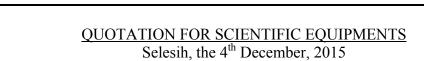
# OFFICE OF THE DEAN COLLEGE OF VETERINARY SCIENCES & ANIMAL HUSBANDRY CENTRAL AGRICULTURAL UNIVERSITY SELESIH,AIZAWL,MIZORAM.



No.P-7/CVSC/CAU/NTP/2015/ /: Sealed quotations are invited for supply of the scientific equipment for different Departments and TVCC. The last date of submission of quotation is11.01.2016at 1.00 pm at office of the Liaison officer,CAU, New Delhi and 21.01.2016 at 1.00 at the office of the Dean, College of Veterinary Sciences & A.H., Selesih, Aizawl, the quotations will be opened on 21.01.2015at 3:00pm in the Conference Hall by the college purchase committee. The tender documents can be downloaded from the College website *viz.* evsceauaizawl.edu.in.

(D.Kathiresan) Dean College of Veterinary Sciences & Animal Husbandry Selesih, Aizawl: Mizoram

## TERMS AND CONDITIONS FOR PURCHASE OF EQUIPMENT

- 1. Rates quoted shall clearly mention taxes/levies, packing, forwarding, freight, transit insurance, octroi, delivery charges, installation and demonstration at College of Veterinary Sciences & Animal Husbandry, Selesih as per quoting instructions. This Institution is exempted from Excise & Custom duties; hence, should not be included. If necessary it may be mentioned separately. The DSIR, Govt. of India Registration Certificate for Excise & Custom duties exemption along with requisite documents will be provided at the time of purchase.
- 2. All the equipment shall be delivered in India for payment in Rupees in India. Only equipment of reputed brands and dulyregistered (Registration certificate to be enclosed) shall be quoted. Quotations for unregistered brands/assembled equipments will be summarily rejected.
- 3. 2 % Earnest Money deposit (EMD) forms an integral part of the tender without which the tender will be invalid. The EMD will be returned to unsuccessful bidders after the purchase decision is taken.
- 4. Copy of ISO/Quality Assurance Certificate, quality control certificate, authorized dealership certificate/Registration certificate with DGS&D and as applicable from the manufacturer has to be furnished. Detailed specifications for the quoted equipments should be given in the quotation and should be supported by product brochure of the manufacturer.
- 5. Delivery, installation and demonstration of equipments has to be made at the Institution, which is 12 Km. short of Aizawl, located on Aizawl-Sihphir-Silchar Road. No responsibility will be taken to receive consignments from any other agency.
- 6. Consignee: Dean, College of Veterinary Sciences & A.H.(CAU), Selesih, Aizawl 796 014, Mizoram.
- 7. Rates quoted should be valid for at least one year from the last date for receipt of the quotations. The quotations should be accompanied with manufacturer's consumer price list in effect for the said period & in no case should exceed the listed price. However, if there is decrease in the manufacturer's price on the date of supply (billing date) the same has to be passed on to the Institution if the brand is selected for purchase based on open tender.
- 8. Supply must be completed within 45 days from the date of issue of supply order unless otherwise specified; failing which the order may be cancelled.
- 9. No advance payment will be made prior to delivery and installation of the equipments/appliances to the full satisfaction of the indenter.
- 10. The equipment/appliances should be meeting the specifications in the tender document and any deviation in that matter may result in rejection.
- 11. At least one-year warranty should be provided from the date of delivery and installation and free service should be provided at the Institution during this period, if necessary.
- 12. Supply will be made at supplier's risk and any damage/breakage before the installation/delivery has to be replaced by the supplier without any extra cost.
- 13. In case of poor quality and unsatisfactory operation of equipment/appliances the Institution reserves the right to reject them at the time of delivery and installation.
- 14. The dealer/manufacturer has to provide manufacturer's quality control/test certificate of each equipment/appliances without fail at the time of supply.
- 15. After successful execution of a supply order payment will be made within 30 days.
- 16. The Institution authorities reserve the right to accept/reject any or all of the tenders received without assigning any reason there of. In case of any dispute, the decision of the University authorities shall be final and binding.

# DECLARATION

I have gone through the above terms and conditions and agree to abide by them in the event of receipt of a supply order from the Institution based on tender. I understand that in the event of tender being quoted is not as per the quoting instructions; it may invite rejection of the tender.

| Date:  |                         |
|--------|-------------------------|
| Place: | Signature of the Bidder |

#### QUOTING INSTRUCTIONS.

- 1. No clear mentioning of packing, forwarding, freight and insurance charges in the tender will be considered as incomplete; and will be rejected.
- 2. Optional accessories offered by the bidder would not be taken into consideration for the evaluation of bid.
- 3. Alternate offer is not permitted. In case of quoting of more than one offer, only the lowest one will be consider as valid one and the others will not be considered for evaluation of bid.
- 4. Quote must include all accessories asked for by the indenter. If the accessories are not detailed in the product brochure it must be clearly mentioned in the tender along with their price. Otherwise it invites rejection on the ground of incomplete quote.
- 5. Expected working life of the equipment is an important specification and may clearly be mentioned in the quote for all items.
- **6.** Only certified, legible copies of valid dealership/ manufacturer certificate will be entertained. If the copies are not legible it may invite rejection.
- 7. Only original/ certified, legible copies of product brochure containing complete "technical specifications" will be entertained. In case, the product brochure does not give the detailed technical specifications, a separate sheet giving complete technical specifications and duly signed by the bidder may be enclosed. The technical specifications must include details on capacity, functionality of the equipment, expected working life of the equipment, specifications of mechanical parts, optical parts, battery, battery life etc. Quote without product brochure and the product brochure without detailed technical specifications invites rejection.
- 8. The tenderer shall mention whether he has supplied identical or similar equipment to any ICAR/ CAU laboratories/institutions in the preceding three years. If yes, details of such supplies and their price shall be mentioned along with the item quoted.
- 9. Only valid DGS&D registration Certificate for the items manufactured and in the approved list may be enclosed.
- 10. It may be noted that rates should be quoted keeping in view the specific requirements for installation of the equipments. The College will not provide anything except for the space, water and electricity connections.

#### **How to Quote?**

- 1. The complete quote for equipment must clearly mention the following parts
  - a) Unit price of the equipment (conforming to complete specifications including accessories) as mentioned in the tender document.
  - b) Institutional discount offered for equipment (including accessories as demanded by the indenter). If no discount is offered it shall be mentioned as nil.
  - c) Taxes/duties/levies/surcharges of Govt. of India, state government etc. (This institution is exempted from excise duties and custom duties).
  - d) Packing, forwarding, freight, insurance charges for the items quoted. If no extra charges are required it shall be mentioned as nil.
  - e) Other charges, if any.
  - Total prices for F.O.R Selesih. (Add all the above from "a" to "e")
  - g) Prices of optional consumables or accessories or spares.

## All above items from "a" to "g" shall form the complete quote.

- 2. The bidder shall quote equipment wise, clearly mentioning the Item serial no. and Item Code no. mentioned in the tender document. Each quote shall be complete in all respects fulfilling complete specifications including accessories mentioned by the indenter and all the terms and conditions.
- **3.** Warranty offered for the equipment.
- 4. Terms of Delivery.5. Delivery schedule.
- 6. For all the items the bid shall be submitted item wise in separate envelops with clear superscriptions (as required for each item) along with item serial no. and item code no. as per tender document allput together in a single envelope with superscription as instructed in general instruction no. 1.
- 7. All the bidders shall give information on availability of Annual Maintenance Contract/ After Sales Service for F.O.R Selesih.
- 8. Only signed terms and conditions page need to be returned with the tender. Detailed list of equipment and other specifications need not be sent back.

## **General Instructions:**

1. Tender shall be submitted in Sealed Envelop superscripted Tender No. P-7/CVSc/CAU/NTP/2015/ dated04.12.2015 and the last date for submission is 11.01.2016 up to 1.00 pm and 21.01.2016 up to 1.00 p.m. at New Delhi and Aizawl, respectively. The duly filled Tenders in all respects must reach either:

The Liaison Officer, Central Agricultural University, Room no. 202, KrishiAnusandhanBhavan-II, Pusa campus, New Delhi-110 012 (On or before 11.01.2016 up to 1.00 pm)

Or

The Dean,
College of Veterinary Sciences & A.H.
Central Agricultural University
Selesih, Aizawl-796014
Mizoram.
(On or before 21.01.2016 up to 1.00 p.m.)

- 2. The Tender shall be sent only by registered post or Speed Post.
- 3. The Institution will not be responsible for late/ delayed delivery of Tender.
- 4. The Tender shall be accompanied with following documents.
  - i) Tender fee for an amount of Rs. 1000/- (Rupees One Thousand) only in the form of Demand Draft drawn in favour of the Dean, College of Veterinary Sciences & AH, Selesih, Aizawl payable at State bank of India, Bawngkawn Branch (Branch Code: IFSC CODE SBIN0007059), Aizawl.
  - ii) Copy of the registration Certificate of the manufacturer/authorized dealer.
  - ii) Copy of manufacturing license of manufacturer/authorized dealership Certificate.
  - iii) Copy of last tax returns certificate of the tenderer.
  - iv) Product technical specifications brochure in support of the items quoted.
  - v) Copy of quality assurance / quality control certificates/DGS & D registration certificate.
  - vi) Terms & conditions form duly signed.
- 5. Opening of Tender documents: 21.01.2016 at 3.00 p.m.
- 6. **Venue:** Administrative Block, College of Veterinary Sciences & Animal Husbandry, Selesih, Aizawl, Mizoram.

| Tecl | Technical Specification: |                  |  |  |
|------|--------------------------|------------------|--|--|
| Sl.  | Item                     | Item             | Specification  |  |
| No.  | Code.                    |                  |  |  |
|      | No                       |                  |  |  |
| 01   | VAN-01                   | High Resolution  | A. <u>Camera</u> : 14MP Digital CMOS imaging device ( Seolux                                       |  |
|      |                          | Microscope       | /MRC Israel) USB-2,with image analysis software  |  |
|      |                          | imaging Camera   | Toupview for measurement, image grabbing and   |  |
|      |                          | with LED display | analysis along with suitable optical adapter for your  |  |
|      |                          | attachment       | existing Olympus-BX-41Tr microscope  |  |
|      |                          |                  | B. <b>Display Attachment (Computer):</b> Windows 8.1   |  |
|      |                          |                  | operating system, Minimum Intel Core i3 processor,   |  |
|      |                          |                  | Minimum 4 GB 1600 MHZ DDR3 (1X4GB) RAM, 1  |  |
|      |                          |                  | TB 7200 rpm SATA hard drive, High definition Audio   |  |
|      |                          |                  | 5.1 DTS Sound, Integrated 10/100/1000 Gigabit  |  |
|      |                          |                  | Ethernet LAN (Network), Bluetooth 4.0 Mini card  |  |
|      |                          |                  | Combo, USB optical mouse, USB keyboard with  |  |
|      |                          |                  | volume control, Super Multi DVD Burner, Minimum 4  |  |
|      |                          |                  | USB 2.0; 4 USB 3.0; 1 head phone/microphone Combo,   |  |
|      |                          |                  | Card Reader and Minimum 19.5 inch LED Monitor, 4.1   |  |
| 0.0  | Y IDY COL                |                  | Channel stereo speaker.  |  |
| 02   | VPY-01                   | Compound         | Eye piece(s): Secured DIN WF 10x/ 18 mm; Heads:  |  |
|      |                          | microscope       | Monocular, 360 rotatable with 45° inclined tubes; Nose   |  |
|      |                          |                  | pieces: Revolving mosepiece with 3 reversed objectives for   |  |
|      |                          |                  | monocular and 4 reversed objectives for binocular;   |  |
|      |                          |                  | Objectives: Achromatic 35 mm parafocal 4x/0.10, 10x/0.25   |  |
|      |                          |                  | and S40x/0.65; Stages: Integrated 115 x 100 mm mechanical stage with 30 x 70 mm; Condenser: Height |  |
|      |                          |                  | adjustable N.A. 1.25 Abbe condenser with built-in-iris   |  |
|      |                          |                  | diaphragm; Focusing adjustment: Coaxial coarse and fine  |  |
|      |                          |                  | adjustment, 2 µm presision; Illumination: 1 w intensity  |  |
|      |                          |                  | adjustable LED illuminated with rechargeable batteries and   |  |
|      |                          |                  | external 100-240 V mains adaptor.  |  |
| 03   | VPY-02                   | Kymograph with   | • Digital  |  |
|      |                          | accessories      | Auto stop after one complete cycle   |  |
|      |                          |                  | Timer with Alarm   |  |
|      |                          |                  | Accessories or connection  |  |
| 04   | VPY-03                   | Stimulators      | • Frequency range from 0.1 to 100 Hz.  |  |
|      |                          |                  | • Pulse Width Range from 0.1 to 5mS  |  |
|      |                          |                  | Output Amplitude up to 50 volts  |  |
|      |                          |                  | • Rise and fall :> 5 µsec  |  |
|      |                          |                  | • Power: 110 – 115 Volts 60 Hz or 220-230 Volts 50 Hz  |  |
| 05   | VPY-04                   | Tissue chamber   | Capable of maintaining stable intracellular membrane   |  |
|      |                          |                  | potential of more than 60mV; Facilitates action potential  |  |
|      |                          |                  | overshoots close to 100mV in amplitude; Prefaration slices   |  |
|      |                          |                  | remain viable at least for 8hrs; Provision for maintenance   |  |
|      |                          |                  | of flow rates  |  |
| 06   | VPY-05                   | Spirometer       | Portable; Should meet criteria of ATS standards; System  |  |
|      |                          |                  | software should v eased on latest Microsoft windows  |  |
|      |                          |                  | operating system; Should have accessories pneumotech   |  |
|      |                          |                  | screens (5 nos) , Mouthpieces (Disposable 250nos)  |  |
|      |                          |                  | Pulmonary filters (50 nos); Should have computer   |  |
|      |                          |                  | interfacing facilities, Manual and strong carrying case,   |  |
|      |                          |                  | printers of the records; Capable measuring; Spirometry and   |  |
|      |                          |                  | flow volume parameters; Maximum ventilation volume;  |  |
|      |                          |                  | Lung volumes and sub divisions; Pre and post   |  |
|      |                          |                  | bronchodilator comparisons; Real time flow volume and  |  |
|      |                          |                  | volume traces on computer screens  |  |

| 07  | VPH&E  | Thermal Cycler      | A compact table top model fitted with universal block   |
|-----|--|---------------------|---|
| ,   | -01  | gradient            | suitable for 0.2ml and 0.5ml PCR tubes simultaneously.  |
|     |  |                     | Machine should have utmost flexibility with simple  |
|     |  |                     | programming gradient function, adjustable ramp rates, time  |
|     |  |                     | and temperature increments, incubation mode, in situ mode,  |
|     |  |                     | link function, pause function, etc. Auto-restart mode in  |
|     |  |                     | case of power failure is must. With power consumption   |
|     |  |                     | features of 120 V and 50-60 Hz. Block temperature control   |
|     |  |                     | range: 4 – 99°C. Gradient range 1-20°C. Lid temperature   |
|     |  |                     | range $37-110^{\circ}$ C with thermal sample protection.  |
|     |  |                     | Temperature distribution range across the block $\pm 0.6^{\circ}$ C.  |
|     |  |                     | Regulation accuracy per well: $\pm 0.2^{\circ}$ C. Block temperature accuracy $0.2^{\circ}$ C with heating rate $3^{\circ}$ C/s and cooling rate $2^{\circ}$ C/ |
|     |  |                     | s for cooling. Number of programmes should not be less  |
|     |  |                     | than 100.   |
|     |  |                     | Sample capacity should not be less than 96 for 0.2ml tube   |
|     |  |                     | and 71 for 0.5ml tube.  |
|     |  |                     | Minimum warranty: Two years after installation.   |
| 08  | VSR-01   | Small Animal        | Small animal examination table:   |
|     |  | examination table   | Length 28"x width 48" x height 34"; Entire table should be  |
|     |  |                     | made up 16 gauze SS 304; All around restraining guides  |
|     |  |                     | (bar) with a gap of 1"; Table top inverted grooved for anti   |
|     |  |                     | spill; Round edges for safety; Central column should be   |
|     |  |                     | 12'x12" and the base pad should be at least 6" extra than the   |
|     |  |                     | central column to provide stable balance; Should not allow  |
|     |  |                     | accumulation of blood, fluid etc.; Drainage whole on both   |
|     |  |                     | sides with provision for hanging; Should be loaded on four anti-skid boots made of teflon   |
| 09  | VSR-02   | Autoclave Vertical, | Autoclave –Vertical with SS Jacket BIS marked   |
| 09  | V SK-02  | Cap.40 ltrs.        | Capacity: 40 litres; Chamber dimension 12" x 22"; With  |
|     |  | Cap.40 IIIs.        | two drums of dimension 9" x11"; Working Pressure (15 psi  |
|     |  |                     | - 18 psi); Sterilizing Temperature 121°C to 140 °C; Double  |
|     |  |                     | wall SS GMP construction; Sterilization Time 25- 30 min   |
|     |  |                     | maximum; Door / Lid Foot lifted with safety and interlock   |
|     |  |                     | device; Door Locking type Wing Nut type; Should have  |
|     |  |                     | temperature indicator; Sterilization indicator; Low water   |
|     |  |                     | sensor; Low water cut-off device; Sterilization indicator   |
|     |  |                     | tape; Heat resistant handles  |
| 10  | TVCC-  | Large animal        | Large animal operation table (Ruminant):  |
|     | 01   | Operation Table     | Length 8ft x width 5ft x height 1ft Should be able to bear at least 1000 kg weight.   |
|     |  | (Ruminant)          | Entirely made up of stainless steel S/S 16 gauze # 304 Stainless Steel  |
|     |  |                     | 1ft adjustable at different height extension for headrest   |
|     |  |                     | Stainless steel sheet on the table top rounded beyond the borders   |
|     |  |                     | to prevent injury to the animals and accumulation of blood etc.   |
|     |  |                     | Should be provided with detachable and properly fitted high   |
|     |  |                     | grade coir mattress at least 6" thickness covered by good quality durable turpoline.  |
| 11  | TVCC-  | Large Animal        | Large animal trolley  |
| • • | $\begin{vmatrix} 1 & \sqrt{2} & \sqrt{2} \\ 02 & \sqrt{2} \end{vmatrix}$ | Trolley             | Length 6 ft x width 3 ft x height 1 ft  |
|     | *-   |                     | Should be able to bear at least 1000 kg weight.   |
|     |  |                     | Entirely made up of stainless steel S/S 16 gauze # 304 Stainless Steel  |
|     |  |                     | Mounted on four strong wheels with two movable front wheels   |
|     |  |                     | with a turning radius of 90 degree both side.  The wheels should be strong enough to bear the weight should   |
|     |  |                     | not cause friction or noise and made up of solid rubber.  |
|     |  |                     | There should be handle on the front side for pulling.   |
|     |  |                     | High grade stainless steel sheet on the table top rounded beyond  |
| 1   |  |                     |   |
|     |  |                     | the borders to prevent injury to the animals and accumulation of blood etc.   |

|          | TVCC- | Doppler Blood     | •TYPE: Ultrasonic Doppler blood flow detector for  |
|----------|-------|-------------------|--|
|          | 03    | pressure monitor  | veterinary patients only   |
|          |       |                   | •ULTRASOUND FREQUENCY: 9.6 Mhz   |
|          |       |                   | •CONSTRUCTION should be High impact ABS-PC   |
|          |       |                   | •DOPPLER FREQUENCY: 9.6 MHz  |
|          |       |                   | •AUDIO OUTPUT: Speaker and headset jack with speaker   |
|          |       |                   | eutoff •POWER ADAPTOR: Input: 110/220 VAC 50 or 60 Hz.   |
|          |       |                   | Output: 5 VDC  |
|          |       |                   | •BATTERY: Rechargeable Lithium-ion   |
|          |       |                   | •USE BETWEEN CHARGES: 35-40 hours continuous   |
|          |       |                   | •TRANSDUCER: Focused piezoelectric elements with 5 Ft. Cable   |
|          |       |                   | •CONNECTOR: 5 Pin circular DIN   |
|          |       |                   | •SPHYGMOMANOMETER: 0-300 mm Hg. certified  |
|          |       |                   | manometer with bulb type pump and deflation valve  |
|          |       |                   | •HEADPHONES: Stereo audio with 3.5 mm phone plug   |
|          |       |                   | •CUFFS: 6 ea. for limb circumferences 3.3-16.8 cm  |
|          |       |                   | •POWER ADAPTOR: Input: 110/220 VAC 50 or 60 Hz.  |
|          |       |                   | Output: 5 VDC  • Should provide Instructional CD/DVD   |
|          |       |                   | <ul> <li>Should provide Instructional CD/DVD</li> <li>Should provide 12 months on site comprehensive warranty</li> </ul> |
|          |       |                   | on the whole equipment with spare part support upto 5  |
|          |       |                   | years.   |
|          |       |                   | • Free of charge facility to train the user on equipment's   |
|          |       |                   | working and use at the time of installation.   |
| 12       | TVCC- | Small animal      | • Stainless steel grade 304 matt finished / 16 gauge,  |
|          | 04    | examination table | wheeled legs, Dimension: 1880mm x 600mm,   |
|          |       |                   | • Adjustable Ht.: 790-1040mm, Centre column 12 X   |
|          |       |                   | 12 Inches,   |
|          |       |                   | • Pipe used 16 gauge SS 304,   |
|          |       |                   | • All around restraining guides with gap of 25 mm+.  |
|          |       |                   | All around Polished matt finishing.  |
|          |       |                   | Drainage on one side.  Table to a relative   |
|          |       |                   | <ul><li>Table top plain.</li><li>Provision for fixing IV stand, One IV stand with</li></ul>                              |
|          |       |                   | block arrangement SS 304 included.   |
|          |       |                   | Table loaded on four anti-skid boots made out of   |
|          |       |                   | Teflon.  |
|          |       |                   | • Trendelenburg and reverse trendelenburg: 30°±3   |
|          |       |                   | • Lateral tilting position: 20°  |
|          |       |                   | • Lifting position 250mm±12mm  |
|          |       |                   | • Flex position;90°  |
|          |       |                   | • Reflex position 220°   |
|          |       |                   | • Head plate 20° up and 90° down   |
|          |       |                   | Customized and large storage space.  |
| 13       | TVCC- | Modular           | All Stainless Steel grade 304 matt finished / 16 gauge.  |
|          | 05    | examination table | Size 24X48X34 inches height.   |
|          |       | for small animal  | Pipe used 16 gauge 2X1 inches and sheet 16 gauge SS 304.   |
|          |       |                   | All around restraining guides with gap of 25 mm+.  |
|          |       |                   | Finish polished matt Provision for fixing iv stand all around with extra IV stand and brackets                           |
|          |       |                   | Table top plain.   |
|          |       |                   | Provision for drainage on one side.  |
|          |       |                   | Table loaded on four anti skid boots made out of teflon.   |
|          |       |                   | All sun mica laminated board 3/4 inch cabinets on the table  |
|          |       |                   | .Extra Storage space.  |
|          |       |                   | Drawers on top on rails.   |
|          |       |                   | Two doors cabinet with provision for adjustment.   |
|          |       |                   | Locks on two main doors of cabinet.  |
|          |       |                   | Material board laminated on both sides with sun mica. With teak beading, mouldings and margins.                          |
|          |       |                   | Anti - Skid teflonsheet .  |
| <u> </u> | 1     |                   | THE ORIGIONOUL.  |

|    | LPT-01  | Vertical Laminar                        | Size: 4'x2'x2'; Cabinet made of stainless steel; Pre-filter  |
|----|---------|---|--|
|    | Lr 1-01 | Flow                                    | Assemblage for Multi dispose particle predominantly in the size range of 5-20 microns; HEPA Filter-0.3 microns; sealed white light, UV light, stainless steel work table; Anti vibration levelling leg/ castor wheels.  Air flow: Designated for 0.45m/s to 0.65 m/s  Pre-filters: Size: 800x400x50; Type: Flange type; Media: Synthetic, Non-oven polyester fibre, washable type; Casing: M.S. Powder coated; Gasket: Neoprene; Retention: 5 micron; Efficiency: 95%; Pressure drop: 6 to 8 mm  HEPA Filter: Size- 1200 x 610 x 75 mm; type: Box; Media: Ultra clean glass fibre; Gasket- Neoprene, Retention- 0.3 micron; Efficiency-99.97%, Pressure drop- 25 mm of wc  Motor blowers: Volts: 230V, 50 Hz; 1/3 HP, 3.5 Amp, 250 watts, 1440 RPM, 10 mfd capacity, overload fitted  Pressure Gauge: Housing- Die casting aluminium case and bezel with acrylic cover; accuracy:±2% of full scale, pressure limit: 15 psi, temperature: 20 to 140F  Illumination: 40 watts fluorescent tube |
| 14 | LPT-02  | Salting Instruments<br>(Brine Injector) | Stainless steel cover, high power resources, integrated pressure control with manometer, suck-in-device with pre filter device, integrated feed back system, easy and thorough cleaning, low power consumption, quick change of injection needles, glycerin-filled manometer 0-6 bar, injection needles from stainless steel 200x4mm, injection pistol from metal, chromium plated, Motor output: 0.5 KW/CA .5BAR Voltage: 400V, 50Hz, 3PH Dimensions: 390x180x240 MM With metal injection pistol, single as well as multiple needle – 200 x 4 mm, 2 needle pork S.S. 150 X 4 MM; 3 needle pork S.S. 150 X 4 MM;   |
| 15 | ANN-01  | Bomb Calorimeter                        | Microprocessor based-operated through software & PC and should be supplied with PC and its accessories, Automatic feeding of Calorific values of ignition wire & cotton thread, Automatic firing in the Bomb Automatic Detection of maximum rise of Temperature, Automatic calculation of Water equivalent/ calorific values in each experiment, Automatic delivery of result data in report format, Automatic graph plotting between time vs, temperature. Battery backup for stirrer and Microprocessor unit (UOS),8interface to connect with computer, soft touch Key pad, auto firing, Detection of maximum rise of Temperature, LCD display with backlit 16 x 2 characters, compatible with USB/ serial port of PC.   |
| 16 | ANN-02  | Muffle furnace                          | Microprocessor PID controller having 4 ramp & soak profile having set mode, made of thick mild sheet having powder coated in good looking colour, Ceramic Fibre blanket for high density for better insulation, provide with Stainless-steel 310 Qlty. Base plate to safe guard the interior chamber Heating Elements are made of special Kanthal wire to make furnace working continuously up to 1150°C, fitted with fine quality Digital indicator cum controller to work on 220Volt AC 50Hz, size: 150 X 150 X 300 mm.  |
| 18 | VHE-01  | LCD Data Projector                      | LCD Data Projector Resolution: 1280X800 pixel, Brightness: 3200 ANSI, Contrast: 2500:1, Connectivity:HDMI, S-Video, USB, Aspect Ratio: 4:3   |

| 19 | VHE-02     | INFORMATION<br>KIOSK<br>Display              | INFORMATION KIOSK Display  (a) Type: Colour LCD (b) Size: 48.3 cm (19 inches) (c) Resolution: 1280 x 1024 (d) LCD Touch Panel: Minimum 250 CD/m2 (NITS) brightness System Details (a) Processor: Embedded processor, 2.0 GHz or higher 3 MB Cacheor higher. (b) Memory: 2 GB or higher (c) HDD/Storage: 250 GB or higher (d) Audio: 1 x Line-out/1 Line-in (e) Speaker: 2x1.5 Watt, RMS Stereo speaker. (f) Operating System: Windows 8 Professional with USB based keyboard  |
|----|------------|--|---|
| 21 | LPM-01     | Back Fat scanner for pig                     | Range/Accuracy:4-35mm (0.156"-1.365") +/-1 digit Display # 2-digit LED for thickness 3 LED's to indicate 1,2 or3 layers being measured Baterry charging LED Controls: On/Off push button Power supply: Nickel Metal Hydride battery Battery Pack Life: approximately 2-4 years (1000 charges/discharges)  |
| 22 | LPM-02     | Milk Analyser with digital weighing machine. | For measurements of fat and SNF in raw cow and buffalo milk  Easy to use, self-contained instrument Measurement results can be transferred directly to PC via RS232, eliminates human sources or readings, Replaces manual and time consuming Gerber and Lactometer methods, Logging of all operations available.  Accessories Adaptor, 4 GB Memory Card, Clean solution, Descalding Solution, Clean Bottle-1ltr, Zero Bottle-1ltr, Descalding Bottle-15oml, RS-232 Cable, Manual Clean Kit, PM Kit, Quick Guide, Instrument Bag, Napkin, Measuring Cups, Descaling Cup   |
| 23 | VMC-<br>01 | BOD Incubator                                | Capacity: ≥150 liters with height ≥ 500mm accommodating two adjustable height SS racks and shaking platform at the bottom accommodating ≥ 12 Erlenmeyer flasks.  Incubation chamber construction: at least double walled, 304 or better, stainless steel rounded corners inner wall of chamber and Mild Steel Epoxy Powder Coating rust free paint worked outer chamber with PUF in place insulation ≥75mm thick in-between.  Doors: Inner Glass/ Acrylic (Plexiglas) mounted on SS frame/ hinges and outer metal door with same construction as the incubation chamber with aerosol tight silicon door seals for both doors.  Incubation Temperature: Programmable microprocessor based temperature controller ranging from 5°C to 50°C or wider achieved by CFC/HCFC free inverter compressor and circulated air heating system with sensitivity ± 0.1°C.  Shaker platform: Should accommodate 500ml & 250ml capacity using suitable SS clamps with spring placed well apart; 12 each to be provided with spare screws for each; rpm range − 10-250rpm or higher with timer adjustable from 1 min to 999hr 59 min; resume from where stopped or reset. Shaker platform should stop with opening of inner door.  Computer interface for temperature and rpm recording in real-time for GLP compliance.  Product should be certified for Bio-Oxygen Demand test, animal cell culture and micro-organism culture including |

shake cultures.

Power supply: Capable of working at wide voltage range (140-280volt 50Hz or wider). Equipment to be supplied with wide voltage range (90V-260V or wider) external stabilizer with high and low voltage cut off and time delay system of 3 times the power rating of the equipment.

Warranty: At least 2 years from the date of installation with assurance of service and spares for 5 years

Quality assurance: declaration regarding compliance of the electrical safety, environment pollution norms and quality assurance norms by the manufacturer. The equipment preferably should bear CE marking/FCC declaration of confirmity, ISO certification etc.

Price should be quoted FOR Selesih, including all the handling and clearing charges and it is to be done by the supplier.