✚ System should comply with NSF/ANSI 49 to ensure a safe operating environment</li> <li>✚ Overall construction SS304 or better material Noise level: &lt;60 dB(A)</li> <li>✚ Waste bag trolley volume: 40-60 Litres</li> </ul>	01
<p><b>5. ANIMAL CHANGE/WORK STATION</b></p> <ul style="list-style-type: none"> <li>✚ Double front access</li> <li>✚ Work surface: Steel Body with epoxy coating</li> <li>✚ Adjustable sash opening, height adjustment, pre-filter alarm</li> <li>✚ Air Velocity at outlet of HEPA Filter: Variable, 0.3 to 0.4 mps,</li> <li>✚ Supply air Pre-filters: 520 x 380 x 20 mm-3 nos.</li> <li>✚ Supply air HEPA filter: 1150 x 550 x 66 mm (H14) with guard screen</li> <li>✚ Exhaust air Pre-filter: 1000 x 300 x 20 mm-1 no. with guard screen</li> <li>✚ Exhaust air HEPA filter: 1150 x 550 x 66 mm (H14)</li> <li>✚ Programmable logical controller with data logger with HMI and data logger</li> <li>✚ Necessary electrical controls</li> <li>✚ Castor wheels, 80 mm diameter - 4 Nos., nylon wheel in SS housing</li> <li>✚ ISO Class 4 Air Quality (ISO 14644-1)</li> </ul>	02
<p><b>6. STEAM STERILIZER</b></p> <ul style="list-style-type: none"> <li>✚ Certification: ISI Marked, CE 0434, ISO 9001, ISO 13485, GMP whole instrument must have ISI Certification</li> <li>✚ Main construction: SS304 with Automatic mechanical control (Steam Jacket) Insulation with Cover: Stainless steel/ Powder coated with glass wool.</li> <li>✚ Door: Double Door</li> <li>✚ Chamber size &amp; shape: 60cm x 60cm x 120cm, horizontal and rectangular</li> <li>✚ Chamber capacity: 500 litres</li> <li>✚ STER timer: 60min</li> <li>✚ Auto Dry with timer: 60min</li> </ul>	01

<ul style="list-style-type: none"> <li>✚ Designed temperature: 140°C</li> <li>✚ Sterilizing temperature: 105~134°C</li> <li>✚ Designed pressure: 1.5 - 4 kg/cm<sup>2</sup></li> <li>✚ Sterilizing pressure: 0.9~2.1 kg/cm<sup>2</sup></li> <li>✚ Water reservoir and boiler: 35- 38 litres (30x65cm)</li> <li>✚ Water filling automatic</li> <li>✚ Safety device: Thermal cut-off, safety valve, emergency exhaust valve and switch, water level control valves, low water indicator, pressure control switch</li> <li>✚ Accessories: <ul style="list-style-type: none"> <li>Sterilizing tray 1pc</li> <li>Water level glass tube 2pcs</li> <li>Heating element 1+1 pcs</li> <li>Silicone door seal 1+1 pc</li> <li>SS Trolley -1 pc</li> </ul> </li> <li>✚ Power supply: 36KW</li> <li>✚ Vacuum drying, Door interlock</li> </ul>	
<p><b>7. TRANSPORT BOXES</b></p> <ul style="list-style-type: none"> <li>✚ Autoclavable, chemically inert and non-toxic, closable viewing panel and Cool texx filter</li> <li>✚ Easily stackable for material handling and transportation, with integral spacers to ensure proper air circulation</li> <li>✚ Capacity: <ul style="list-style-type: none"> <li>❖ Large Container for maximum 8 rats up to 225gms with 3 water gel packs</li> <li>❖ Small Container for maximum 10 mice with 3 water gel packs</li> </ul> </li> <li>✚ Size: 300 x 200 x 150mm and 430 x 300 x 150mm</li> </ul>	10
<p><b>8.FUMIGATOR/FOGGER/DISINFECTION MACHINE</b></p> <ul style="list-style-type: none"> <li>✚ Fumigator Fogger with timer and Disinfectant Fogging Machine</li> <li>✚ SS 304 non-reactive unbreakable engineering plastic construction, CE approved</li> <li>✚ Complete with 0-60-minute timer</li> <li>✚ Consistent Particle Size regeneration: 0.3 -1 Micron</li> <li>✚ Reach: 40-45 ft&amp; 10-12 ft height cover</li> <li>✚ Volume to be Covered: Up to 12,000-15,000 cu.ft.</li> <li>✚ Should be suitable for all major water based disinfectant.</li> <li>✚ Motor overheat/over load protection to be provided</li> <li>✚ Suitable for: 220 V, 50 hz AC single phase power supply.</li> <li>✚ Nozzle: 304 SS, non-clogging design</li> <li>✚ Solution Tank: Capacity 5 Litre with graduating marking</li> <li>✚ Metering System: 0-90 ml/min</li> <li>✚ Intake Air Filter: Suitable to prevent dust / dirt, absorbs moisture from air.</li> <li>✚ Atomizing Capacity: 30-50 ml/min</li> <li>✚ Rotate between at least 90 and 360 degrees</li> </ul>	01

<p><b>9. MOPPING MACHINE (AUTOMATIC SCRUBBER DRIER)</b></p> <ul style="list-style-type: none"> <li>+ Scrubbing width: 450 mm</li> <li>+ Effective Suction Width: 750 mm</li> <li>+ Theoretical area coverage: 2500 m.sq/hr</li> <li>+ Working Speed, up to: 5 km/h</li> <li>+ Airflow rate: 35L/sec</li> <li>+ Vacuum Pressure: 1277mm of H<sub>2</sub>O</li> <li>+ No. of brushes: 1</li> <li>+ Diameter of brush: 450mm</li> <li>+ Brush Speed: 180rpm</li> <li>+ Brush Load: 25 kg</li> <li>+ Fresh water tank: 45 L</li> <li>+ Dirty water tank: 45 L</li> </ul>	<p>01</p>
<p><b>10. RO SYSTEM</b></p> <ul style="list-style-type: none"> <li>+ Operating Temperature 5<sup>0</sup>C to 40<sup>0</sup> C, Outer Body Material SS 304, Running Current in Amps. (Max) 1.5+/-0.1</li> <li>+ Refrigerant: Freon 22</li> <li>+ Capacity: Cooling Capacity at Comfort Level 60 Litres, Production Capacity 50 LPH, Reservoir Capacity 80 Litres, Water Storage Tank Capacity 80 Litres, RO Membrane (Thin Film Composite) 80 GPD X 4, RO Membrane Rating 4 No. x 80 GPD or Equivalent</li> <li>+ Purifier: % of Recovery of Purified Water 0.25, % of Reduction in TDS 90% (Approx.), No of Stages for Filter cum Purifier 7, Permeate (Purified Water) Production Capacity 50 LPH</li> <li>+ Faucet: No. of Cold Water Faucets 2, Total No. of Faucets 2</li> <li>+ Input Water” Input Water Turbidity &lt; 5 NTU (Max.), Recommended Chlorine in Input Water 0.2 ppm (Max.), Recommended Hardness in Input Water 500 ppm (Max.), Recommended Iron in Input Water 0.3 ppm (max.), Recommended pH of Input Water 6.5 to 8.5</li> <li>+ Installation Type: Indoor</li> <li>+ Dimensions mm (WXDXH)640 x 450 x 1350 in mm</li> <li>+ Weight: 85 Kg</li> </ul>	<p>01</p>
<p><b>11. AIR-CURTAIN</b></p> <ul style="list-style-type: none"> <li>+ Door Size: upto 6ft</li> <li>+ Air Velocity: &gt;20-22 m/s</li> <li>+ Noise Level: &lt;70 dB</li> <li>+ Mountable above doorways</li> <li>+ Powerful high speed air flow dividing the inside and outside environments into two independent zones</li> <li>+ It should prevent bugs, dust and smoke from invading</li> </ul>	<p>02</p>
<p><b>12. SHOE-COVER DISPENSER</b></p> <ul style="list-style-type: none"> <li>+ Fully Automatic</li> <li>+ Voltage: 220V / 50Hz</li> <li>+ Rated Power: 20W</li> <li>+ Automatic: Shoe Counting Function</li> <li>+ Loading Capacity: 50 Covers (Non-woven)</li> <li>+ Loading Capacity: 80 Covers (Plastic)</li> </ul>	<p>02</p>

<ul style="list-style-type: none"> <li>✚ Dimensions: 750 x 300 x 630 mm</li> </ul>	
<p><b>13. LABORATORY ANIMAL ANESTHESIA SYSTEM</b></p> <ul style="list-style-type: none"> <li>✚ Oxygen Flowmeter Volume: 0-4 liters per minute @ 55 psi.</li> <li>✚ Oxygen Flush Volume: 15-35 liters per minute @ 55 psi.</li> <li>✚ Gas Supply: Oxygen male DISS connector</li> <li>✚ Gas Pressure Requirements: 50-55 psi</li> <li>✚ Flow meter: Single-turn metering valve</li> <li>✚ Oxygen Flush: Plunger-actuated, spring return valve</li> <li>✚ Adjustable Pressure Limiting (APL) Valve: Three-turn metering valve</li> <li>✚ Dimensions: 22"w x 19"d x 50"h, Base Footprint: 19"w x 18"d</li> <li>✚ Material: Aluminium Frame; steel bolts and screws; injection moulded polyurethane absorber head; brass valves and tubing; acrylic canister and flowmeter cover; Delrin handle and APL (evacuation) valve.</li> <li>✚ Finish: Heat-treated enamel</li> <li>✚ Dual delivery system</li> <li>✚ Mapleson E non-rebreathing circuit</li> <li>✚ 9 mm Mouse nose cone, 12 mm Mouse/Rat nose cone, 14 mm Rat nose cone</li> <li>✚ Induction chamber, air tight, 2-liter</li> <li>✚ Oxygen hose, ten feet with DISS fittings</li> <li>✚ Evacuation tubing, 22 mm, 6 feet</li> <li>✚ VaporGuard activated charcoal evacuation filter, two Anti-spill adapter, funnel-fill</li> <li>✚ Isoflurane (500 ml) should be supplied with Isoflurane vaporizer</li> <li>✚ New Precision temperature and flow rate compensated funnel fill</li> <li>✚ Should be supplied with Anesthesia Guide, protocols</li> <li>✚ Should be CE certified/FDA/BIS approved product.</li> </ul>	<p>01</p>
<p><b>14. TABLE TOP AUTO CO<sub>2</sub>EUTHANASIA ASSEMBLY</b></p> <ul style="list-style-type: none"> <li>✚ Automated multi-stage control of gas flow and evacuation</li> <li>✚ Automatic locking system.</li> <li>✚ A single chamber system that can incorporates upto 8 Mouse Cages, 2 Rat Cages</li> <li>✚ Automated Single Chamber System</li> <li>✚ EA-285 Electrically Heated Regulator 25 - 125 CFH Output</li> <li>✚ With Smartbox Side Control Box, Tabletop Chamber, Exhaust Blower, Exhaust Tubing, Two Hose Clamps, Mounted Timer</li> <li>✚ Cart with 6" wheel, CO<sub>2</sub> Cylinder</li> <li>✚ Two preset times - adult and neonate</li> <li>✚ Flow Rate: 10-30% Chamber Volume/minute</li> <li>✚ Chamber Size: 9" L X 4" W x 4"H 11" L X 7" W x 6"H</li> <li>✚ Compliant with AVMA Guidelines</li> </ul>	<p>01</p>



<p><b>15. CO<sub>2</sub> MANUAL EUTHANASIA ASSEMBLY</b></p> <ul style="list-style-type: none"> <li>✚ Regulator: EA-550 Heated PSI Regulator 0 - 50 PSI Output, mounted timer, hose, and fittings</li> <li>✚ Cart with 6" wheels for easy mobility</li> <li>✚ Induction chamber: Euthanasia chamber suitable for mice and rats complete with container, lid, inlet valve, outlet valve, adequate silicon tubing.</li> <li>✚ CO<sub>2</sub> cylinder: CO<sub>2</sub> Cylinder with gas filled in it - 47 ltrs - 7 Cubic mtr.</li> <li>✚ Euthanasia chamber Size:                      Mouse: 7.5"x5.5"x4"                      Rat: 11"X5.75"X7"</li> </ul>	01
<p><b>16. MICRO-CENTRIFUGE MACHINE</b></p> <ul style="list-style-type: none"> <li>✚ Micro centrifuge with capacity to hold 18 to 24 micro centrifuge tubes (MCT) of 1.5/2mL capacity, to hold 18 to 24 MCT of size 0.25/0.4 ml</li> <li>✚ Instrument should have the ability to support the following and must be supplied with necessary accessories (rotors and adapters) in order to fulfil following:                     <ul style="list-style-type: none"> <li>➤ freezerble to hold 18 to 24 MCT of size 0.25/0.4 ml</li> </ul> </li> <li>✚ Should have maximum RCF 20,000g or more.</li> <li>✚ Should have maximum speed of 14000 rpm or more.</li> <li>✚ Should have acceleration and deceleration time in range of 11 to 16 seconds and 12 to 18 sec respectively.</li> <li>✚ Should have at least time set ranging from 1 min to 99 min or better with 1 minutes or better increment.</li> <li>✚ Should have separate short spin/Pulse button for quick centrifugation.</li> <li>✚ Should have user friendly digital display and regulation for speed (rpm and RCF) and run time.</li> <li>✚ Should have Soft touch one finger lid closure for ergonomic operation.</li> <li>✚ Noise Level should be less than 56dbA.</li> <li>✚ Should work in ambient temperature range.</li> <li>✚ Rotor with lid should be autoclavable at temperature 121<sup>0</sup> C for 20 min or more</li> <li>✚ Should be CSA certified, CE marked All certificates and documents supporting this must be attached with the bid.</li> <li>✚ Should be bench top model with external dimensions not exceeding 230 x 250 x 360 mm (height x width x depth in mm).</li> </ul>	01
<p><b>17. ANIMAL WEIGHING SCALE</b></p> <ul style="list-style-type: none"> <li>✚ LCD screen</li> <li>✚ load capacity - Min: 1 g, Max: 3 kg</li> <li>✚ linearity - +0.1 mg / +0.2mg</li> <li>✚ Practical add and weigh function (tare)</li> <li>✚ With detachable bowl, 2.5" x 7.25"</li> <li>✚ Easy to clean, auto-off function</li> <li>✚ Scale Dimensions: 8.75" L x 1.75" W x 8.63" H</li> </ul>	01

<p><b>18. PRECISION ANALYTICAL WEIGHING BALANCE</b></p> <ul style="list-style-type: none"> <li>✚ Readability: 0.01 gm</li> <li>✚ Capacity: upto 500 gm</li> <li>✚ Linearity: + 0.02 gm</li> <li>✚ Repeatability: 0.01gm</li> <li>✚ Operating temperature: 0- 45°C</li> <li>✚ Pan Size (diameter): 100 - 110 mm</li> <li>✚ Response time: 1- 3 Seconds</li> <li>✚ Calibration External</li> <li>✚ Display: Backlit LCD display</li> </ul>	01
<p><b>19. LABORATORY MICROSCOPE</b></p> <ul style="list-style-type: none"> <li>✚ Upright Binocular Microscopes (with inbuilt light source &amp; imported achromatic optics)</li> <li>✚ Binocular microscope with universal infinity corrected optical system</li> <li>✚ Halogen / LED light source illumination.</li> <li>✚ Rigid frame with ergonomics design</li> <li>✚ Binocular observation tube with inclination of 45/30 degrees</li> <li>✚ Built in torque adjustable focusing knob</li> <li>✚ Mechanical stage with rigid hand coaxial control</li> <li>✚ Abbe condenser, Iris diaphragm</li> <li>✚ Revolving Quintuple nose piece (for objectives)</li> <li>✚ Plane achromat objectives 4X, 10X, 40X, 100X (Oil)</li> <li>✚ 40X, 100X objective should be spring loaded</li> <li>✚ Eye piece 10X (For 22)</li> <li>✚ Antifungal treatment should be applied to the observation tube, eyepiece and objective</li> <li>✚ Accessories, dust cover and power cord</li> <li>✚ Eye pieces with pointers – 10 nos.</li> <li>✚ Power requirement 220 V/50 Hz</li> <li>✚ Should be CE certified/FDA /BIS approved product</li> </ul>	01
<p><b>20. STEREO MICROSCOPE</b></p> <ul style="list-style-type: none"> <li>✚ Fluorescent bottom illumination</li> <li>✚ Zoom Range: 0.7x to 4.5x</li> <li>✚ Zoom Ration: 1:6.5</li> <li>✚ Total Magnification: 7x to 45x standard, 2.1x to 225x with optional lens</li> <li>✚ Working Distance: 108 mm (without Auxiliary Lens), can be 38 to 312 mm with Optional Auxiliary Lens</li> <li>✚ Field of View: 5.1 to 33 mm standard, 1.1 to 124 mm with optional lens</li> <li>✚ Interpupillary Distance: Adjustable 55 to 75 mm</li> <li>✚ Binocular Tube: 45° incline</li> <li>✚ Diopter Adjustment: +/-5 Diopters</li> <li>✚ Binocular Body: Can be rotated full 360 degrees</li> <li>✚ Trinocular Body: Provides a vertical phototube for CCD Video and Micro-Photographic systems</li> </ul>	01

<p><b>21. VORTEX MIXER</b></p> <ul style="list-style-type: none"> <li>+ Speed range from 0 to 2850 rpm</li> <li>+ Made up of robust diecast body.</li> <li>+ Integral retort rod</li> <li>+ Orbit diameter 4.2mm</li> <li>+ Should be supplied with accessories like circular foam insert for beakers and flasks (up to 500ml capacity), rectangular foam insert (for 0.2ml, 0.5ml and 1.5ml micro-centrifuge tubes) and Solid rectangular foam insert (blank for custom holes)</li> <li>+ Power Input: 220-240 VAC</li> <li>+ Should be FDA or CE or BIS approved product</li> </ul>	<p>01</p>
<p><b>22. DEEP FREEZER CHEST TYPE</b></p> <ul style="list-style-type: none"> <li>+ Microprocessor controlled Deep Freezer with digital LED displays.</li> <li>+ Temperature range -10°C to -25°C, adjustable with increment of 1°C with temperature deviation of ±1<sup>0</sup>C</li> <li>+ Working efficiently at wide ambient temperature range of 10°C to 45°C.</li> <li>+ High density foam insulation for rigidity and stable storage temperature.</li> <li>+ Broad Voltage range 180-240V. All electrical system should be compatible with Indian electrical supply.</li> <li>+ Built-in Over/Under voltage compensating technology to reduce wear and tear.</li> <li>+ Storage capacity: 300 liters</li> <li>+ High efficiency compressor with CFC free refrigerant.</li> <li>+ Should have Stainless steel lockable castor and should be movable.</li> <li>+ Door handle for easy operation with locking facility.</li> <li>+ Both types of alarm indications: audible buzzing and visible flashing light.</li> <li>+ Malfunction Audio-visual alarms for over/under temperature, voltage</li> <li>+ Sensor defect, condenser radiating effect, over ambient temperature and power.</li> <li>+ Instrument should be European CE Certified and ISO certified, these certificate should be attached with the technical bid.</li> </ul>	<p>01</p>
<p><b>23. REFRIGERATOR</b></p> <ul style="list-style-type: none"> <li>+ 190 L Single Door</li> <li>+ Auto fridge defrost to stop ice-build up</li> <li>+ Digital Inverter Compressor</li> <li>+ Built in Stabilizer</li> </ul>	<p>01</p>
<p><b>24. LABORATORY REFRIGERATOR GLASS DOOR</b></p> <ul style="list-style-type: none"> <li>+ White exterior</li> <li>+ Automatic door closing</li> <li>+ Air forced cooling</li> <li>+ Adjustable shelves</li> <li>+ Key lock on door</li> <li>+ Temperature Range: 2-10<sup>0</sup>C</li> <li>+ Gross Capacity: 360 litres</li> </ul>	<p>01</p>

<ul style="list-style-type: none"> <li>✚ Microprocessor controlled with digital coloured touch screen display</li> <li>✚ battery backup for alarm, loggings and temperature display in case of power cut</li> <li>✚ Ambient temperature display</li> <li>✚ USB Port for Data Output</li> <li>✚ Visual and acoustic alarm</li> <li>✚ Adjustable high/low temperature alarm</li> <li>✚ Power failure alarm</li> <li>✚ Open door alarm</li> <li>✚ CE Certified</li> </ul>	
<p><b>25. MANUAL MICROTOME</b></p> <ul style="list-style-type: none"> <li>✚ Range of section thickness: 0.5 - 100 µm from 0.5 µm - 1 µm in 0.5 µm increment from 1 µm - 100 µm in 1 µm increment</li> <li>✚ Section Thickness Indication</li> <li>✚ Trimming Section: 0.5 - 100 µm from 0.5 µm - 1 µm in 0.5 µm increment from 1 µm - 100 µm in 1 µm increment</li> <li>✚ Automatic Motorized adjustable specimen retraction</li> <li>✚ Horizontal Specimen feed: 30mm</li> <li>✚ Vertical Specimen Feed: 60mm</li> <li>✚ Specimen Orientation: Horizontal 8°, Vertical 8°</li> <li>✚ Maximum Specimen Size: (LxHxW): 50mmX60mmX40mm</li> <li>✚ Operating Voltage: 220V Single Phase AC supply</li> </ul>	01
<p><b>26. TABLE MOUNTED TISSUE PROCESSOR</b></p> <ul style="list-style-type: none"> <li>✚ with 10 Nos. reagent containers, 2 Nos. stainless steel Wax Baths and 2 Nos. stainless steel basket rotors with capacity of 1Ltr.and 2 Ltrs.</li> </ul>	
<p><b>27. SLIDE WARMER</b></p> <ul style="list-style-type: none"> <li>✚ With Hinged Cover for 24 Slides</li> <li>✚ Digital temperature control from room temperature to 75°C and LED</li> <li>✚ Anodized black working surface</li> </ul>	02
<p><b>28.SLIDE STAINING MACHINE</b></p> <ul style="list-style-type: none"> <li>✚ Modular, 44 Stations, microprocessor controlled automatic program</li> <li>✚ Multiple staining procedures with their names &amp; various parameters</li> <li>✚ Should include slide holders for 76 x22 standard slides</li> <li>✚ Detachable drip tray for cleaning</li> </ul>	01
<p><b>29. CONVECTION OVEN</b></p> <ul style="list-style-type: none"> <li>✚ Microprocessor-Controlled Gravity Convection Ovens</li> <li>✚ Interface for Monitoring and Controlling with a PC</li> <li>✚ Storage Function for Both Temperature and Time</li> <li>✚ Timer with Alarm and Error Status up to 99 Hours 59 Minutes with Delay and Continuous Function Digital Backlit LCD Display</li> <li>✚ With 3-Sided Heating Mechanism</li> <li>✚ Standard Features</li> <li>✚ High Performance 3-Sided Heating Element</li> <li>✚ Temperatures from 70°C to 230°C (158°F to 446°F)</li> <li>✚ Range Fluctuation ±0.6°C at 100°C (±2°F at 212°F)</li> </ul>	01

<ul style="list-style-type: none"> <li>✚ 2 Shelves</li> <li>✚ Over-temperature and over-current protection, sensor error detection</li> </ul>	
<p><b>30. COVERSLIPPERS</b></p> <ul style="list-style-type: none"> <li>✚ Fully automated Coverslipping Workstation</li> <li>✚ With two drawer systems and 30-capacity slide racks</li> <li>✚ Can perform H&amp;E, PAP and special staining protocols, alone or in combination.</li> <li>✚ Parameters for each reagent station can be individually set to adjust staining to the pathologist's requirements</li> </ul>	01
<p><b>31. TISSUE FLOATATION WATER BATH</b></p> <ul style="list-style-type: none"> <li>✚ Modular, Microprocessor controlled</li> <li>✚ Removable rectangular glass basin for easy cleaning</li> <li>✚ The glass basin should be illuminated by LED light</li> <li>✚ Temperature settings</li> <li>✚ corrosion resistant, stainless steel temperature probe with thermostat sensor inside that turns off when it is lifted up and re-starts when placed back into the basin.</li> <li>✚ Overall Size: 35 W x 35 D x 11.4 H cm</li> <li>✚ Interior Basin Size: 25.4 W x 16.5 D x 5.1 H cm</li> <li>✚ Maximum Operating Temperature: 75°C ±1°C (167°F)</li> </ul>	03
<p><b>32. PARAFFIN EMBEDDING STATION</b></p> <ul style="list-style-type: none"> <li>✚ Bench top, Easy to clean</li> <li>✚ 3 Ltrs. Paraffin container, temp. setting range 45°C to 70°C</li> <li>✚ Microprocessor controlled, modular</li> <li>✚ 3-liter capacity paraffin reservoir</li> <li>✚ Heated forceps warmer and illuminated paraffin dispenser</li> <li>✚ Two Module system</li> <li>✚ Cold Plate for at least 60 blocks</li> <li>✚ Compressor cooled working surface with removable stainless steel drainage tray beneath.</li> <li>✚ Tactile membrane touch-pad for easy temperature setting and monitoring.</li> <li>✚ Capacities <ul style="list-style-type: none"> <li>Paraffin Reservoir: 3 Ltrs.</li> <li>Cassette Bath Capacity: 100 cassettes</li> <li>Cassette Tray: 8 Cassettes</li> </ul> </li> <li>✚ Temperature Range of Functional Units <ul style="list-style-type: none"> <li>Paraffin Reservoir: 45°C to 70°C</li> <li>Mould Warmer: 35°C to 70°C</li> <li>Cassette Bath: 45°C to 70°C</li> <li>Working Surface: 45°C to 70°C</li> <li>Cold Plate: -10°C</li> </ul> </li> </ul>	01
<p><b>33. INSECT KILLER</b></p> <ul style="list-style-type: none"> <li>✚ Electric, Frequency: 50Hz, Voltage: 230V</li> <li>✚ Four Tubes of 24" / 20 Watts</li> <li>✚ Ceiling / Wall Mounting Type</li> </ul>	03

<ul style="list-style-type: none"> <li>✚ Dimensions: 360mm(H)x615mm(W)x115mm(D)</li> </ul>	
<p><b>34. THERMO-HUMIDITY METER</b></p> <ul style="list-style-type: none"> <li>✚ Battery-operated, self-contained, stable, and accurate</li> <li>✚ It should include Chemical- and shock resistant ABS plastic case, flip-open stand, wall mount, external temperature probe, 10 ft. (3m) cable, and “AAA” alkaline battery.</li> <li>✚ Humidity range: 25 to 95% RH, with 1% resolution and <math>\pm 2\%</math> (midrange) to <math>\pm 4\%</math> (outside midrange) accuracy</li> <li>✚ Ambient temperature range: <math>-5^{\circ}</math> to <math>+50^{\circ}\text{C}</math></li> <li>✚ Resolution to <math>1^{\circ}</math> and accuracy <math>\pm 1^{\circ}\text{C}</math> for both ambient and external temperature readings</li> <li>✚ Dual-recall (minimum and maximum) memory can be displayed or cleared at the touch of a button</li> <li>✚ Should Permit monitoring conditions overnight, weekends, or during any user-set time period</li> <li>✚ External temperature sensor and cable perform accurately under water</li> </ul>	10
<p><b>35. SOUND LEVEL MEASURING INSTRUMENT</b></p> <ul style="list-style-type: none"> <li>✚ Measurement Range (dB): 30 to 130dB</li> <li>✚ Frequency Range (Hz): 31.5 Hz - 8000 Hz</li> <li>✚ Measuring Range(dB): 30 to 130dB</li> <li>✚ Operating voltage(Volt): 2.5</li> <li>✚ Resolution (dB): 0.1 db</li> </ul>	01
<p><b>36. LUX METER</b></p> <ul style="list-style-type: none"> <li>✚ Range (Lux): 0-500, digital</li> <li>✚ with an internal memory or data logger to record and save measurements</li> <li>✚ an external LED light sensor.</li> </ul>	01
<p><b>37. EAR PUNCH</b></p> <ul style="list-style-type: none"> <li>✚ 5cm long, 2mm diameter</li> <li>✚ Thumb type</li> </ul>	02
<p><b>38. EAR PUNCH SCISSOR TYPE</b></p> <ul style="list-style-type: none"> <li>✚ Scissor Style Ear Punch, 10cm long, 1mm diameter</li> <li>✚ Should punch a hole of 2mm dia</li> <li>✚ Mouse ear punch approximately 5 cm long</li> <li>✚ Rat ear punch approximately 10cm long</li> </ul>	02
<p><b>39. EAR TAG APPLICATOR WITH EAR TAGS</b></p> <ul style="list-style-type: none"> <li>✚ Black chrome plated steel</li> <li>✚ Corrosive proof</li> <li>✚ Specified Numbering (1-1000)</li> <li>✚ Made of a monel, nickel-copper alloy</li> <li>✚ Self-piercing and self-locking</li> </ul>	02 WITH EAR TAGS
<p><b>40. FEEDING NEEDLE STRAIGHT AND CURVED</b></p> <ul style="list-style-type: none"> <li>✚ Size: 18G, 20G in different lengths</li> <li>✚ Smooth ball on the tip of needle</li> <li>✚ Cannula and balls made of AISI 304 Stainless steel</li> </ul>	06 each

<ul style="list-style-type: none"> <li>✚ Hub made from Nickel plated Brass, Luer lock</li> <li>✚ Leak proof and strong joint between hub- cannula and steel ball-cannula</li> </ul> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Needle Size</th> <th>Length (Inches)</th> <th>S.S. Ball Diameter (mm)</th> </tr> </thead> <tbody> <tr> <td>10G</td> <td>6"</td> <td>6.0</td> </tr> <tr> <td>12G</td> <td>4"</td> <td>5.0</td> </tr> <tr> <td>18G</td> <td>2"</td> <td>2.10</td> </tr> <tr> <td>20G</td> <td>2"</td> <td>2.30</td> </tr> <tr> <td>20G</td> <td>3"</td> <td>2.36</td> </tr> </tbody> </table>	Needle Size	Length (Inches)	S.S. Ball Diameter (mm)	10G	6"	6.0	12G	4"	5.0	18G	2"	2.10	20G	2"	2.30	20G	3"	2.36	
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20G	2"	2.30																	
20G	3"	2.36																	
<p><b>41. MOUSE RESTRAINER</b></p> <ul style="list-style-type: none"> <li>✚ Perspex cylinders mounted on a flat black perspex base</li> <li>✚ Flat Bottom Restrainer (Head and Tail Adjustable Type)</li> <li>✚ Weight Range (Mouse): 15g to 30g</li> <li>✚ Size: 1.5" x 4"</li> </ul>	02																		
<p><b>42. RAT RESTRAINER</b> Perspex cylinders mounted on a flat black perspex base</p> <ul style="list-style-type: none"> <li>✚ Flat Bottom Restrainer (Head and Tail Adjustable Type)</li> <li>✚ Weight Range (Rat): 125 g to 250g</li> <li>✚ Size: 2.5" x 6"</li> </ul>	02																		
<p><b>43. RABBIT RESTRAINER</b></p> <ul style="list-style-type: none"> <li>✚ Fully Adjustable Acrylic Rabbit Restrainer</li> <li>✚ Highly polished edges to prevent chafing, especially at the neck.</li> <li>✚ Non-slip surface for better footing</li> <li>✚ Curved back butt plate</li> <li>✚ Vertical head bars (adjustable)</li> <li>✚ Stainless steel pin offers several fine adjustment points for neck plate.</li> <li>✚ Autoclavable</li> <li>✚ Non-slip base pads</li> </ul>	02																		
<p><b>44. MULTI-FUNCTIONAL SURGICAL PLATFORM</b></p> <ul style="list-style-type: none"> <li>✚ Stainless steel surgical surface and polycarbonate overlay</li> <li>✚ Rechargeable far infrared animal warming pad</li> <li>✚ Bright led lighting: connects to multi-port USB power strip</li> <li>✚ Magnetic limb positioners-4 in nos.</li> <li>✚ Magnetic nose cone/intubation tubing stabilizers, (1-small and 1-large)</li> <li>✚ Elastic wire positioner (1-meter)</li> <li>✚ Detachable procedure bowl</li> <li>✚ Replacement surgical field covers-5 in nos.</li> <li>✚ Base dimensions:40.01 cm x 45.21 cm</li> </ul>	02																		
<p><b>45. ILLUMINATED TAIL VEIN INJECTION UNIT</b></p> <ul style="list-style-type: none"> <li>✚ Should be suitable for rodents weighing from 15g up to 500g.</li> <li>✚ Rechargeable</li> <li>✚ Base unit with cone, batteries and charger</li> </ul>	02																		
<p><b>46. HOT BEAD DRY STERILIZER</b></p> <ul style="list-style-type: none"> <li>✚ Working Temperature: 250°C</li> <li>✚ Sterilization Time: 2-5 sec</li> </ul>	01																		



<ul style="list-style-type: none"> <li>✚ Well size: 20cm deep x 5cm diameter</li> </ul>	
<p><b>47. ELECTRICAL NEEDLE AND SYRINGE DESTROYER</b></p> <ul style="list-style-type: none"> <li>✚ 100 W, can destroy disposable syringe and needle 18G to 28G</li> <li>✚ Collection receptacle to collect the waste</li> <li>✚ Provision of On/Off switch with pilot lamp</li> <li>✚ Shock Proof-Main circuit breaker</li> <li>✚ Portable, compact, handy</li> </ul>	01
<p><b>48. SMALL ANIMAL OPERATION TABLE</b></p> <ul style="list-style-type: none"> <li>✚ Table top: 23X33cm, SS 304 and PP legs</li> <li>✚ Four SS rods, adjustable</li> <li>✚ Folding legs</li> <li>✚ Digital temperature controller</li> </ul>	01
<p><b>49. INFRARED WARMING PAD</b></p> <ul style="list-style-type: none"> <li>✚ Reusable, with Integrated Homeothermic Control</li> <li>✚ Dimension: 20.3 cm W x 25.4cm L</li> <li>✚ Includes battery (portable/rechargeable), charger and 10 disposables, non-sterile sleeve protectors</li> </ul>	01
<p><b>50. DISSECTION BOARDS</b></p> <ul style="list-style-type: none"> <li>✚ Made of 1” thick High Density Polyethylene (HDPE)</li> <li>✚ With LED, Magnifier and Magnetic Base System</li> <li>✚ Flex arm, non-obstructive rimless magnifying glass (main lens: 2.3X, inset lens: 4.0X).</li> <li>✚ Non-skid feet for added stability</li> <li>✚ Size: 12” (L) x 9.5” (W)</li> </ul>	02
<p><b>51. STETHOSCOPE</b></p> <ul style="list-style-type: none"> <li>✚ A tunable diaphragm conveniently alternates between the low- and high-frequency sounds without turning over the chestpiece.</li> <li>✚ High-performance single-lumen tubing for excellent acoustic performance in a range of attractive colors.</li> <li>✚ Tight Soft-Sealing Eartips.</li> <li>✚ Comfortably angled, anatomically correct headset.</li> <li>✚ Non-chill rim and diaphragm</li> </ul>	01
<p><b>52. THERMAL CAUTERY SET</b></p> <ul style="list-style-type: none"> <li>✚ Autoclavable handpiece with six-foot cord</li> <li>✚ Must maintains the desired temperature during tissue contact and does not rapidly diminish.</li> <li>✚ Should include one handpiece and two each of disposable thermalite electrodes</li> <li>✚ Dimensions: 3.75" D x 6.5" W x 2.75" H</li> </ul>	01
<p><b>53. TRIMMER</b></p> <ul style="list-style-type: none"> <li>✚ Cordless trimmer and detailer</li> <li>✚ 4 comb attachments, blade oil, cleaning brush, 3 AA batteries,</li> <li>✚ #30 and #40 blades and storage base</li> </ul>	01
<p><b>54. MOUSE SURGICAL KIT</b></p> <p>Mouse Surgical Kit includes one each of the following:</p>	02

<ol style="list-style-type: none"> <li>1. Tweezer #5 Stainless steel, 11cm long</li> <li>2. Needle Holder, serrated, straight, 12.5 cm long</li> <li>3. McPherson-Vannas Scissors, straight, 8 cm long</li> <li>4. Wire Speculum</li> <li>5. Dissecting Scissors, straight, 10 cm long</li> <li>6. Iris Forceps, serrated, 10cm long</li> <li>7. Blunt probe, 14cm long, 1.0mm dia., Stainless Steel</li> </ol>	
<p><b>55. RAT SURGICAL KIT</b> Rat Surgical Kit includes one each of the following:</p> <ol style="list-style-type: none"> <li>1. Tweezer #5 Stainless steel, 11cm long</li> <li>2. Needle Holder, serrated, straight, 12.5 cm long</li> <li>3. McPherson-Vannas Scissors, straight, 8 cm long</li> <li>4. Iris Scissors, straight, 12.5 cm long</li> <li>5. ALM Self-retaining, serrated, 7 cm long</li> <li>6. Iris Forceps, serrated, 10 cm long</li> <li>7. Blunt probe, 14cm long, 1.0mm dia., Stainless Steel</li> </ol>	02
<p><b>56. VESSEL CANNULATION KIT</b> Vessel Cannulation Kit includes one each of the following:</p> <ol style="list-style-type: none"> <li>1. Tweezer #5 Stainless steel, 11cm long</li> <li>2. McPherson-Vannas Scissors, straight, 8 cm long</li> <li>3. Iris Scissors, straight, 12.5 cm long</li> <li>4. ALM Self-retaining, serrated, 7 cm long</li> <li>5. Vessel Cannulation Forceps, 10 cm long</li> <li>6. Micro Cannula</li> </ol>	02
<p><b>57. ANIMAL HANDLING GLOVES</b></p> <ul style="list-style-type: none"> <li>✚ Polyurethane Coated Gloves</li> <li>✚ Puncture resistance</li> </ul>	02
<p><b>58. SS PLATFORM TROLLEY</b></p> <ul style="list-style-type: none"> <li>✚ AISI SS 304 with 4 castor wheels with provision of locks for 2 wheels</li> <li>✚ Low floor heavy duty trolley to transport animal feed and bedding</li> <li>✚ One crossbar handle for easy pull and push</li> <li>✚ Approximate size L x W (3.5' x 2.5')</li> <li>✚ Should able to carry minimum 200 kg of weight load</li> <li>✚ All the joints should be welded with smooth glossy finish</li> <li>✚ 16-gauge Stainless steel sheet and 20mm diameter pipe</li> <li>✚ 500kg weight bearing capacity</li> </ul>	02
<p><b>59. SS TROLLEY GENERAL PURPOSE</b></p> <ul style="list-style-type: none"> <li>✚ With two trays fabricated from AISI 304 quality stainless steel sheet.</li> <li>✚ AISI 304 quality stainless steel sheet and Pipe of Size: 25mm x 25 mm.</li> <li>✚ Movable on 4 No. of Polyurethane swivel castor wheels 2 with brakes.</li> <li>✚ All the joints will be welded with Argon Arc welding with glossy finish</li> <li>✚ Overall Size: 600 (L) x 900 (D) x 900 (H) mm</li> </ul>	02
<p><b>60. SS PALLET</b></p> <ul style="list-style-type: none"> <li>✚ Rust resistance</li> <li>✚ Smooth edges</li> </ul>	10

<ul style="list-style-type: none"> <li>✚ 600kgs load bearing</li> </ul>	
<p><b>6. CROSS OVER BENCH</b></p> <ul style="list-style-type: none"> <li>✚ Should be made up of SS 304</li> <li>✚ Seating space should be such that it should accommodate three persons.</li> <li>✚ Should have shoe rack underside of the bench</li> <li>✚ Dimension: 1000 mm X 400 mm x 550 mm</li> </ul>	01
<p><b>62. SHOE RACK</b></p> <ul style="list-style-type: none"> <li>✚ S.S. shoe rack</li> <li>✚ Can hold upto 10-20 pair shoes.</li> <li>✚ Size: 1.5x1.5x5.5' Ft.</li> </ul>	01
<p><b>63. SS CONTAINERS</b></p> <ul style="list-style-type: none"> <li>✚ SS 316 with lid</li> <li>✚ Capacity 30 kgs, Air tight</li> </ul>	02
<p><b>64. SS TROLLEY WITH BASKET FOR WATER BOTTLES</b></p> <ul style="list-style-type: none"> <li>✚ Trolley for drying, storing and transporting water bottles</li> <li>✚ Should have one shelve on top and lower shelve should be in form of grilled basket</li> <li>✚ Grill should be fabricated from 12 SWG SS wire</li> <li>✚ Frame should be made up of 304 quality SS</li> <li>✚ Two crossbar handles for easy pull and push</li> <li>✚ Approximate size L X W X H (3'x 2' x3')</li> <li>✚ Should able to carry minimum 50 kg of weight load</li> <li>✚ Movable on four polyurethane swivel casters of minimum diameter of 60 mm</li> </ul>	02
<p><b>65. TROLLEY FOR TRANSPORTATION OF CAGES</b></p> <ul style="list-style-type: none"> <li>✚ AISI 304 quality stainless steel wire mesh and Pipe of Size: 25mm x 25 mm.</li> <li>✚ 4 No. of Polyurethane swivel castor wheels 2 with brakes.</li> <li>✚ All joints should be welded with Argon Arc welding with glossy finish.</li> </ul>	02
<p><b>66. TROLLEY FOR TRANSPORTATION OF ANIMAL FEED</b></p> <ul style="list-style-type: none"> <li>✚ AISI 304 quality stainless steel sheets with Cover.</li> <li>✚ 4 No. of Polyurethane swivel castor wheels 2 with brakes.</li> <li>✚ All the joints should be welded with Argon Arc welding with glossy finish.</li> </ul>	02
<p><b>67. SS SURGICAL TROLLEY</b></p> <ul style="list-style-type: none"> <li>✚ AISI 304 Grade Stainless Steel sheet of 16 SWG &amp; 18 SWG Pipe.</li> <li>✚ 4 No. of Polyurethane swivel castor wheels 2 with brakes.</li> <li>✚ Joints should be welded with Argon Arc welding with glossy finish.</li> <li>✚ Two shelves</li> </ul>	01
<p><b>68.SS SURGICAL TRAY</b></p> <ul style="list-style-type: none"> <li>✚ Stainless steel Tray with cover.</li> <li>✚ Size: 10 x 8 inches</li> </ul>	02
<p><b>69. STAINLESS STEEL DUST BIN</b></p> <ul style="list-style-type: none"> <li>✚ Pedal Operated SS Dustbin</li> <li>✚ SS 304 Construction</li> <li>✚ Capacity 20-25 Litres</li> </ul>	01

<p><b>70. SS SURGICAL WASH BASIN</b></p> <ul style="list-style-type: none"> <li>+ Two S. S. Basin with approx. 14" Dia</li> <li>+ Vertical CRCA MS tube of size 1"</li> <li>+ Basin Holder CRCA MS tube of size 3/4"</li> <li>+ Five legs base mounted on 5 cm dia castors</li> <li>+ Finish: Pre-treated and Epoxy Powder Coated</li> </ul>	<p>01</p>
<p><b>71.WIRE MESH RACK</b></p> <ul style="list-style-type: none"> <li>+ No of Layers: 4</li> <li>+ Load per Layer: 0-50 kg</li> <li>+ Material: Stainless Steel</li> </ul>	<p>02</p>
<p><b>72. STAINLESS STEEL RACK</b></p> <ul style="list-style-type: none"> <li>+ No of Layers: 4</li> <li>+ Load per Layer: 0-50 kg</li> <li>+ Material: Stainless Steel</li> </ul>	<p>02</p>
<p><b>73. Enrichment Devices</b></p> <ul style="list-style-type: none"> <li>+ <b>Bio-Homes for Rats:</b> <ul style="list-style-type: none"> <li>➤ 7 7/8" wide x 3 3/4" tall x 8 3/4" long</li> <li>➤ 2 Openings: (Top: 2 1/4" dia Front - 3 1/2" wide x 2" tall)</li> </ul> </li> <li>+ <b>BioHuts for Mice</b> <ul style="list-style-type: none"> <li>➤ 3 1/4" wide x 2 1/2' tall x 2 5/8" long</li> </ul> </li> <li>+ <b>Crawl Balls</b> <ul style="list-style-type: none"> <li>➤ Autoclavable, polycarbonate</li> <li>➤ Contaminant Screened, polycarbonate, cage washer safe</li> <li>➤ 4" diameter with three 2 1/2" openings</li> <li>➤ Amber, Red Coloured</li> </ul> </li> <li>+ <b>Mouse Tunnel</b> <ul style="list-style-type: none"> <li>➤ Autoclavable, polycarbonate</li> <li>➤ Tunnels - 3 7/8" long x 2" inside diameter; 1/8" wall</li> </ul> </li> <li>+ <b>Mouse Igloo</b> <ul style="list-style-type: none"> <li>➤ Autoclavable, polycarbonate</li> <li>➤ Amber, Red, Blue Coloured</li> <li>➤ 4 1/4" diameter x 2 1/4" tall with 3 openings - 1 1/4" wide x 1 3/4" tall</li> </ul> </li> </ul>	<p>10 each</p>

**ANIMAL HOUSE FACILITY AT AIIMS RISHIKESH ON TURNKEY BASIS**

The turnkey work includes all modifications to the built up space provided by Institute including installations of equipment, communications system, civil modifications, electrical works, plumbing works, interior decorations, HVAC works, exhaust system and all other works required for the smooth functioning of the Animal House Facility. Entire complex under scope of Turnkey work of Animal House will be made rodent/pest proof. Work shall be executed as per requirement/Satisfaction of authorized representative of Institute/Engineer-In-Charge\*\*.

**1. Spare Parts**

**1.1** The Supplier shall be required to provide any or all materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- (a) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) In the event of termination of production of the spare parts:
  - (i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
  - (ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

**2. Warranty**

- 2.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 2.2 The Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.
- 2.3 Unless otherwise specified in the SCC, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
- 2.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 2.5 Upon receipt of such notice, the Supplier shall, within a reasonable period of time, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the

Purchaser.

- 2.6 If having been notified, the Supplier fails to remedy the defect within a reasonable period of time, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.
- 2.7 Goods requiring warranty replacements must be replaced on free of cost basis to the purchaser.

### **3. Change Orders and Contract Amendments**

- 3.1 The Purchaser may at any time, by written order given to the Supplier pursuant to Clause on Notices of the GCC make changes within the general scope of the Contract in any one or more of the following:
- (a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
  - (b) The method of shipping or packing;
  - (c) The place of delivery; and/or
  - (d) The Services to be provided by the Supplier.
  - (e) The delivery schedule.
- 3.2 If any such change causes an increase or decrease in the cost of, or the time enquired for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within fifteen (15) days from the date of the Supplier's receipt of the Purchaser's change order.
- 3.3 No variation or modification in the terms of the contract shall be made except by written amendment signed by the parties.

### **4. Assignment**

- 4.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

### **Schedule of Requirements/ Technical Specifications for the Proposed Work**





- The scope involves Design, Fabrication, Procurement, Construction, Installation, Commissioning, and Testing of complete facility on a Turnkey Basis. This includes providing power backup security/safety systems, lab accessories and furniture and utilities.
- The technical details provided in this document serve as only guidelines. **Bidder is required to visit the site, take necessary inputs required before providing the bids.**
- This job shall be treated as a **total turnkey job**. The successful bidder shall be fully responsible for all functions starting from concept to commissioning and validation of the facility with all systems and shall stand guarantee for achieving the desired / rated performance. Partial / conditioned bids will be rejected.
- Client will provide Power and Water at one location near to the proposed facility.
- The complete design specifications, calculations and drawings shall be provided by the bidder in the technical part of the bid.
- The bidder shall prepare the layout plan incorporating all structures and systems that are required for the current phase of the project.
- Bidder shall prepare different options of layout plan indicating the location of various structures including entry/exit to the site, etc. Bidder shall highlight the merits and demerits of various options conceptualized by them.
- The existing/new drain line to be rerouted bypassing the proposed plan and merged with the existing drain if required.
- The concept design for the proposed facility shall be carried out taking into account the following major considerations:

#### **Basic Data Fixation**

- Studying and understanding of the details provided in this document
- Collection of all necessary details/data during pre-bid meeting, if any.
- Site inspection

#### **Layout development based on:**

- Functions / activities considerations
- Operational considerations
- Safety/Fire Escape/Emergency considerations (evacuation during emergency situations)
- Site considerations
- Operational support considerations
- Regulatory considerations

- Architectural considerations

### **Traffic / Flow Diagrams**

Based on the type of functions proposed to be carried out in the facility, following flows shall be prepared and submitted:

- Material Flow
- Personnel Flow
- Waste Flow

### **Clean Room/AHU Zoning**

This shall be applicable where clean rooms are envisaged. Deliverables shall include the following:

- Clean room classifications – area wise / room wise
- Pressure differentials – area wise / room wise
- AHU zoning

Following are the envisaged work packages under this Tender:

1. Sanitary, Plumbing, Drainage, Water Supply and Sewerage or any other work as required for operation of animal house.
2. Electrical, electronic, communication, acoustics systems and design
3. IBMS
4. HVAC, clean room partitions and integrations of all services.
5. Landscape
6. Interiors
7. Graphic design and signage
8. Procurement, Supply, Installation, Commissioning and Testing of Animal Facility Equipments and complete facility on a Turnkey Basis.

Further sections provide detailed specifications for each work package.

## **3. DETAILED SPECIFICATION**

### **3.1 CIVIL**

Scope of Civil Work shall include:

1. Design

- a. Civil, structural and architectural design
  - b. Structural calculations
2. Others
- a. Wall with Epoxy painting
  - b. Vacuum Dewatered Flooring (VDF) and Epoxy Flooring
  - c. Miscellaneous Civil Works: Masonry, internal and external finishing works, Drainage, Plumbing, and Sanitary works.
- Construction of wash tanks with stainless steel fittings.
  - Proper drainage should be there in the laboratories, wash area, sterilizing area.
  - Plumbing and provision of workbench shall be in the laboratories, wash area, sterilizing area. Water supply to labs alongwith sink and faucets, storage tank, and various fittings.
  - Double door steam sterilizer will be installed and necessary provision for water supply, drainage and waste disposal should be made.
  - Chequered tiles on ramps should be provided.
  - Fixation of curtain blinds as per approved make and material by the Engineer-in-charge or authorized representative from Institute.
  - Entire complex/shall be made pest/rodent proof.
  - Graphic and glow signage inside the facility for each room and as per designated area.
  - Inner surfaces of the brick walls in the rooms shall be cladded or covered with epoxy polyester powder coated GPSP sheets to match with the internal wall panels.
  - Wall to wall, wall to Floor Epoxy Covings shall be uniform and of smooth finish not to allow any dust / dirt accumulation.
  - The facility finished flooring shall be Zero-Zero Level, Smooth finish Vacuum Dewatered Flooring (VDF).
  - Self-Levelling epoxy flooring along with required screening shall be laid for the entire facility area if required.
  - Wire fencing around the premises as per approval and satisfaction of Engineer-in-charge or authorized representative from Institute.

**Specifications for clean room wall panels:**

Modular Wall Panels	Double skin Progressive
Type of material	Galvanised Plain Skin Pass sheet (GPSP sheet) -0.8mm thick on both sides
Finish of the panels	Epoxy polyester powder coated

Thickness of panel	50 mm
Thickness of the finish	60 microns
Dimension of the panels	1200 x 3000 mm
Sealant colour	Matching with panel colour shade
Dimensional stability	Tolerance limits of 0.5mm
Type of infill	Poly Urethane Foam (PUF)
In-fill density	40 ± 2 Kg/m <sup>3</sup>
Supporting system	On Bottom track & Top track
Impact resistance	40 kg -cm
Surface resistance	4500 gm
Differential pressure the system can handle	600 pa
Acoustic performance	Noise Reduction Coefficient of 1.0 and sound levels less than 50 db
Air leakage rate to be considered from wall and ceiling panels for fresh air calculation	No Leakage
Approvals	FM Approved

## 3.2 CLEANROOM

**3.2.1 Ceiling, Doors and Clean Room Partitions:** All internal partitions should be 50 mm thick double skin modular panels with PUF insulation. All internal ceiling panel should be 80 mm thick double skin modular panels with PUF insulation. All PUF sections shall have PPGI, 0.6mm to 0.8mm thick (based on the requirement) on either side with finish. All panel to panel corners should be provided with coving.

All doors should be in 46 mm double skin construction. View panels (red) and door closures should be provided in the doors of animal rooms and laboratories.

### 3.2.2 Modular Wall Panels

50mm thick double skin modular wall panels made of 0.8mm thick powder coated sheets on both sides with PUF of density 40±2kg/m<sup>3</sup> as infill, GI or aluminium profiles for reinforcement along the periphery, floor track suitable to accommodate the epoxy floor flush with wall panel. Joint shall be sealed with cleanroom compatible silicon sealant.

### **3.2.3 Ceiling Panels**

50 mm thick double skin totally flush walkable type false ceiling made of 0.8mm thick powder coated sheets on both sides with PUF of density  $40 \pm 2 \text{ kg/m}^3$  as infill, GI or aluminium profiles for reinforcement along the periphery, including ceiling grid for easy installation and necessary hardware. Joints shall be sealed with cleanroom compatible silicon sealant. (Load bearing capacity-150 kg/m<sup>2</sup>)

### **3.2.4 Metallic False Ceiling**

Metallic False Ceiling (Armstrong Make) or as per requirement with necessary suspension arrangement and suitable intermediate channels, cleats and expansion fasteners.

### **3.2.5 Coving**

Extruded aluminium powder coated clip on type R-70 covings for the entire wall to wall and wall to ceiling and wall to floor, 3D Internal/External corner coves.

### **3.2.6 Doors**

46 mm thick doors made with PU painted 0.8mm thick GPSP sheets on both sides with honeycomb kraft paper as infill, 1.2 mm thick GPSP powder coated door frames, hardware like SS push plate, SS 'D' handle, SS ball bearing butt hinges, Double glazed view panel of standard size, Dorma TS-71 Standard arm door closure for active leaf, concealed flush bolt for double door and provision for automatic bottom drop seal etc.

Single leaf door of size:750mm x 2100mm

Single leaf door of size:900mm x 2100mm

Single leaf door of size:1000mm x 2100mm

Single leaf door of size:1200mm x 2100mm

Single leaf door of size:1500mm x 2100mm

Automatic Concealed door bottom drop seal

1.2mm thick SS304 kick plate of height 300mm

Both side operable lock and key, Emergency exit panic latch

### **3.2.7 Fixed Glass Windows**

Double glazed fixed (non-openable) windows with 6mm thick float glass of size 1200mm x1800mm

### **3.2.8 Air Shower**

- The air shower shall provide access to and from a Cleanroom work area and shall be a high velocity, low air pressure system.
- Enclosure is prefabricated wall and roof sections with integral air duct plenums.
- The mechanical section of the air shower shall contain blower/motor units, air nozzles, HEPA filter and electrical controls.
- HEPA Filter with 99.99% efficiency down to 0.3 microns
- Pre-Filter of EU 6 Grade with efficiency of 95% down to 5 microns.
- Body Structure of grills SS 304 with No.: 4 Finish
- Air Nozzles shall be of adjustable SS 304 finish construction.
- Switch for UV light and Florescent On/Off.
- Hour meter for UV to be provided.
- Door interlocking to be provided with Electromagnetic type.
- Doors are provided with double glazed view panel.
- Timer setting and emergency exit button.
- Noise level shall not exceed 50 db.

### **3.2.9 Dynamic Pass Box**

- The pass box is used for the transfer of materials and animals in between two Cleanrooms of different cleanliness class or between Cleanroom and non-Clean room.
- Door interlocking function is a part of the system which maintains the condition that one door only can be opened at time. 2-Door Interlocking system complete with no touch sensors and accessories.
- Pass boxes shall be of Dynamic type with inbuilt HEPA filter and UV Light.

### **3.2.10 Double Door Sterilizer**

A high pressure horizontal rectangular sterilizer of size 600x600x1200 mm double hinged door suitable for operation on electricity with load of 36KW shall be provided by the bidder.

## **3.3 CHANGE ROOM**

A change room has to be created with a garment cabinet, storage cabinet for personal protective materials and cross over bench.

**3.3.1 Garment Cabinet/Cubicle:** Garment Cubicle is suitable for storage of clean apparel for Cleanrooms having HEPA filter.

- HEPA Filter with 99.99% efficiency down to 0.3 microns.
- UV Germicidal tube.
- SS 304 with No.: 4 Finish
- Switch for UV light and Florescent On/Off.
- Hour meter for UV to be provided.
- Doors should be provided with double glazed view panel.
- Hanger rod with hangers and shoe rack provided.

### **3.3.2 Cross Over Bench**

- Cross over bench is used to store shoes and take support to change cleanroom dress.
- SS 304 No: 4 finish.
- Easy to store shoes and slippers in the individual rack.
- Easy to clean.

Clean room Validation shall be carried out at "As-built" conditions for the Facility before handover and "at rest" when clean rooms are equipped with animal cages, furniture and equipment and laboratory animals. Third part validation agency shall be engaged by the successful bidder at bidder's own cost in consultation with the client (AIIMS). However, the Validation plan shall be submitted in advance by the contractor along with proposed validation agency names and credentials for selection by AIIMS.

## **3.4 HVAC**

HVAC system is intended to maintain and control inside design conditions viz., Temperature, and Relative Humidity in the enclosed space. HVAC system would be designed as per applicable standards by selecting suitable Air Changes, Air Velocities, etc. HVAC system design shall include Cooling and heating loads and subsequent selection of High side equipment (Air cooled condensing units...) and Low side equipment (AHU, Humidifiers, Ducting...) as applicable. The bidder should provide 100% redundancy for the proposed and existing facilities. Accordingly, the relocated AHU area should be designed along with piping and cables etc.

**All rooms/HVAC system shall have exhaust fans to facilitate carrying out of fumigation processes.**

- Clean corridor will have highest air pressure followed by clean rooms (animal rooms) and service corridor to ensure unidirectional flow of air. Change rooms, clean store, autoclave downstream area and feed store are also considered as clean areas. These areas will have



HEPA filters at terminal with positive air pressure.

- Service area/ washing area will be under high moisture and noise. This area does not need cooling but should have high ventilation rates (ACPH 40 or more). Animal room with open type/conventional cages shall be provided with 100 % once through fresh air. i.e. these rooms will be provided with air conditioned supply and there will be no return air from these rooms. Air will be directly exhausted out after treatment.
- Animal room with IVC cages will be provided with HEPA filtered air for IVC ventilator. Recirculation of room air mixed with fresh air is allowed in rooms with IVC's. Exhaust from IVC shall go out of the building after treatment. Slightly more than the overall exhaust volume of all the room IVCs shall be added as fresh air in the AHU inlet to keep the room positive pressured.
- All labs, Surgery room will be conditioned through a separate AHU to avoid the mixing of any odour with animal room. These rooms will not house animals round the clock and all the procedures will be carried out under containment (Biosafety cabinets/fume hoods) hence HVAC suitable for a laboratory condition is preferred. Surgery room should have terminal HEPA at supply air duct.

Area	Relative Pressure	Proposed ACH of Fresh air
Clean corridor	+++	-
Animal Rooms	++	5-6 ACH of fresh air for rooms with IVC system. 100% fresh air with 10-15 ACH for rooms with conventional type caging.
Service corridor	+	Only exhaust

### 3.4.1 Design Data

Environmental Conditions for Design of HVAC Systems shall take into account the temperature, humidity, etc. in the site during all seasons.

HVAC system shall be designed as per the specified ambient conditions, Client Inputs, designer assumptions and Standards.

### 3.4.2 AHU Zone Classification:

AHU zone classification shall be based on following major consideration:

- Cleanliness classification
- Laboratory requirements

- Cross-contamination issues
- Fumigation philosophy
- Comfort conditions
- Room Pressures

AHU zoning shall be such that it shall be possible to operate a part of the laboratory or all the rooms in the laboratory depending upon the work load at any given time. Bidders may consider the options of providing common AHU zone wise with Variable Frequency Drives (VFD) or individual AHUs room wise, with or without VFD as the case may be.

All the air handling systems shall be of re-circulating type with provision to mix treated or untreated fresh air and re-circulated air. Wherever the operations require exhaust, provisions shall be made for 100% exhaust.

**3.4.3. AIR HANDLING UNIT (AHU) if required, a site visit is necessary to study existing facility design layout before quoting the bid.**

- All air handling units meant for clean room applications shall be of double skin type only.
- AHUs shall be floor mounted and shall be placed in the plant room within the boundary of designated project site.
- AHUs shall have smooth inner surfaces made out of panels with internal covings.
- The unit shall be duly insulated and provided with drain pans, filters, cooling coil heating coil etc.
- All double skin AHUs shall have an outer casing made of sandwiched panels with polyurethane foam acting as a thermal barrier for better insulation. The entire unit shall give a sweat free operation.

**3.4.4 Direct Expansion Condensing Unit (Chilling Unit) if required**

- Air Cooled condensing unit comprising of Scroll type compressor with necessary fittings and isolators shall be considered.
- Condenser coil would be made up of copper tubes and Aluminium fins.
- Propeller type condenser fan with direct driven motor are used to circulate the air through condenser. Forced air will reduce the refrigerant temperature from high to low hence condensation will take place properly.
- Enclosure with powder coated panels and integral control circuit are fitted in the system.

- The unit is suitable to operate with 415V/ 3ph/50Hz power supply. Copper piping is used for connecting the condensing unit and AHUs, refrigerant will pass through Expansion valve and filter drier.
- Refrigerant copper tube with nitrile rubber insulation for suction line would be provided to avoid the cooling loss.
- Powder coated metallic stand for mounting outdoor condenser units with first charge of refrigerant, oil & necessary controls. All metallic fixtures should be powder coated.

### **3.4.5 GI Ducting if required**

- All ducts shall be factory made ducts using makes as given in the make list.
- All ducts, dampers and accessories shall be galvanized steel and rectangular.
- The galvanized ducting shall be as per SMACNA standards. All the transverse duct joints shall be with MS iron angle flanges duly painted / galvanized.
- Supply and return air ducts should be fabricated out of GI class VIII sheets of LFQ quality.
- Ducts shall be reinforced length wise by cross bracing or for larger ducts by angle iron. Ducts shall be supported at distances not exceeding 2.4 m. GI fasteners to be provided along the flanges at pitch not exceeding 125 mm. Angles to be riveted to Al. / GI sheet at intervals not exceeding 100 mm.
- All angle, rods and other members, materials, components, etc, used for supports shall be provided of GI materials only.
- Aerofoil design opposed blades type Volume control dampers with suitable control provisions.
- Fire Dampers with 1.6 mm thick sheets with fire rating of minimum 1.5 Hours.

### **3.4.6. Thermal Insulation if required**

- Supply Air ducts shall be insulated with 19 mm thick cell elastomeric nitrile foam covered with factory laminated UV protected aluminium
- Return Air ducts shall be insulated with 13mm thick cell elastomeric nitrile foam covered with factory laminated UV protected aluminium.

### **3.4.7 Exhaust System**

- Suitable exhaust system shall be considered for areas where 100% exhaust is required.
- AHU for exhaust system shall be 100% redundant.
- The exhaust system shall use fan from the makes as provided in this document.

**Note: HVAC system described above is only for reference. Actual design shall need to take into account the local conditions, any other special needs that may be applicable to the site, etc.**

Scope also includes test, adjust and balancing (TAB) of the entire system.

### **3.5 ELECTRICAL**

**The bidder shall design, supply, install, test and commission the appropriate rating LT distribution panel with a scope of 25% future electrical load. Design of LT panel shall be with appropriate incomer and outgoings to cater all electrical requirement of animal facility.**

- Complete electrification of the Animal house shall include Power distribution, electrification of utility equipments such as AHUs, condensing units, etc., and earthing shall be in scope of the bidder.
- The bidder shall submit the proposed electrical distribution plan (Single line diagram) for the evaluation in the technical bid.
- Following factors may be considered tentatively while designing electrical load for general instruments / equipments.

Loading Factor: 60%

Diversity Factor: 60%

Spare capacity for future additions on current plan load: 30%

Provisions for one additional electrical load in future

- All socket outlet points to be segregated in to Emergency (with Backup power from DG set), Ordinary (On Grid- RAW power supply only), stabilized supply and UPS.
- Lightings should be on Emergency supply feeders with Changeover facility between Emergency & Ordinary supply. The changeover facility shall be by both auto and manual modes.
- Regular natural light cycles of 12/12 hours' light/dark are suggested. Variations in the light dark cycles to mimic seasonal changes could be considered.
- Auto Switch ON Emergency Lights are to be provided at critical locations.
- The entire Single-phase load to be evenly distributed to three-phase distribution system.

- All wiring shall be concealed in heavy-duty metallic conduit with PVC insulated FRLS (Flame Retardant Low Smoke) copper conductor wires of ISI conforming and approved make only.
- Earth wires also shall be FRLS PVC insulated flexible copper conductor of recommended sizes to be laid with circuit/sub-main/main wiring in the same conduit.
- Neutral conductor size of UPS to be of same size of Phase wire.
- Modular type with flame proof switch/sockets/plates/boxes/Telephone outlets/LAN/Computer outlet of matching aesthetic and approved brand to be used. Clean Room compatible accessories to be used for Clean room application.
- All Luminaries/Light fixtures of only Standard LED type and Approved make with Energy Efficient Lamps. The type of Light Fixtures (Direct/Indirect/Wall washers/Focus/Dark light louvers/Down lighters/Study light etc.) to be planned suitable for application of the room. In the clean room, Clean Room compatible luminaries shall be installed.
- Provision should exist for adjusting the lux intensity of lights in the animal rooms.
- All DBs/MCBs should be metallic double door concealed to the wall and approved make only.
- In TP DBS, Four Pole MCB and SP DB, Double pole MCB to be provided in Incomer.
- As far as possible, all circuit to be protected with MCBs and MCCBs. The use of SFU / Fuses to be avoided.
- The raw power to the proposed animal house will be sourced from the substations identified by AIIMS. The bidder shall have to incorporate an on-load change over facility in the PCC panel for the proposed power sources.
- All PCC / MCC to be Flush type, free standing, with MCCB, MCBs and adequate indicating, metering and protective equipment.
- Electrical Panels shall have components from approved makes only.
- The Electrical Panel builder shall be CPRI approved.
- The bidder shall supply and lay the suitable power cable from the substations of AIIMS to the animal house and terminate at both ends.
- Suitable copper plate earthing with 100% redundancy for cleanrooms, equipments shall be under bidder's scope.
- The plant room should accommodate the incoming power and distribution PCC panel, UPS with batteries, UPS distribution panel, BMS panel, MCC panel and AHUs.
- All functional areas (animal rooms and experimentation area) will have minimum 250- 325 lux lighting level at 1-meter height from flooring. (Lighting will be BMS controlled)

### **Internal Light Points, Power Points, Fittings and Fixtures**

- The Electrical fittings and fixtures shall be sealed type, explosion proof, capable to withstand chemical exposures during laboratory fumigation. The light fixtures shall be surface mounted type. The switches, sockets and light fixtures shall have IP 55 or better protection. The electrical switches and sockets shall be modular type.
- All the electrical points, power points, light and power sockets shall be fully wired with switches, sockets, connections complete in all respect as required. Only multi-stranded copper conductor wires shall be used for light and power wiring. The conduit work for light points, power points, data points, FDA system etc., shall be concealed type and shall be done in rigid PVC as per IS specifications. All the conduit pipes shall be sealed to prevent ingress of air.

### **Communication Facility (Intercom & LAN)**

- The administrative area shall be provided with Data and Voice points for communication. The system shall be complete with required conduit and wiring. The incoming voice lines and internet connection for the facility shall be procured and provided by AIIMS Rishikesh. The Data and Voice points shall be fully wired with CAT5 cable complete with output terminals.
- A suitable EPABX shall be provided for upto 8 incoming lines and 10 outgoing lines for the laboratory for internal communication. All the rooms shall be provided with intercom connection and telephone instrument set.

### **3.6 BMS**

Building Management System (BMS) shall be able to centrally monitor, automate and control all functional parameters of the facility. It shall combine the latest state of the art technology with simple operating techniques and shall be used to control, manage alarms and reports and monitor the building services installations.

- Bidder shall decide the location of centralized control room in consultation with AIIMS. The centralized control room shall house BMS panel, UPS backup system, computer furniture, and a Central control PC with customized software for remote operation of facility through BMS.
- CCTV and Access control systems shall be provided by bidder.
- The functions (control/monitoring/integration) to come under the purview of integrated Building Management System shall include the following:

- Cleanroom Parameters
- AHU Parameters
- Automatic variation of the Air flow/coolant flow parameters to maintain set cleanroom temperature and relative humidity
- Prevention of unauthorized or unwanted accesses
- Error diagnosis system
- Alarm handling
- Data processing (historical) related to alarm handling
- Printing

### **Computer Networking inside the Animal House Building**

Administration area and all the laboratories need to have computer networking points.

- Passive: Supply of materials and works related to laying and installation of CAT-6 cable along with other passive components in coherence with the existing Campus LAN of AIIMS for the required number of information outlets will be included in current scope.
- Active Components: Supply of switches (at least one Distribution Switch and required number of Access Switches) and Wireless Access Points compatible and coherent with the existing Campus LAN should be considered.



**4. LIST OF COMPONENT MANUFACTURERS (CIVIL/ELECTRICAL)**

<b>No.</b>	<b>Descriptions</b>	<b>Makes</b>
1	Cleanroom ceiling system (FM Approved)	Klenzaid/ Iclean /nicomac
2	Flush Double Glazed Cleanroom View panels	Klenzaid/ Iclean / nicomac
3	Emergency doors	Shakti Met-door/ Iclean
4	Cleanroom Doors	Shakti Met-door/ GMP/ Iclean
5	Antistatic Epoxy flooring	Fosroc / Apoorva / Cipy
6	HEPA filter	AAF/ Camfill / Freudenberg
7	Cleanroom Lighting (LED)	Philips / Wipro/NTL
8	Air shower	Terra Universal / Iclean
9	Pass boxes	Terra Universal/ Iclean
10	Garments cubicle	Terra Universal/ Iclean
11	Cleanroom power sockets/switches	MK Electric/GE-electric/Legrand
12	Air handling units	Iclean/ Flaktwoods/Sagar/Edgetech
13	AHU fan blower	Nicotra / Kruger/
14	Fire / Smoke dampers	Cary aire / Air master / System Air
15	Damper actuators	Honeywell / Siemens / Belimo
16	Dampers/Diffusers/ Grills-Duct accessories	Cary aire / Air master / System Air
17	Factory made Ducting	SAIL / JINDAL / TATA
18	Insulation duct / pipe	Trocellen / K -Flex / Supreme
19	Exhaust system Blowers	Kruger / Flaktwoods / ebm-NADI
20	Exhaust ducting	Durapipe/Finolex
21	Fire detection & suppression systems	Honeywell / Siemens/Jhonson
22	BMS, Access control	Honeywell/Siemens
23	Temperature / RH / Pressure sensors	Honeywell/Siemens/Jhonson
24	Power control cables	Finolex/ Lapp / Polycab / Havell
25	Electrical Panel Components (Panel building by CPRI approved builder)	Legrand / ABB/Siemens / L&T
26	Electrical Wires	Finolex/ Lapp / Polycab / Havells
27	MCCB with socket (3 phase)	Legrand/ ABB/Siemens
28	Lighting DB / Power DB	Havells/Legrand
29	Electrical Switch gear MCB / VCB	Legrand / ABB/Siemens

30	Glands	Comax / Rotomax / Flu-con
31	Lugs	Dowell / Jainson
32	Cable trays	MEK / Indiana
33	Clean Room wall panels (FM Approved)	Iclean / Klenzaid
34	Office furniture in lobby and conference rooms	Godrej
35	Split Air conditioners	LG/Hitachi
36	Direct Expansion Condensing Unit (chilling units)	Carrier/Blue star
37	Butterfly valves/balancing valve in chilling water circuit	Advance make
.38	Non-return vavles in the chilling water circuit	Sant
39	Expansion joints in the chilling water circuit	Cori

**5. LIST OF MANUFACTURERS (ANIMAL FACILITY EQUIPMENTS)**

1.	IVC system for Mice	Citizen/Tecniplast/LabProducts
2.	Rabbit Cages	Citizen/Vishnu Traders/Techniplast
3.	Metabolic Cage System	Citizen/Vishnu Traders/Techniplast
4.	Bedding Disposal System	Citizen/Tecniplast/AllenTown
5.	Animal Change/Work Station	Citizen/Tecniplast/ AllenTown
6.	High Speed Rectangular Horizontal Steam Sterilizer Double Door	Nat Steel/Systec/Steris/Precision
7.	Transport Boxes for rodents	Vet-tech/Sigma-Aldrich/Kent
8.	Disinfection Machine/Fogger/Fumigator	Galtronindia/Aerojet Steriz/Epizone
9.	Automatic Scrubber Drier/ Floor Mopper	NACS/Aman Cleaning Equipments/ Selden
10.	RO System	EurekaForbes/AquaSure/Kent/Aqua Guard
11.	Air Curtain	Labarad/Panasonic/ Waiometra
12.	Shoe Cover Dispenser	PB Statclean/Bajaj/Euronix
13.	Research Anesthesia Assembly	VetEquip/VetTech/Parkland Scientific
14.	Smart Box Auto CO <sub>2</sub> Euthanasia assembly	Euthanex/NextAdvance/E-Z/Quietek
15.	CO <sub>2</sub> Manual Euthanasia Assembly	Euthanex/NextAdvance/Orchid
16.	Micro-Centrifuge Machine	Fisher Scientific/AXIVA/Labtron/ Parkalnd
17.	Digital Weighing Scale 1g-3kg	Kent/Shimadzu/Sartorius
18.	Digital Precision Weighing Balance 0.01mg-220g	Shimadzu/Sartorius/Aczet
19.	Laboratory Microscope	Nikon/Olympus/Labtron
20.	Stereomicroscope	Olympus/Labtron/ Fisher Scientific
21.	Vortexer/Cyclomixture	Braintree/Axiva/Labtron
22.	Horizontal Deep Freezer -20°C	Fisher Scientific /Labtron/Arctico
23.	Refrigerator 185 L	LG/Godrej/Whirlpool
24.	Laboratory Refrigerator	Fisher Scientific /Labtron/Arctico
25.	Manual Microtome	Leica/Ted Pella/ SM Scientific
26.	Automated Vacuum Tissue Processor	Leica/Ted Pella/ SM Scientific
27.	Slide Warmer	Leica/Ted Pella/ SM Scientific
28.	Slide Staining Machine	Leica/Ted Pella/ SM Scientific

29.	Convection Ovens	Leica/Ted Pella/ SM Scientific
30.	Automated Cover Slippers	Leica/Ted Pella/ SM Scientific
31.	Tissue Flootation Water Bath	Leica/Ted Pella/ SM Scientific
32.	Paraffin Embedding Station	Leica/Ted Pella/ SM Scientific
33.	Insect Killer	Bajaj/Ascone/Avro
34.	Thermo-cum-hygrometer	Orchid/PCE Instrument
35.	Sound level measuring instrument	Orchid/PCE Instrument
36.	Lux Meter	Orchid/PCE Instrument
37.	Ear Punch-Thumb Punch	Orchid/Citizen/Vishnu Traders
38.	Scissor Ear Punch	Orchid/Citizen/Vishnu Traders
39.	Ear Tag Applicator with Washer	Orchid/Citizen/Vishnu Traders
40.	Feeding Needle straight/curved	Orchid/Citizen/Vishnu Traders
41.	Mouse Restrainer	Sigma/Orchid/Braintree
42.	Rat Restrainer	Sigma/Orchid/Braintree
43.	Rabbit Restrainer	Orchid/Citizen/Vishnu Traders
44.	Multi-Functional Surgical Platform with Magnifier Glasses and LED lighting	Kent Scientific/Braintree/AIMS
45.	Illuminated Tail Vein Injection Unit	Kent Scientific/AIMS
46.	Hot Bead Dry Sterilizer	Kent Scientific/Braintree
47.	Electrical needle and syringe destroyer	Kent Scientific/Braintree
48.	Small Animal Operation Table	Orchid/Vishnu Traders
49.	Infrared Warming Pad	Kent/AIMS
50.	Dissection Boards	AIMS/Kent
51.	Stethoscope	Kent Scientific/Braintree
52.	Thermal Cautery Set	Geiger/Kent Scientific/Braintree
53.	Trimmers	Kent Scientific/Braintree
54.	Surgical Instrument Kits for Mice	Kent/Braintree
55.	Surgical Instrument Kits for Rats	Kent/Braintree
56.	Mouse and Rat Vessel Cannulation Kit	Kent/Braintree
57.	Animal Handling Gloves	Kent/Braintree
58.	SS Platform Trolley	Vishnu Traders/Orchid/Citizen
59.	SS Laboratory Trolley with two shelves	Vishnu Traders/Orchid/Citizen
60.	SS Pallet	Vishnu Traders/Orchid/Citizen
61.	SS Cross Over Bench	Vishnu Traders/Orchid/Citizen

62.	Shoe Rack	Vishnu Traders/Orchid/Citizen
63.	SS Containers with lid for Feed Storage with SS Scoop	Vishnu Traders/Orchid/Citizen
64.	SS Trolley with basket for transport of bottle	Vishnu Traders/Orchid/Citizen
65.	SS Trolley for transfer of cages	Vishnu Traders/Orchid/Citizen
66.	SS Trolley for transfer of feed	Vishnu Traders/Orchid/Citizen
67.	SS Surgical Trolley	Vishnu Traders/Orchid/Citizen
68.	SS Surgical tray	Vishnu Traders/Orchid/Citizen
69.	SS dustbin with pedal	Vishnu Traders/Orchid/Citizen
70.	SS Surgical hand wash basin	Vishnu Traders/Orchid/Citizen
71.	SS Wire Mesh Rack	Vishnu Traders/Orchid/Citizen
72.	SS Rack	Vishnu Traders/Orchid/Citizen
73.	Enrichment Devices	Vishnu Traders/Orchid/Citizen

**Bidders quoting for equivalent makes must enclose a compliance chart depicting the technical comparison of the products of the above make and the quoted make failing which the bid may be treated as non- responsive.**

**GENERAL TECHNICAL SPECIFICATION APPLICABLE TO ALL INSTRUMENTS**

These general instructions should be made available to each instruments in point wise manner and mentioned in compliance statement along with specific technical specification as mentioned in subsequent pages.

Compliance statement must in following format (General and Specific):

Name of instrument:				
Number of instruments offered:				
Model & Make:				
Point or serial no. of the specification as mentioned in the technical specification of the tender document	Details of the technical specification as per the invitee document	Specification offered by the bidder	Compliance according to bidder or not	Page no of supporting document

- I.** Manuals: Operation, maintenance and part list with detailed specifications must be provided in original (no photocopy will be entertained).
- II.** Bidder must agree to provide onsite operational and maintenance training to the two laboratory staff on mutually agreed date with the indenting department.
- III.** Supplier must agree to provide IQ, OQ and PQ certification at the time of installation or as per the convenience of end user of the institute.
- IV.** Must be compatible with Indian electrical supply of 220V, 50/60Hz supply and compatible power plugs.
- V.** Should be attached to suitable power supply provided for laboratory and other work area such that it provides uninterrupted power supply for critical instruments as decided by the end user. (Necessary compatible online UPS line for such instruments must be able to provide at least 30 minutes backup time)
- VI.** A half yearly essential service visits by service engineer has to be provided by vendor/company which may include training and up gradation of technicians, veterinarian and faculty and calibration and maintenance of instrument. (with or without complaint visits). In case of any fault in instrument, the said instrument needs to be repaired urgently as mentioned below: During the operation and maintenance period, it is expected that the Contractor shall attend the breakdown and rectify the fault/s promptly with minimum possible downtime. The maximum permitted DOWNTIME shall be 48 Hours from the time the intimation is given by the user. If the repair/rectification is not carried

out by the Contractor within the maximum permitted DOWNTIME, the Employer shall charge penalty, for each breakdown instance, as follows:

- VII.** Above 48 hours and Below 96 hours: Penalty of 1% of the annual warranty charges/CMC Above 96 hours & Below 192 hours: Penalty of 1.5% of the annual warranty charges/CMC Above 192 Hours: Penalty of 2% of the annual warranty charges/CMC and get the work repair/rectification done from third party at the Contractor' s Risk and Cost
- VIII.** A five-year comprehensive warranty with spares and accessories to be provided by the bidder.
- IX.** A CMC for next 5 years with spares and accessories needs to be included in quote.
- X.** Complete price should be quoted for different consumables/spare parts which will be used in future in the machine. These prices should be freezed for subsequent 10 years and in case of reduction of price the lower price to be communicated and to be charged by the supplier. Undertaking must be given by the supplier in this regards.
- XI.** All material, manpower etc. required for the successful installation and regular maintenance of instrument is to be provided by the bidder to keep instrument working >95% time every year.
- XII.** Site selection needs for installation of equipment needs to be coordinated with the indenting department.
- XIII.** Information regarding installation in India and satisfactory service and maintenance be provided with complete address and telephone contact details of end users for each instruments.