

ASSAM AGRICULTURAL UNIVERSITY

Khanapara-781022

BIDDING DOCUMENT

(Terms and conditions)



**Directorate of Research
ASSAM AGRICULTURAL UNIVERSITY
Khanapara-781022**

**OFFICE OF THE DIRECTORATE OF RESEARCH (VETY) ASSAM
AGRICULTURAL UNIVERSITY
Khanapara-781022**

NOTICE INVITING QUOTATION

Sealed quotations are invited from the reputed manufactures/ authorized dealers/ suppliers for supplying certain numbers of equipments and kits for the following projects:

1. **Modeling of Indigenous Diagnostics and Immuno-Potent Vaccine Candidates to Combat African swine fever in India.**
2. **Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including The North East Region.**

The Tender documents may be obtained from the office of the ADMaC personally on payment of Tender fee of Rs 300/- (Rupees Three Hundred) only in the form of IPO/Demand Draft to be drawn in favour of DIRECTOR OF RESEARCH VETY payable at SBI Khanapara Branch. The Tender Documents may also be downloaded from the website www.cvscadmaclab.org.in or www.vetbifg.ac.in subject to the condition that the bidders must have to submit the Tender fee Rs 300/- along with the quotation, without which the tender/ quotations will be rejected. The earnest money 4% for items of Rs. 10,00,001 and above, 3% for items of Rs. 5,00,001 to Rs. 10,00,000 and 2% for items of upto Rs. 5,00,000 of the unit price of the quoted value of equipments in the form of Demand Draft to be drawn in favour of DIRECTOR OF RESEARCH VETY payable at SBI Khanapara Branch must be submitted along with the quotations. The tenders/quotations will be received up to 4:00 pm of 21st January 2022. The undersigned reserves the right to accept or reject any or all the quotations without assigning any reason thereof.

Sd/-
(N. Kalita)
Director of Research (Vety)
Assam Agricultural
University Khanapara-22

99/DRV/293/OHC/2021-22/F-05/83-87

Dated:28/12/2021

Copy for information and necessary action to

1. The Comptroller, Assam Agricultural University, Jorhat-13
2. Dr. N.N. Barman, Project Co-ordinator ADMaC-II, C.V.Sc., AAU, Khanapara
3. The Coordinator, BIF, AAU, Khanapara, Guwahati-22 with a request to upload the advertisement in the website www.vetbifg.ac.in
4. Notice Board Dean CVSc/DR (Vety)/DEE/DPGS, College of Veterinary Science.
5. The Advertisement manager, The Assam Tribune with a request to publish the above Advertisement in one issue of your paper and submit the bill for payment to the office of the undersigned with copy of the Advertisement.
6. Office Copy

(N. Kalita)
Director of Research (Vety)
Assam Agricultural
University Khanapara-22

Terms and Conditions

1. The quotation fees of Rs.300/- (Rupees Three hundred only) in favor of DIRECTOR OF RESEARCH VETY is not refundable. Those who will submit the quotation by downloading the tender documents, they must have to submit the quotation fee in the form of IPO/DD along with the quotation without which quotation will be rejected.
2. The bidder shall enclose the earnest money 4% for items of Rs. 10,00,001 and above, 3% for items of Rs. 5,00,001 to Rs. 10,00,000 and 2% for items of upto Rs. 5,00,000 of the quoted price in the shape of DD drawn in favor of the DIRECTOR OF RESEARCH VETY, payable at SBI, Khanapara Branch. The bids that are not accompanied by the aforesaid bid security will not be accepted. The details of bid security must be provided. The bid security of the unsuccessful bidders will be released after issuing supply to the successful bidder and the bid security of the successful bidder will be released after execution of the order.
3. The bidder should provide separate EMD against each item in a separate seal enveloped. The quotation shall be sealed and super scribed at the top of sealed cover "Quotation for Lab equipments/Kits invited vide memo no. No. 99/DRV/293/OHC/2021-22/F-05/ 83-87
Dated:28/12/2021
4. Quoted price: To facilitate format evaluation, the bidder shall quote the price of items separately along with relevant papers for supporting the quoted price such as catalogue, dealership certificate and Co's printed price list, user list etc. failing which the bid shall be treated as non-responsive at the discretion of the purchaser.
5. The bid submitted to the bidder shall remain valid for a period of 90(ninety) days. Bid not conforming to this provision shall be treated as non-responsive.
6. To facilitate prompt evaluation, the bidder must positively submit Double Bid (Technical bid and price bid separately) for each item for verification and evaluation. If the bidder fails to qualify the technical part, the bid would automatically get cancelled for the same prior to opening of the price bid.
7. Quotation must also be submitted in a soft copy in CD (to support in Microsoft words only) in the following format failing which the bid treated as non-responsive, at the discretions of the purchaser. In case of any optional items, pictures should be shown separately. Any discrepancies in the soft copy will be the responsibility of the bidder.

Format

Name of Item	Brief Specification	Unit Price	GST/Freight Charge if any (FOR Destination)	Total
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8. The rate shall be quoted for all duties, taxes and other levies payable by the bidder shall be included in the item rate. GST should be quoted separately (GST No. must be furnished)
9. There should not be any overwriting. Corrections, if any, should be made with dated initial of bidder. Bidder shall submit quotation separately in each item.
10. Rates should be quoted clearly both in words and figures separately for each item without which the quotation shall stand rejected.
11. The price quoted shall be fixed and not subject to adjustment/variation during the performance of the contract.
12. The warranty of the items shall be as per the prevailing warranty policy/certificate of manufacturer (where necessary) for the items and warranty period shall not be less than 6 (six) months from the date of commissioning of items at site.
13. The bidder shall furnish the warranty for all the items at the time of delivery and commissioning. The purchaser shall reject the items not enclosed by warranty certificate from their manufacturer. The warranty certificate should be duly signed and sealed.

14. Bidders must supply the items at their own cost. All machineries/equipments/kits are to be supplied FOR destination. Delivery of goods shall have to be completed within 30 (thirty) days from the date of issuing supply order.
15. Installation and commissioning charges, if any, inclusive of expenses of foundation work etc. are to be mentioned separately against each machine. In case of no mention, the same will be considered as inclusive of installation cost whenever applicable.
16. The machineries are to be supplied ready to operate, complete with motor, starter and any necessary gadgets including catalogues, troubleshooting manual etc. without which the same will be considered as incomplete supply.
17. List of spare parts with current price to be required during operation of the machines and addresses of the source of spare parts availability including contact no., e-mail etc. are to be provided in a separate sheet.
18. Price of one set of critical wearable spares that would hamper the working of the machineries/equipments should be mentioned separately against each machine.
19. The supplier shall provide free maintenance services during the period of warranty. Any repair and maintenance including providing of spare parts (covered by manufacturer's warranty certificate) during the warranty period shall be bidder's responsibility.
20. Detailed specification with make, model, size, and code no., catalogue, and name of manufacturer should be furnished. ISO certificate must be furnished for the offer make where applicable.
21. Copies of S.S.I registration or such documents may be produced with quotation.
22. Attested copies of dealership certificate and Co's printed price list must be enclosed with the quotation.
23. Up-to-date sale Tax clearance certificate and Income Tax return of last two years duly attested must be submitted along with the quotation. PAN No. must be furnished.
24. All payment shall be made preferably in Indian Rupees only.
25. Where ever the laws and regulations require, deduction of taxes at source of payment, the purchaser shall effect such deduction from the payment due the supplier, the remittance of amounts so deducted and insurance certificate for such deduction shall be made by the purchaser as per the laws and regulation in force.
26. Every page of the bidding documents purchased from the purchaser are to be signed by the bidder including their acceptance of terms and conditions and returned with their quotation.
27. The undersigned reserves the right to accept or reject any quotation and to cancel the instant bidding process and reject all quotation at any time prior to award of contract, without thereby incurring any obligation to the affected bidders of grounds for the purchaser action.
28. The bidder must mention their bank details along with the quotation.

ANNEXURE –I
Format for EMD Details

Sl.No	Sl. No of the item (as per bid document)	Name of the item quoted	Basic price of the item (excluding taxes and transportation charges)	Price in Indian rupee (for imported items at the prevailing rate of exchange)	Amount of EMD (4% for items of Rs. 10,00,001 and above, 3% for items of Rs. 5,00,001 to Rs. 10,00,000 and 2% for items of uptoRs. 5,00,000)	Details of EMD submitted including amount and validity

Annexure-II
 FORMAT FOR COMPLIANCE STATEMENT

SI No	Name of the Item as per Bid Document	Make: Model:	
Detailed Specification:			
SI No.	Specification Asked for	Specification offered*	Complied (Yes/No)

*The Specification offered must be verifiable form the data sheet (both softcopy and hardcopy) from the OEM, provided by the vendor as well as the official website of the OEM.

FORMAT FOR QUOTATION
(Separate Quotation for individual items to be submitted)

Sl. No	Name of the item (s)	Brief Specification	Unit price	% of GST/Freight charge if any (FOR Destination)	Total amount

We agree to supply the above items in accordance with the technical specification mentioned. We also confirm that normal commercial warranty / guarantee of months shall apply to the offered goods.

Quotationers Name:

Signature

Date:

Seal

Sl. No	Name of the Project	Name of Equipment	Specification
1	Modelling of indigenous diagnostics and immune-potent vaccine candidates to combat African swine fever in India	Minilysate (Tissue Homogenizer)	<ol style="list-style-type: none"> 1. The instrument should be an open bead-based technology with multi-directional motion of beads for homogenizing samples to extract DNA/RNA/Protein in downstream processing. 2. The speed of the multi-directional motion should have different adjustable speed range. 3. It should have time selection. 4. Should have capability to process simultaneously multiple number of samples in 1.5 ml or 2 ml and 7 ml tubes made by different manufacturers. 5. Beads made from stainless steel, glass or other material should be supported depending on sample type. 6. The instrument should be provided with additional beads and vials to homogenize minimum 2000 tissue samples. 7. It should be compact occupying less bench space. 8. The bidder should provide post-sale service with trained engineers for emergency service. 9. The instrument should have warranty for 3 years along with 2 years of AMC after expiry of 3 years of warranty period. 10. Quoted price should be FOR destination
2	Modelling of indigenous diagnostics and immune-potent vaccine candidates to combat African swine fever in India	-20⁰ C Freezer	<ol style="list-style-type: none"> 1. Temperature Range: -20⁰ C 2. Capacity: 500 L or more 3. There should be wheels 4. There should be Lock system 5. Freezer should have the facility for Automatic Reset, Automatic Restart with Non- Volatile memory, programmed Restart. Hinge should be rust free 6. It should be CFC, HCFC free refrigerants. 7. Freezer should have Diagnostic Software to trace and solve system errors. 8. Freezer should have CE Certified and UL Certified 9. Freezer should be supplied with Racks and Boxes to store the sample vials 10. It should be accompanied with cryovials for serum and tissues (1000 each) 11. Stabilizer (5KVA Copper 4000W 90V - 300V Heavy Duty Mainline Voltage). 12. Warranty for 3 years and minimum 5 years for compressor. 13. There should be facility for post-sale service and trained service engineer in emergency. 14. Quoted price should be FOR destination

3	<p>Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region</p>	<p>Multimode detection system for detection of nucleic acid, protein and ELISA reader system</p>	<ol style="list-style-type: none"> 1. A spectral scanning unit for UV-visible wavelength range, with option to multiple wavelengths within one program using software. 2. Compatibility with Sample Format – 6, 12, 24, 48, 96 and 384 well microplates or cuvettes including possible lid. 3. Should work as a standalone system without computer and able to run with computer- controlled software also. 4. Analysis software supplied should have unlimited user License installation. 5. Should able to read end point, kinetics, spectral scanning and kinetic spectral scan. 6. Instrument should able to read single and multiple samples of low volume analysis plate for proteins, DNA/RNA purity & concentration. 7. Instrument should come with PC/Laptop for instrument operation and software installation. 8. Instrument should support USB Flash drive, microSD card and wireless connectivity to network. 9. Data shall be exportable to Excel spreadsheet for data analysis. 10. Instrument should have adjustable wavelength range from 200 nm to 1000 nm with 1 nm steps. 11. The instrument should have inbuilt incubation and linear shaking options for longer kinetic assays etc. 12. Spectral scanning speed should be 10 sec or less. 13. Instrument should come with Data Analysis Software. 14. Software should allow multiple absorbance /Photometry steps in a single program for differentially analysis assays, including plate out option during the program to add required compounds and then continue the program for further analysis. 15. Allow multiple absorbance reading steps within the same program i.e., in case of two sets of reading before and after adding the compounds. 16. Database based software to run backups of all data, restore back up data (in case of hardware failure of original computer). 17. Should have area selection option, for different measuring parameters for different area in a same plate. 18. Spectral scanning of all 96 samples or 384 samples should be able to view in single graph plot. 19. The instrument should be an open system
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			<p>for assay kits, able to accommodate any kit from any manufacturer.</p> <p>20. Consumables, Cuvettes (1000 nos), liquid dispenser single channel (0.1 to 1000 Micro liters), plastic wares- strip, plate with cover, filter tips of different range for 1000 reactions must be provided with the instrument.</p> <p>21. Thermal printer with additional paper roll.</p> <p>22. Warranty for 3 years.</p> <p>23. Extended AMC of 2 years after completion of warranty period.</p> <p>24. Facility for Post sale service, service engineer and provide user list in India and northeast.</p> <p>25. Quoted price should be FOR destination</p>
4	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North-East region	Electroporator for both prokaryotic and eukaryotic cells	<ol style="list-style-type: none"> 1. System should be versatile for reproducible transfection/transformation of Eukaryotic and Prokaryotic cells (Mammalian, bacterial, yeasts etc). 3. System should efficiently deliver nucleic acids, proteins, and siRNA into prokaryotic and mammalian cell types including primary and stem cells with a high cell survival rate. 4. Instrument should have different length of pulse mode. 5. The instrument should support both Square / Exponential waveform. 6. It should produce effective transfection and low cytotoxicity. 7. Instrument should come with minimum 100 cuvettes each of 0.4cm, 0.2cm & 0.1cm Cuvettes. 8. Compatible with any brand cuvette. 9. It should have default programs for common bacterial and mammalian cell lines. 10. The instrument should be an open system and should support consumables from any manufacturer. 11. Should contain touch screen for smooth operation 12. Should have an inbuilt storage of more than 100 programs or protocols 13. Pulse width should be minimum 1-100ms 14. Operating temp should be 5-40°C. 15. System should have digital display feature. 16. Should be provided compatible stabilizers (120-280 V). 17. Instrument should have warranty for 3 years. 18. Facility for Post sale service, service engineer and provide user list in India or Northeast. 19. Quoted price should be FOR destination
5	Establishment of a Consortium for One Health to address Zoonotic and Transboundary	High Precision circulating water bath	<ol style="list-style-type: none"> 1. System should have digital temperature sensor, 2. mounted on the outside of the bath Cooling Rate: Max. 2.5°C/min between 100°C and RT 3. Heating Rate: Max. 6°C/min 4. Temperature Range: Min. 15°C below RT,

	<p>Diseases in India, including the North- East region</p>		<p>max. 100°C</p> <ol style="list-style-type: none"> 5. Working temperature range of the system should be at least 5 above ambient to +100 6. Setting temperature range of the system should be +10 to +100°C 7. Setting accuracy Temperature of the system should be 0.1 °C 8. 2-point calibration 9. System should have 3.5" color graphic display with touch screen 10. Should have digital display controller of set and actual temperature and of program time. 11. Should have corrosion-proof large-area heating on the outside of the interior. 12. System should have innovative easy to empty drain system and visual - acoustic digital timer from 1 min. up to 99 hours 59 min. 13. System should have Deep-drawn stainless-steel tray (stainless steel W.St. 1-4301), without corners and edges for easy cleaning incl. central drain (no disturbing installations) 14. Volume of the system should be 10 l 15. Temperature Accuracy: Max. $\pm 0.5^{\circ}\text{C}$ at 20- 45°C 16. Temperature Settings: 1°C / 100°C 17. Capacity 12-20 lts 18. Should be supplied with 6 Nos. coloured thermometers upto 100°C. 19. Warranty for 3 years. 20. Extended AMC of 2 years after completion of warranty period. 21. Facility for post sale service, service engineer and provide user list in India or Northeast 22. Quoted price should be FOR destination
6	<p>Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region</p>	<p>Air Curtain (3 ft. door with 90mm- 01 No and 4 ft. door with 1200mm- 01 No.)</p>	<ol style="list-style-type: none"> 1. Door air curtain with inbuilt sensor and remote control 2. Air velocity: 21m/S 3. Noise level: 40-50db 4. No of blowers: 3 5. No of motors: 2 6. Voltage: 220/50hz 7. No of Shafts: 2 8. RPM (Max/ Min): 2700/2100 9. % insect/ dust rejection: 75-95% 10. Weight Kgs.: 15-20 11. Stabilizer (5KVA Copper 4000W 90V - 300V Heavy Duty Mainline Voltage) 12. Warranty for 3 years. 13. Extended AMC of 2 years after completion of warranty period. 14. Facility for Post sale service, service engineer and provide user list in India or Northeast 15. Quoted price should be FOR destination

7	<p>Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region</p>	<p>ELISA/PCR kits</p>	<ol style="list-style-type: none"> 1. List of Kits: <ol style="list-style-type: none"> a) African Swine fever Virus (ASF): i-ELISA kit & PCR kit b) Porcine reproductive and respiratory syndrome (PRRS): i-ELISA kit c) Animal Brucella: iELISA kit d) Bovine Tuberculosis: IGRA kit, PCR e) Anaplasma: PCR f) Q fever: PCR g) Leptospira: iELISA; PCR h) Cryptosporidiosis: PCR i) Cysticercosis: Antigen Detection ELISA; PCR j) Nipah in Pigs: iELISA kit k) Swine influenza: iELISA kit & PCR l) Lumpy Skin Diseases (LSD): iELISA kit & PCR m) Japanese encephalitis: antibody ELISA kit; PCR kit n) CSF: antibody ELISA; antigen ELISA o) Porcine circovirus 2: indirect ELISA; antigen ELISA, PCR p) Duck plague: indirect ELISA, antigen ELISA (Sandwich ELISA) q) Porcine Parvovirus: PCR kit r) CCHF iELISA kit: Double antigen multispecies. 2. All the kits must contain standard positive and negative control. 3. All the kit should be OIE, EU validated/certified or validated by International Institute. 4. All the kit should contain user manual. 5. Must include user list. 6. Kit should have long expiry. <p>Other Conditions:</p> <ol style="list-style-type: none"> 7. The bidder must provide separate price bid for ELISA kits against different no. of reactions: 96, 192, 384, and 480. 8. The bidder must provide separate price bid for PCR kits against different no. of reactions: 50, 100, 250 and 500. <p>9. Quoted price should be FOR destination</p>
8	<p>Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region</p>	<p>Gradient Thermal Cycler with UPS</p>	<ol style="list-style-type: none"> 1. Universal Block PCR System for both 96 x 0.2 ml and 71 x 0.5 ml PCR Tube 2. Gradient PCR capable of testing 12 different temperatures across a gradient range of 1 - 20°C 3. Gradient Technology ensuring ramp rates identical in both gradient and normal operation. 4. Heating and Cooling via Peltier Technology. 5. The system should have Thermal Sample Protection 6. Temperature Control Range: from 4° C to 99° C 7. Temperature Control Mode: Fast, Standard and

			<p>Safe</p> <ol style="list-style-type: none"> 8. Lid Temperature range: 37° C to 110° C 9. Block Temperature Accuracy: ± 0.2° C 10. Gradient Temperature Range: 30°C to 99°C 11. Lid temperature Range: 37°C to 110°C 12. Block Homogeneity:- <ol style="list-style-type: none"> a. 20°C to 72°C :< + 0.3°C b. 95°C :< + 0.4°C 13. Temperature control speed approx. 3 °C/s (heating) 14. Temperature control speed approx. 2 °C/s (cooling) 15. Intuitive Graphic programming with larger display and Flexible Lid to adjust the height of the tubes/plates of any make. 16. Control Panel should be enabled to operate 3 individual units. 17. PCR should be supplied with suitable UPS 18. Quoted price should be FOR destination
9	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Gel Documentation System	<ol style="list-style-type: none"> 1. Gel Documentation System should have CX4 Scientific Grade camera with 2 megapixels resolution extendable to 7,6 megapixels 2. Passive cooling Facility with 16-bit – 65 536 grey levels 3. USB-3 connection with Motorized zoom lens with feedback 4. Field of view: 20x20cm 5. Facility for Auto-exposure; Auto-focus; Auto-lighting 6. Smart Darkroom technology 7. Software control of the lighting 8. White light led panels with automatic intensity adjustment 9. UV cut-off filter 10. Fix position transilluminator with optional protection screen 11. Steel and stainless-steel darkroom for long lasting robustness. 12. Wide access door with UV safety shut-off 13. Software: Free software for image acquisition with full GLP compliance. Molecular weight calculation, band quantification, colony counting, distance calculation, text annotation and image enhancement should be included. 14. Should have wide applicability 15. Colorimetric stained protein gels, X-Ray film, autorads, SSCP gels, colony dish and flask imaging and other EPI white light applications, Coomassie blue, Silver stain, Ponceau S Red, Copper stain. 16. Sky-Pad or Blue light conversion screen for DNA/RNA detection (avoid «nicking» DNA): Sybr Safe, Sybr Green, eGFP 17. Options for White light or blue light conversion screen. 18. Has to be supplied with a Computer along with following Specifications : Core i3-7100, 4GB DDR4 RAM, Onboard Graphics, 1TB HDD, Win 10 Pro, DVD-RW, Intel® B250 Chipset, up to 32GB RAM-DDR4, No Serial Port + 2 GB Dedicated Graphics to

			<p>support refresh rate 60Hz + Dell 19.5 inches 16:9 Widescreen Aspect Ratio 1600 x 900 @ 60Hz Monitor</p> <p>19. Quoted price should be FOR destination</p>
10	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Refrigerated High Speed Centrifuge Machine with multiple rotor and Stabilizer	<ol style="list-style-type: none"> 1. Centrifuge should have cooling facility with temperature control : -11°C to 40°C 2. Maximum speed should have : upto 17,000 rpm or more and Maximum rcf : up to 30,000 x g or more 3. Fixed Angled Rotors to be quoted for 30 x 1.5/2.0 mL tubes, 6 x 15 mL, 6 x 50 mL 4. Acceleration Time should have : 14 s 5. Braking Time should have : 15 s 6. Timer should have : 30 s to 99.59 hr, with continuous mode 7. Noise level should have : <54 dB(A) 8. Power Supply : 230V, 50/60 Hz 9. Power Requirement should have : max. 1,050 W 10. Dimensions (W x D x H) should have : 38 x 64 x 29 cm 11. Centrifuge should have the facility for Fast Temp which allows programming of pre-setting via date and time to have the centrifuge refrigerated and ready-for-use at the pre-selected time 12. Centrifuge should have the Built-in condensation drain to eliminate water accumulation and prevent corrosion 13. Facility should have to save minimum 50 protocol with program name 14. Adequate program keys should have for easy access to routine programs 15. Dynamic Compressor Control should have for optimized cooling performance 16. Should have ECO shut-off facility to engage after 8 hours of non-use to reduce energy consumption and extend compressor life. 17. System must be ISO, European CE, IVD and IEC Certified. 18. Compatible Stabilizer should be supplied 19. Quoted price should be FOR destination
11	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	PCR cabinet	<ol style="list-style-type: none"> 1. Outer Body Material Should be Mild steel powder coated, polished 22 gauge, 2. Inner Body material should be : SS-304, polished 22 gauge. 3. The controller should be Microprocessor Based PID touch screen along with UV ON-Off, 4. Should have UV timer, Blower speedcontrol & ULPA Filter. 5. Should have Micropipette stand in the Inner side of the PCR Station. All side clearacrylic partition to have side view. 6. Working table must be SS-304 22 GAUGE. 7. Control panel should have at top side of the machine with cooling fan in built. Entire panel board should have made with heat proof insulation wire and cooling fan inside for heat release of the panel board.

			<ol style="list-style-type: none"> 8. At the bottom there must be cup board for storage of the samples or small instrument, completely powder coated, with 2 inner shelves. 9. Should have Ergonomic design for versatile usage eases of use, plug & play system. 10. The machine should meet the requirements of US Federal Standard 209 B (BS5295) providing particle free air to meet class 100 conditions International Standards - UK Complied Certifications & should have ISO, CE & GMP. Should have Internal IQ/OQ/PQ Certification. 11. Air flow type should be Vertical Air flow from the top. 12. Air Flow Velocity should be 90 FPM $\pm 20\%$, Inflow Velocity should be 0.53 m/s, and Down flow Velocity: 0.33 m/s . 13. The designed of the machine should be Aerodynamically front airflow intake grid eliminates potential turbulence and Contamination. 14. Should have wheel on the stand with lockable castors with foot rest. 15. Quoted price should be FOR destination
12	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Horizontal gel electrophoresis with power pack	<ol style="list-style-type: none"> 1. The System Should be use for a wide range of samples including those from plasmid preps, PCR product, restriction fragments, RFLP analysis etc. 2. The system should do very fast separation of DNA, RNA or restriction fragments in agarose gel. 3. The system should come with atleast 2 gel casting tray 4. Tank Size (L×W×H) (cm) 30×13×6 (minimum) 5. Gel Size (W x L) (cm) 7.0 x 10.0 (minimum) 6. Minimum of 3 comb set 7. Buffer requirement (500- 800 ml). 8. Comb Well: 10 - 15 9. The system should run up to 30 samples (maximum). 10. With Power pack system. 11. Power pack should have the option to run 3 units at constant voltage or constant current with maximum output of 300V, 400mA, and 80 Watts. 12. Time setting option should be present. 13. Quoted price should be FOR destination
13	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Autoclave vertical	<ol style="list-style-type: none"> 1. Automatic Digital Autoclaves 2. Automatic purging for efficient sterilization. 3. Preset (at 121°C) Digital temperature indicator cum Controller linked to a preset (20 min) timer. 4. Low water level cut off. 5. Fitted with a Safely Valve / Fusible Safety Plug for added safety. 6. End of cycle buzzer 7. Working chamber/ capacity minimum 50L 8. Quoted price should be FOR destination

14	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Digital pH meter	<ol style="list-style-type: none"> 1. pH: Range should be from -2.000 to 20.000; Resolution: 0.1, 0.01, 0.001; Relative Accuracy: ± 0.002 2. Calibration Point: Up to 5 points with cal editing facility. 3. Data Logging: Auto read, up to 2000 data points with time and date stamp. 4. Rating: IP54-rated housing handles splashes and cleans up easily. 5. Power: 100-240 VAC with optional battery power facility up to 800 hrs. 6. The meter should be supplied with Epoxy Triode refillable pH/ATC electrode with respective filling solution. 7. Certification: It should have the International Certifications for CE & TUV, FC etc. 8. Warranty: 3Years on Meter 12 months on pH electrode 9. Supply should include: Main Benchtop pH meter with pH/ATC electrode, pH buffer & solution kit, Electrode stand, and Universal power adapter. 10. The bidder should have local Guwahati, Assam based service centre and trained engineer to attend any service call within 3-5 working days. <p>11. Quoted price should be FOR destination</p>
15	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	All quartz double distillation unit demountable boiler panel series, vertical model with DAPS	<ol style="list-style-type: none"> 1. Borosilicate Boiler, Borosilicate Condenser & Quartz Heater 2. Horizontal Type with DAPS 3. Dist. Water output cap minimum 3.0 lt/hr 4. Minimum cooling water requirement:2.5Lt/min 5. Distillation Temp ($^{\circ}$C): 65 - 750 C 6. Should be supplied with storage tank of 20 lts (two nos.) <p>7. Quoted price should be FOR destination</p>
16	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	5KVA online UPS with 2 hrs backup	<ol style="list-style-type: none"> 1. The Online UPS system should fulfill the following conditions <ol style="list-style-type: none"> a. Capacity 5KVA b. Output power capacity 4000W c. Technology Online double conversion VFI - SS – 111 d. Display LED + LCD Display 2. Input characteristics <ol style="list-style-type: none"> a. Voltage 230 VAC b. Frequency 50-60 Hz $\pm 5\%$ auto sensing c. Voltage Range 160 V-300 VAC and 110 V-300 VAC @ 50% load d. Power Factor >0.99 e. THD of input current $<10\%$ f. DC voltage 192-240 V 3. Output characteristics <ol style="list-style-type: none"> a. Voltage 220 VAC/230 VAC/240 VAC $\pm 1\%$ b. Frequency 50 Hz ± 0.1 Hz c. Frequency synchronization 47.5 to 52.5 Hz d. THD of output voltage $<3\%$ Linear load & $<5\%$ Non-linear load e. AC to AC (overall efficiency) Up to 92% f. Converter mode Available g. Configurable bypass Available 4. Overload capacity <ol style="list-style-type: none"> a. 105 - 110% 3 mins/111 - 130% 30 secs 5. Quoted price should be FOR destination

17	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Water bath	<ol style="list-style-type: none"> 1. Type: Orbital 2. Tank Size :450 x 425 x 200 mm 3. Tray Size :325 x 325 mm 4. Stroke Speed Per Minute: 20- 200 (without load) 5. Body Material: MS Painted with powder coating. 6. Tray material: Stainless Steel. SS cover is provided. 7. Temp. Range (Ambient +5) to 95 °C 8. Digital Display with microprocessor based PID Controller of Accuracy $\pm 1^{\circ}\text{C}$.by using PT 9. 100 as sensor 10. Shaking speed 20 - 200 stroke per min. 11. Supplied with SS Gabled Cover. 12. Continuous operation limit, maximum upto 10-12 hours 13. Digital Safety Controller. 14. Removable Spring loaded SS lotus clamps for holding the Flasks in the Water Shakers , 15. Flask Capacity : 50 ml. (Qty – 16 Nos.) , 16. 100 ml. (Qty . 16 Nos.) 17. 250 ml. (Qty . 8 Nos.) 18. 500 ml. (Qty. 8 Nos.) . 19. Quoted price should be FOR destination
18	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	(-40 to -50 C) Deep Freezer with stabilizer	<ol style="list-style-type: none"> 1. Upright deep Freezer (-40 to -50°C) with Fully programmable microprocessor controlled with membrane keypad and eye level control panel. 2. Freezer should be of 420-450 Litres capacity and should have clear and legible Blue LED display with advanced Interface conveniently located at Eye level. Freezers should have an Automated vent port for quick re-access to samples 3. System should have Programmable operating temperature upto -50 °C with 1°C increment at Maximum ambient operating temperature. 4. System should be highly energy efficient, with minimum energy Consumption 5. Insulation should be of advanced Polyurethane Foam (PUF) to maintain highest heat insulation. 6. System Exterior should be made up of powder coated Steel to resist scratch and rust and the interior should be of Polished Stainless-Steel grade 304 2B. 7. At least 5 Inner doors should have tight sealing to prevent temperature loss and Outer door should have reinforced tight sealing. 8. System should have Heavy duty castors wheels to easily move the freezer to a new position 9. System should have Silence level/Noise 51.5 dB or lesser 10. Freezer must have battery back-up and pass word protection security for unauthorized tampering of freezer settings. 11. System should have Door open recovery (DOR) of 20 min or lesser for 15 sec Door opening OR Door open recovery (DOR) of 22 min or lesser for 30 sec Door opening;

			<p>12. Freezer must have Standard (BMS) Remote alarm port</p> <p>13. System should have battery powered back-up circuit; in event of a main/power outage the battery should supply power to the alarms and display for up to 72 hrs. at least.</p> <p>14. Audible and visible alarms for temperature, power failure, system failure, battery low etc., and it also have remote alarm port for connection to an auto dialer.</p> <p>15. Freezer must have HFC-free, CFC-FREE, HCFC-FREE non-flammable refrigerants, and should have Green Natural HC Gas based refrigeration system.</p> <p>16. It must be energy efficient and hermetically sealed two stage cascade refrigeration system.</p> <p>17. Freezer must have ISO standard quality test requirements and IEC Electrical safety CE certified.</p> <p>18. Freezer must have capacity to hold 25 racks and 320 (32,000 samples) boxes of 2" height vials</p> <p>19. Freezer should be supplied with 5 KVA Servo Controlled Voltage Stabilizer</p> <p>20. Quoted price should be FOR destination</p>
19	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Micropipette Set (Single channel)	<p>1. Variable volume (0.1 – 2.5 µl, 0.5-10 µl, 10-100 µl, 20-200 µl, 100-1000 µl) with accuracy ±0.02-0.6 µl, precision ≤0.01-2.0 µl.</p> <p>2. Spring loaded tip cone with research grade quality</p> <p>3. 4-digit volume display</p> <p>4. Ultralight chemically resistant piston providing overall weight reduction</p> <p>5. User adjustment to adjust the pipetting volume when working with difficult liquids</p> <p>6. Fully autoclavable without disassembly</p> <p>7. Warranty for 3 years.</p> <p>8. Prices for individual (different volume) pipette should be quoted separately</p> <p>9. Facility for Post sale service, service engineer.</p> <p>10. Quoted price should be FOR destination</p>
20	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Multi Channel Pipette	<p>1. 8 Channel variable 20 – 300 µl with accuracy ±0.5-1.1µl, precision ≤0.1-0.4 µl.</p> <p>2. Spring loaded tip cone with research grade quality</p> <p>3. 4 digits' volume display</p> <p>4. Ultralight chemically resistant piston providing for overall weight reduction</p> <p>5. User adjustment to adjust the pipetting volume when working with difficult liquids</p> <p>6. Fully autoclavable without disassembly</p> <p>7. Warranty for 3 years.</p> <p>8. Facility for Post sale service, service engineer from Guwahati</p> <p>9. Quoted price should be FOR destination</p>

21	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Motorized Pipette Filler	<ol style="list-style-type: none"> 1. Motorized pipette with automatic recognition of the associated Serological Pipette with research grade quality 2. Standard or sterile from 1 mL to 50 mL, covering a wide range of dispensed volumes: from 1 ml to 50 mL with high accuracy and precision level. 3. Ultralight chemically resistant piston provides for overall weight reduction 4. Operation while recharging is possible 5. LED display, adjustable coarse speed setting with minimum 7 hours back up per charge 6. High filling speed 25 ml in 5-10 sec 7. Should be supplied with different size Pipette for up to 1000 reaction 8. Pipette stand 9. Warranty for 3 years. 10. Facility for Post sale service, service engineer at Guwahati <p>11. Quoted price should be FOR destination</p>
22	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Vortex mixture	<ol style="list-style-type: none"> 1. Motion: Orbital 2. Speed Range: 0-3000RPM 3. Speed display: LED 4. Timer: 0-99hr 59min 5. Heavy metal base & rubber feet to prevent movement of the machine during use. 6. Choice of continuous and touch mood 7. Variable speed control 8. Should come with one hand insert, microtube insert and cup insert. <p>9. Quoted price should be FOR destination</p>
23	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Microcentrifuge	<ol style="list-style-type: none"> 1. Should produce minimum noise 2. Should fit in less space 3. Built in power supply 4. Digital display of time & RPM 5. Should be able to run maximum 30 nos 1.5ml tube and minimum 15 nos 6. Maximum RPM should be 12000 7. Supplied with multiple rotors for 0.5ml and 0.2ml tubes <p>8. Quoted price should be FOR destination</p>
24	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	Monopan weighing balance	<ol style="list-style-type: none"> 1. The Minimum Load should be 1 mg. 2. Stabilization Time should be 2 seconds or better. 3. Pan size of the balance should be 90 mm Dia. 4. The glass draft shield should have anti-static coating. 5. It should have internal auto calibration with the press of a single button and without putting any external weight. 6. The balance should have at least 5" colour touch screen display. 7. Should have in-built sensors to measure tilt and display graphic message on the weighing device screen. 8. The bidder should have local Guwahati, Assam based service centre and trained engineer to attend any service call within 3-5 working days. <p>9. Quoted price should be FOR destination</p>

25	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the North- East region	ELISA reader system	<ol style="list-style-type: none"> 1. Wavelength range should be 400 to 800 nm. 2. The system type should be open with 96 well plates and Flat, U & V wells. 3. Mode of operation should be Absorbance, Quantitative, Semi-Quantitative, Kinetic. 4. The System should be supplied with data analysis software. 5. The instrument should have options for the following features and modes of operations <ol style="list-style-type: none"> a. Measurement Modes: Continuous/ Step b. Shaking Modes Three Linear Speeds - Low, Medium and Fast c. Wavelength Selection Monochromatic, Bi-Chromatic, Multi-Chromatic d. Calculation Modes -Non-linear Standard; Cut-off; Index Formula; Column Subtraction; Linear Regression; Point to Point; Cubic Spline; Linear – Log e. Blank Options Blank, Control, Assay, Validation equations, Against Air / Water, Well, Plate, Column, Column, Mean, Row, Row Mean. f. Number of programmable standards / calibrators: Up to 10 standards Storage/ display/ printing of multi standard curves and cut-off equations for all parameters. g. Test Programs: 100 totally “open” Test Programs h. Photometer - Optical system: 8 measurement channel i. Light Source: 13.8V/50W Quartz; Halogen Lamp. - Photometric Resolution: 0.001OD j. Wavelength Range: 400 to 800 nm; Measurement Range: 400 to 800 nm (0 to 3.5 OD) Accuracy: 0.0 ~ 2.0; Linearity: 400 to 8000 nm 6. Measurement Time: NORMAL- 16 Seconds single wavelength; SPEED- 8 Seconds single wavelength 7. The instrument should be supplied with the following filters: 400-700nm 8. Built-in Thermal Printer High resolution with full graphics facility, and option for connecting External Parallel Printer should be available. 9. It should be programmable up to 10 standards. 10. Operating temperature should be 20-40 Degree Celsius. 11. The bidder should have local Guwahati/Assam based service centre and trained engineer to attend any service call within 72 hours. 12. Quoted price should be FOR destination
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