ICMR-NATIONAL INSTITUTE OF VIROLOGY, PUNE NIV PASHAN UNIT

NOTICE INVITING TENDER

Enquiry No. ICMR-NIV/SAC-EQPT/ 2020-21

Sealed tenders are invited up to 14th January, 2022 from reputed manufacturers, suppliers or their bonafide representatives/agents for supply, installation, testing, demonstration, training and commissioning of laboratory instruments; details of which are given in Part-I of tender document.

Tender document containing three parts (Part-I: Schedule of requirements, specifications and allied technical details, Part-II: Terms & Conditions of tender and Part-III: Checklist), may be downloaded from our Websites www.icmr.nic.in, www.niv.co.in, www.eprocure.gov.in & www.gem.gov.in. and offers be submitted to the Director, ICMR-National Institute of Virology, Pune within the stipulated date and time. Late/incomplete quotations will not be considered.

Bidders are advised to regularly visit ICMR-NIV website **www.niv.co.in** for corrigendum/amendments, if any, which will be notified only on the above ICMR-NIV website. Director, ICMR-NIV, Pune reserves the right to accept or reject any/all applications without assigning any reason thereof.

DIRECTOR

Due on: 14.01.2022

Part-I: Schedule of Requirements

Refrigerated Tabletop Microcentrifuge = 2 Nos

PP.No. 3679

Group: Dengue and Chikungunya

Specifications

- 1. Maximum Speed RPM 14000 rpm, with a brushless motor
- 2. Temperature range from 0°C to 25 °C, & should maintain 4°C at maximum speed
- 3. Rotors: Aerosol tight fixed angle metal rotor with lid to accommodate 24 number of 1.5 & 2 ml tubes (Maximum Speed should be atleast 15000 rpm) in a single row/layer,
- 4. Additional Rotor with lid for 32 X 0.2 ml PCR tubes or four 8 well 0.2 ml PCR strips
- 5. Digital Display large, brightly lit LCD for all parameters including temperature time, speed.
- 6. Timer 10s to atleast 9 hrs with continuous run function.
- 7. Approx Noise levels should be < 55 dB
- 8. With an in-built condensate drain to prevent water accumulation
- 9. With Programmable function, possible in both rpm and RCF
- 10. Perform gentle acceleration and deceleration using 10/10 RPM steps
- 11. With safety features like- emergency door opening facility on electrical failure, Lid Locking, auto rotor recognition, Rotor imbalance shut off
- 12. Spares should be available for additional 5 years after warranty period.
- 13. Electrical supply:220-230 Volts, Frequency 50Hertz, single phase
- 14. CE Certified
- 15. Installation, validation/performance demonstration should be carried out at site.
- 16. Operational and maintenance plan: 3+2 years warranty.

Refrigerated Tabletop Centrifuge = 5 Nos

PP. No. 3632, 3646, 3810, 323

Group: Hepatitis, JE and Bengaluru Field Unit, Mumbai Unit. Specifications

- 1. Refrigerated Tabletop Centrifuge
- 2. Maximum Speed RPM 14000 rpm for fixed angle rotor and minimum 3500 rpm for swing bucket rotor
- 3. Temperature range from 0°C to 25°C, & should maintain 4°C at maximum speed
- 4. Rotors: Compatible Swing bucket rotors with buckets for 4X 250 ml, 4 X 96 well plate buckets and adapters for 50 ml, 15 ml, and 5 ml according to the capacity of the bucket
- 5. Compatible Fixed Angle rotors with aerosol tight lid for 6X 50 ml tubes and adapters for 15 ml
- 6. Compatible Fixed Angle rotors with aerosol tight lid with aerosol tight lid for 24X 1.5/2 ml
- 7. Rotors, buckets, adapters and caps should be autoclavable
- 8. Digital Display large, brightly lit LCD for all parameters including temperature time, speed.
- 9. Parameter input using keypad.
- 10. Timer 1 min to atleast 90minutes with continuous run function
- 11. Approx Noise levels should be < 60 dB
- 12. With an in-built condensate drain to prevent water accumulation
- 13. With Programmable function, possible in both rpm and RCF
- 14. Perform gentle acceleration and deceleration using 10/10 RPM steps
- 15. With safety features like- emergency door opening facility on electrical failure, Lid Locking, auto rotor recognition, Rotor imbalance shut off
- 16. Electrical supply:220-230 Volts, Frequency 50-60 Hertz, single phase
- 17. Spares should be available for additional 5 years after warranty period.
- 18. CE Certified
- 19. Installation, validation/performance demonstration should be carried out at site.
- 20. Operational and maintenance plan: 3+2 years warranty.

Real-time PCR system = 2 Nos PP.No. 3689 and 3599

Group: Virus repository and Avian Influenza

Specifications

The real-time PCR system should have the following features

- 1. Optics: Halogen or LED light source, Detection using CCD Camera/Photodiode, at least five excitation and five emission filters (should be able to detect at least five of the following dyes or equivalent: FAM, VIC/HEX, Cy3, Cy5, Texas Red, Cy5.5, Quasar 705
- 2. Chemistries supported: Taqman, SYBR green and melting curve based
- 3. Reaction Speed: Fast, and Standard
- 4. Dynamic Range: 9 logs and above of linear dynamic range
- 5. Sensitivity: Down to 1 copy of human RNAse P or any housekeeping gene
- 6. Capacity: 12 x 8-tube strips (0.1 -0.2 ml), 1 x 96-well plate (0.1-0.2ml)
- 7. Format: 96-well plate, 8-well strips
- 8. Run Time: ≤2 hrs (Standard)
- 9. Reaction Volume Range: 10-30 µl
- 10. Temperature Range: 4.0- 99.9 ± 1 °C; Temperature Uniformity: should be equal or less than ± 1 °C; Temperature Accuracy: should be equal or less ± 0.5 °C; Block Ramp Rate: 5 and above °C/sec
- 11. Thermal Cycling System: Peltier-Based System
- 12. System should be an open platform which can run reactions based on reagents from different companies
- 13. External Computer: Latest model compatible Laptop latest version of operating system and with latest version of acquisition and analysis software.
- 14. Should be able to provide spares and service for the quoted model for additional 5 years after warranty period.
- 15. Installation, validation/performance demonstration should be carried out at site.
- 16. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

Operational and maintenance plan: 3+2 years warranty.

Biosafety cabinet Class II A2 = 20 nos PP.Nos: 3657, 3666, 3707, 3722, 3675, 3645, 3713, 3708

Dengue, Hepatitis, Avian Influenza, Animal House, DVG, Academic Cell, JE

Specifications

- 1. A class II, type A2 Biosafety cabinet made of a rust proof, electro galvanized steel with oven-baked epoxy-polyester powder coating. The external dimensions of the unit should be approximately 50 56" X 30 33" X 55 60" (W X D X H).
- 2. All exterior surfaces painted with a permanent antimicrobial coating to minimize contamination and the cabinet should be approved for both hydrogen peroxide vapour (HPV) and formaldehyde decontamination protocols.
- 3. Interior work area and work surface must be made up of a single piece of stainless steel and the internal work area dimensions should be 48 52" X 20 22" X 24 27" (W X D X H). The cabinet work zone should be devoid of any welded joints.
- 4. With long life ULPA/HEPA filters for supply and exhaust airflows with the filtration efficiency of > 99.999% at 0.1 micron to 0.3 microns.
- 5. Should provide around 70% recirculation and 30% exhausts through exhaust plenum with the inflow velocity of 90-100 fpm and down flow velocity 60-70 fpm.
- 6. Programmable through microprocessor based control system with a LCD interface indicating the cabinet performance in form of the air velocity, air flow and sash condition, etc. The unit should be a certified vibration free and low noise working station (<65dB).
- 7. The cabinet shall be equipped with germicidal ultraviolet light and timer for automatic switch off, UV run hour meter to monitor the remaining UV lamp life, a fluorescent lamp with intensity of 1100->1400 Lux, two internal electrical sockets (5 Amp), etc and audio-visual alarm monitoring any unsafe conditions for use including the improper airflow or sash position.
- 8. A frameless, shatterproof sash positioned at standard height should be equipped with automatic UV shut-off on sash opening. The sash glass should be a certified safety glass.
- 9. The sash counterbalance should be suspended on two high-strength cables, and the sash shall lock into position in the event one cable becomes detached. The blower and lights on/off should be synchronized with movement of sash window to correct position.
- 10. The biosafety cabinet should be fully compliant, tested and certified by NSF 49 or EN 12469 and should have listed by Underwriters Laboratories (UL) or CE for electrical safety. All necessary certificates for standard compliance must be provided in the form of hard copy with the quotation.
- 11. Should have Lockable castor wheels for easy moving
- 12. Spares should be available for additional 5 years after warranty period.

- 13. Installation, validation/ performance demonstration should be carried out at site.
- 14. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation
- 15. Operational and maintenance plan: 3+2 years warranty

CO₂ Incubator (Water Jacketed) = 6 Nos PP. Nos: 3641, 3670, 3680, 3597, 3807

Hepatitis, Avian Influenza, Enteric Virus, Virus repository, Bengaluru Field Unit

Technical Specifications:

- 1. Water jacketed unit with digital display, stackable.
- 2. Temperature range 5 degree centigrade to 50 degree centigrade.
- 3. Adjustable stainless steel 3 to 4 shelves with inner glass door.
- 4. CO2 concentration must be adjustable 0-20 %.
- 5. Relative humidity should be up to 93-95% at 37° C.
- 6. Temperature uniformity as $\pm 0.2^{\circ}$ C at 37° C.
- 7. It should be equipped with Digital display and audiovisual alarm system for adjusted CO₂, temperature and relative humidity levels.
- 8. Capacity of unit should be 180-200 liters.
- 9. Interior dimensions should not be less than 50-52 X 52-54 X 65-68 cm.(LXWXH).
- 10. Equipped with in chamber HEPA filter and microbiological filters on all gas inlets and outlets and sample port.
- 11. The unit should be provided with all necessary accessories including humidity pan (3-3.5 lit capacity), compatible CO2 regulator with pressure gauge.
- 12. Spares should be available for additional 5 years after warranty period.
- 13. Power supply 200-240 V /50 HZ.
- 14. Installation, validation/performance demonstration should be carried out at site.
- 15. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.
- 16. Operational and maintenance plan: 3+2 years warranty

Gel & Blot Imaging System = 1 No

PP. No: 3631 Hepatitis

Technical Specifications:

- 1. With flexible, sensitive multiplex fluorescent and chemiluminescence western blot detection
- 2. Should also allow agarose and SDS-PAGE gel imaging, analysis and documentation
- 3. With imaging system, camera and screen display and attached computer with latest operating system and atleast 8GB RAM or more
- 4. With automatic selection of optimal light source by application, auto focus, auto exposure, and preview features
- 5.Should be compatible with a wide range of fluorophores with facility for multiplex fluorescent western blotting
- 6. Should enable diverse imaging applications and have appropriate supporting software options with multi user license.
- 7. Spares should be available for additional 5 years after warranty period.
- 8. Delivery, installation, validation/performance demonstration should be carried out on site.
- 9. Operational and maintenance plan: 3+2 years warranty
- 10. Electrical requirement 220V, 50Hz, Single phase

Electrophoretic Transfer Cell = 1 NO

PP. No: 3630 Hepatitis

Technical Specifications:

- 1- It should be a semi dry transfer system for transfer of proteins from polyacrylamide gels to nitrocellulose or PVDF membrane in 10 -30 minutes.
- 2- The system should allow simultaneous transfer of four mini sized gel or 2 midi sized gels.
- 3- With integrated power supply
- 4- With blotting cassettes
- 5- Pre programmed methods for low molecular weight, mixed range molecular weight and high molecular weight proteins.
- 6- 1.5 mm thick mini gels gels and gels with variable dimensions
- 7. Spares should be available for additional 5 years after warranty period.
- 8. Delivery, installation, validation/performance demonstration should be carried out on site.
- 9. Operational and maintenance plan: 3+2 years warranty
- 10. Electrical requirement 220V, 50Hz, Single phase.

Laboratory Fermentor

PP. No: 3658 Hepatitis Specifications

Suitable for cell-culture and microbial culture.

- 1. Capacity: 3-5 liters
- 2. A head plate, to close the vessel
- 3. Single walled and jacketed with facility for aeration and an impeller for stirring.
- 4. Acid/base inlets for pH control
- 5. Temp control system
- 6. With pH, (dissolved oxygen) DO, Temperature, Optical Density, Foam level Sensors
- 7. Air flow accuracy, Controlling and monitoring components, within or attached to the vessel or the head plate, to measure and adjust the culturing conditions, such as feed lines and sensors
- 8. A control system comprising external components to adjust the culturing conditions and control software
- 9. With inoculation port and easy sampling and harvesting facility
- 10. Autoclavable unit
- 11. Spares should be available for additional 5 years after warranty period.
- 12. Delivery, installation, validation/performance demonstration should be carried out on site.
- 13. Operational and maintenance plan: 3+2 years warranty
- 14. Electrical requirement 220V, 50Hz, Single phase.

Data Logger System 1 No

PP No. 3693

Avian Influenza

Technical Specifications:

Mode: Operator mode and administrative mode

- 1. System with highly reliable wireless data logger to read connected sensors at programmable intervals, stores the data locally, and transfers it wirelessly to centralized data collection center.
- 2. System with wireless modules
- 3. With LCD display with latest parameter details, signal strength, remaining battery level & alert.
- 4. Automatic alarms for out-of-bound conditions and technical problems.
- 5. On-board memory for up to 3,000 readings,
- 6. 13.6 V Lithium battery (up to 3500 mAh) providing up to 2 years service
- 7. Wireless range up to 800M (line of sight)
- 8. Sensors: Wireless Sensor with external temperature probe & display: Range: -40°C to ambient (~ 25°C) for Freezers, [-40°C Deep Freezers] 2 Nos.
- 9. Wireless Sensor with external temperature probe & display: Range: (minus) -100°C toambient (~ 25°C)[ultra low temperature freezers [-80°C] 2 Nos.
- 10. Wireless digital Dual sensors with external temperature probe Temperature & Humidity Range: +10°C to +50°C [ambient temperature monitoring]. 2 Nos.
- 11. Wireless digital Dual sensors with external temperature probe & CO2 Incubators Range: Temperature 0° C to $+50^{\circ}$ C & CO2 +0% to 9.99%. 2 Nos
- 12. Wireless Sensor with external temperature probe & display: Range: (minus) -10°C to +80°C [Refrigerators] 4 Nos
- 13. Software: to collect data from sensors for generating reports and audit trails.
- 14. With Alert Management System in case of technical failure-Supports automated voice call, e-mail, SMS, printer, etc,
- 15. With Alert acknowledgment by users
- 16. Plugged directly into our host Desktop computer to collect data
- 17. Standard Accessories:
- 18. All standard accessories such as repeaters, wireless siren, USB telephone modem, alarm controller, Desktop Computers with latest operating system and atleast 8 GB RAM etc.,
- 19. Other requirements:

- 20. Installation, validation/ performance demonstration should be carried out at site.
- 21. Electrical requirement 220V, 50Hz, Single phase.
- 22. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.
- 23. Operational and maintenance plan: 3+2 years warranty.

Inverted Microscope 2 No PP No 3723 Academic Cell

Technical Specifications:

- 1. Objectives: Phase Contrast objectives 4x, 10x, 20x & 40x
- 2. Transmitted Illuminator LED Lamp.
- 3. Observation Method Fluorescence (Blue/Green Excitation).
- 4. Fluorescence (Ultraviolet Excitation).
- 5. Phase Contrast, Inversion Contrast, Bright field, Zoom-10x, 20x and 40x.
- 6. Operating Environment Indoor Use Ambient Temperature 5 40 °C.
- 7. Revolving Nosepiece Manual Standard Type,
- 8. Built-in 4 position, Stage Mechanical Plain Stage.
- 9. Use for observation of all type of Tissue culture plates and flask (Small & Big).
- 10. Electricals 230-240 V/50-60Hz
- 11. The unit must be provided with all necessary accessories with 3 years comprehensive and 2 years non-comprehensive warranty. Spares should be available for additional 5 years.
- 12. Delivery, Installation, validation/ performance demonstration should be carried out on site.
- 13. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.
- 14. Spare LED Lamps (4 Nos.)

ELISA Washer: 1 No

PP No. 3677 Enteric Virus

Technical Specifications:

- 1. Plate Types 96-well
- 2. Wash Heads 1x8, 1x12 Dispensing Volume Range 50 to 400 micro liter (96)
- 3. Priming and rinsing volume 1 bottle x 2 ltr
- 4. Display LCD
- 5. Strip washing and strip-skip washing.
- 6. Programmable soak time, wash cycle and wash volume. Cross wash & bottom wash.
- 7. Storage of multiple wash programs.
- 8. Large color clear display and keypad for easy, convenient use
- 9. Rust free Unit.
- 10. Spares should be available for additional 5 years after warranty period.
- 11. Delivery, installation, validation/ performance demonstration should be carried out on site.
- 12. Operational and maintenance plan: 3+2 years warranty
- 13. Power supply: 230V, 50Hz/60Hz.

Fluorescent Microscope PP. NO: 3639

JE.

- 1. Inverted Fluorescence Microscope.
- 2. **Brief description:** Epi-fluorescence microscope suitable for transmitted and reflected fluorescence microscopy, with a trinocular viewing head, imaging system, desktop computer and all accessories
- 3. Detailed specifications:

Component	Specifications			
Body	Acid-resistant, ergonomic, Siedentopf-type tiltable tube, with wide-field			
	trinocular viewing head with camera port, offering adjustments in			
	interpupillary distance from 50 to 75mm			
Optical system	High-quality, latest, infinity-corrected system, offering best brightness			
	contrast, and colour correction, preferably with anti-reflection, anti-fung			
	and anti-bacterial coating			
Intended applications	Bright field, phase contrast, differential interference contrast, fluorescence			
	microscopy and preferably live cell imaging.			
Illumination source	LED, with in-built Fly eye lens/12Volt or 100Watt Halogen lamp			
Eyepiece	Paired, wide-field 10X eyepieces, with minimum field of view of 22mm,			
	focusable and adjustable dioptre setting			
Nosepiece	Revolving sextuplet nosepiece with precise click stops			
Objectives	Plan Apochromat 1X/1.25X, Plan Achromat 2X/4X, Plan Fluorite 10X,20X,40X			
	60X and Plan Apochromat 100X(O) with numerical aperture 1.4 v			
	correction collar			
Focusing system	Co-axial fine and coarse adjustment with smooth movements, fine division of			
	1μm, moving range of 35mm, and minimum sample space of 55mm			
Stage	Scratch-resistant, rectangular, mechanical stage with minimum dimensions of			
	≥25mm x ≥28mm (X-Y), right-sided control handle, and universal holders for			
	slides, multi-well cell culture plates, cell culture flasks, Petri dishes, with well			
	clamp and stage clip			
Condenser	Rotating, multi-function, with a numerical aperture ≥0.55, with iris diaphragm			
	and filter holder, supporting a working distance of 72mm or higher, and with			
	phase contrast annuli for 10X, 20X, 40X and 60X objectives			
Filters	Suitable for FITC/GFP, DAPI/Hoechst, TRITC/Rhodamine, Cy5, Cy3 and Texas			
	Red dyes and dual band filters for FITC/Rhodamine, Triple band filter for			
	FITC/TRITC/Rhodamine			
Camera	Standard C- or F-mount camera (with at least 7MP and supporting a minimum			
	pixel size of 3.4μmx3.4μm), with controllable electric sensor-based cooling,			
	supporting upto 20-40 deg. below ambient temperature, able to achieve			
	working temperature within 5 minutes, exposure time 1msec-600seconds or			
	more, upto 50 minutes of long time exposure, USB3.0 5GBit/sec interface for			
	high-speed data transmission, excellent colour reproduction, advanced vide			
	and image processing application, supporting video and trigger mode			
Imaging system	Fully licensed, latest version image analysis software, with intuitive, easy-to			
	navigate interface facilitating counting and measurements, time lapse			
	acquisition at predetermined times, montage function using Z-stacked images,			

	overlay function to obtain merged images obtained with different filters, multichannel fluorescence capturing, including measurement and enhancing tools, annotations for easy documentation Compatible desktop PC with at least 8GB RAM, at least i5 10 th Generation or equivalent processor, 1TB HDD, 1GB Graphic Card, 4 USB ports and and built-in removable DVD RW drive, 32" monitor, with USB keyboard and wireless mouse
Operating voltage	230V, 50Hz/60Hz.
Accessories	Vinyl dust cover, cleaning cloth, Allen keys, fuses (2 Nos.), Instruction Manual, Blue Filter (Frosted & Plain), Power Cord
Warranty	3 years comprehensive and subsequently 2 years non-comprehensive onsite warranty

Name of equipment: Gel imaging system

PP No: -003686, 3507,3725

Dept : Bacteriology, Avian Influenza, Academic cell (MSc. Virology)

Quantity : 3 Nos.

Technical Specification

1. Compatible to image DNA, RNA, Protein gels (Coomassie stain and silver stain). Bacterial colony plate. Upgradable to Chemiluminescence and chemifluorescence for imaging Western blot.

- 2. High resolution CCD camera: 5-20 mega pixel resolution with ~2000 X 1500 pixel array, Pixel Size 4.6 x 4.6
- 3. Dynamic range: 3.0-5.0 orders of magnitude
- 4. UV and white light source: ~300nm illumination source having about 25x25 Tran-illumination areas with foldable white light
- 5. Data acquisitions: 16 bit and 65 grey levels
- 6. Motorized Zoom lens and 3 positions filter slider with amber filter.
- 7. Universal dark room with white light EPL with sliding as well as open door facility
- 8. Software for imaging and analysing 1-D electrophoretic gels, dot blots, slot blots, and colony counts. Software should quantitate and analyze a variety of data
- 9. Multi positioned motorized filter with emission filter for ethidium bromide, SYBER Green. etc.
- 10. Operation Fully automated (auto exposure, no focus or other adjustment or calibration needed)
- 11. Sample stage size $\sim 25 \times 35$ cm
- 12. Possibility of future upgrade for excitation and emission filters for imaging FITC, FAM, GFP gels.
- 13. With multi-user licensed software with compatible workstation and latest configuration
- 14. The unit must be provided with all necessary accessories with 3 years comprehensive and 2 years non-comprehensive warranty. After warranty spares should be available for additional 5 years.
- 15. Delivery, Installation, validation/performance demonstration should be carried out on site.
- 16. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

Name of equipment : Real Time Quantitative micro PCR Analyser

PP No : 002747/2020-21 **Department** : MCL (BSL-IV)

Quantity : 1 No.

Technical Specifications

Specifications:

1. Principle based on real time micro PCR with Fluorescent, three Wavelength Optics

- 2. Speed of equipment around 40 cycles of PCR/35 minutes.
- 3. Equipment Interface: Wi-Fi, Bluetooth.
- 4. With Auto calibration facility
- 5. Capacity to store 20,000 test results
- 6. Operating Temperature 15 °C -40°C
- 7. Capacitive 5 inch touch screen display for programming.
- 8. Rechargeable Lithium Ion Battery pack 7.4 V, 8.7 Ah,
- 9. Input to AC/DC adaptor: 100-240; 50/60 Hz; 1500 mA. Output from AC/DC adaptor: 10 V, 4500mA; 45VA.
- 10. Overall weight of equipment shall be less than 2 kgs.
- 11. The unit must be provided with all necessary accessories with 3 years comprehensive and 2 years non-comprehensive warranty.
- 12. After warranty spares should be available for additional 5 years.
- 13. Delivery, Installation, validation/performance demonstration should be carried out on site.
- 14. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

Name of equipment : Tissuelyser Machine
PP No : 003585/2021-22
Department : MCL (BSL-IV)

Quantity : 2 No's.

Technical Specifications

1) Purpose: - Mechanical automated dissociation and homogenization device to obtain live cells from solid tissue or molecules from solid and liquid sample

- 2) Motor capable of 100 rpm for tissue dissociation (obtaining live cells) and high speed motor for up to 22000 rpm for homogenization
- 3) Suitable for 1 ml to 15 ml cartridges
- 4) Bead based system
- 5) With facility to detach and sterilise sample holders
- 6) Power Supply 220 Volt & 50 Hz, Single phase
- 7) Vision panel/Inspection windows available to view working of the machine
- 8) Touch screen panel/PC with facility for programming of running times, volume, light and homogenization speed etc.
- 9) Electronic and software update possible.
- 10) The unit must be provided with all necessary accessories with 3 years comprehensive and 2 years non-comprehensive warranty.
- 11) After warranty spares should be available for additional 5 years.
- 12) Delivery, Installation, validation/performance demonstration should be carried out on site.
- 13) All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

Name of equipment: Animal identification system with RFID Transponders and Readers

PP No : 003586/2021-22 **Department** : MCL (BSL-IV)

Quantity: 1 No.

Technical Specifications

Specifications:

- 1) Portable reader system for programming & reading the identification data from transponders
- 2) Reader contains OLED screen display screen
- 3) Data transmission to the system through serial USB as well as wireless transmission,
- 4) Audio & vibration feedback
- 5) Memory storage up to 100000 records.
- 6) Time and date stamp
- 7) Selectable fields, records & formatting parameters including temperature
- 8) 1 Phase power supply: 220-240V, 50 Hz, AC Power as well as operating with rechargeable batteries.
- 9) 3000-5000 mAH user replaceable Batteries.
- 10) Preferably compatible with the IPTT-300 transponders
- 11) The unit must be provided with all necessary accessories with 3 years comprehensive and 2 years non-comprehensive warranty.
- 12) After warranty spares should be available for additional 5 years.
- 13) Delivery, Installation, validation/performance demonstration should be carried out on site.
- 14) All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.
- 15) Programming devices, Wireless module, Reader stand, Communication cable, Suitable transponders- 1000 no's & dedicated laptop of 2 TB HDD with Licenses software for Animal identification system

Name of equipment : Animal Vital Signs Monitor

 PP No
 : 003588/2021-22

 Department
 : MCL (BSL-IV)

Quantity: 1 No.

Technical Specifications

1) **Specifications:**

- 1. Smaller animal Vital Signs Monitor
 - Non Invasive
 - Works on anesthetized and conscious subjects
 - Works on neonates through adults
 - MRI Compatible
 - Can be used to monitor multiple animals
- 2. Provides the following measurements:
 - Arterial Oxygen Saturation
 - Heart Rate 90-900 BPM
 - Breathing Rate
 - Core Body Temperature
 - Pulse Distention
 - Breath Distention
- 3. Premium Monitoring with Data Acquisition and Analysis Module:
- 4. Premium monitoring includes trending charts, real time recording options, file markers for noting important events, and a quick averaging diagnostic feature for spot-checking.
- 5. Built in parameter alarms for monitoring depth of anesthesia.
- 6. Ability to write data to a file for later analysis.
- 7. Electrical Requirement: 220V/50-60 Hz
- 8. Programming device, Wireless module, Reader stand, Communication cable
- 9. The unit must be provided with all necessary accessories with 3 years comprehensive and 2 years non-comprehensive warranty.
- 10. After warranty spares should be available for additional 5 years.
- 11. Delivery, Installation, validation/performance demonstration should be carried out on site.
- 12. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

Name of equipment : -80°C Ultra Low Freezer PP No : 003589, 003703,324

Department : MCL (BSL-IV), PVG, Mumbai Unit

Quantity: 04 Nos.

Technical Specifications

1. Model type should be up right (vertical)

- 2. Temperature Range should be about -70°C to -86°C
- 3. Should be able to maintain minimum temperature at up to 40°C ambient temperature
- 4. Inner & Outer cabinet made of stainless steel AISI 306 grade. Stainless steel shelves with four compartments, Individual sub-doors for each compartment made of Stainless steel sheets.
- 5. Outer door should be lockable
- 6. Digital controller and display with keypad (Without Touch screen) with adjustable setting option
- 7. Non-CFC, high density, urethane Foam insulation of 150mm thickness.
- 8. Closure-durable magnetic rubber gaskets of twin circuits
- 9. Robust, adjustable, lockable wheels
- 10. Storage Capacity: 400 to 600 liters.
- 11. Required no's of stainless steel clip racks that can hold standard cryo boxes.
- 12. The unit must be provided with all necessary accessories with 3 years comprehensive and 2 years non-comprehensive warranty.
- 13. After warranty spares should be available for additional 5 years.
- 14. Delivery, Installation, validation/performance demonstration should be carried out on site.
- 15. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

Name of the Equipment : Individually Ventilated Cage System (Quantity

PP No-3510

Department : BSL-3 Quantity : 1No.

Technical Specifications:

Individually Ventilated Caging System (IVCs) to house laboratory mice including cages, racks, Air Handling Unit and other essential accessories

CAGES

- 1. Floor area (Approx 450-500 cm²) capacity- 5-7 adult mice/cage
- 2. Positive /negative pressure monitor- air pressure via the AHU control panel.
- 3. Durable cage for rigorous washing and frequent autoclaving.
- 4. S/S wire Lid bar with proper sealing mechanism.
- 5. Provision for water bottle, microbiological filter (filtration efficiency 99.5% referred to 0.3µ particles size or better), supply and exhaust valve for air ventilation and latches
- 6. Polycarbonate / polysulfonate transparent Water bottle with a stainless steel 316 cap.
- 7. Inlet and outlet air nozzles must prevent cross-contamination and with no air drafts.
- 8. All components are to be autoclavable and washable with plastic card holder.

RACKS

- 1. Double sided, Rack with system of vertical plenums with demountable air nozzles for air circulation to individual cage
- 2. 304 stainless steel rack structure, indicators for cage properly docked.
- 3. Heavy duty, castor wheels with SS 304 casing and special grade wheels (2 nos. free moving & 2 Nos. with padlock arrangement).
- 4. Horizontal plenums to facilitate the equal air distribution and demountable.

AIR HANDLING UNITS

- 1. Filter: Prefilter and HEPA filter for supply and exhaust,
- 2. Individual AHU capable of serving to 2 double sided or 4 single sided racks easy setting.
- 3. Stand-alone system physically separated from the racks.
- 4. Microprocessor controlled system for monitoring of parameters.
- 5. Necessary electricals & controls to monitor various parameters such as Air Changes per hour, average cage temperature and humidity, working pressure mode..
- 1. DOP test certification for HEPA filters both supply and exhaust.
- 2. Dry contact for alarm connection to integrate with the building management software.
- 3. Low noise Units (< 50 dBA).
- 4. Along with acceptable test reports of:
- 5. a]. Air flow tests in both positive and negative pressures
 - b]. Filter integrity c]. Calibrated sensors
- 6. Standard certifications ISO 9001 and ISO 14001 or similar

Others:

- The unit must be provided with all necessary accessories (Cages, supply and exhausts nozzles, Water bottles, SS steel lid bars) with 3 years comprehensive and 2 years non-comprehensive warranty. Spares should be available for additional 5 years.
- Delivery, Installation, validation/ performance demonstration should be carried out on site.
- All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

PP No-003668/2021-22

Department : BSL-3

Name of the Equipment : Ultra freezer (with LN2 Backup)

Quantity : 01Nos.

Technical Specification:

1. Type : Upright (Vertical)

Temperature : -86 (range: -78°C to -86°C)
 Capacity : Minimum 500- Maximum 600 L

4. Electrical Requirements : 230V/50 Hz, 4-8A

5. Dimensions (D x W x H) Exterior : 95 x 100 x 200 cm Approx.
6. Dimensions (D x W x H) Interior : 70 x 90 x 130 cm Approx
7. Display : Touch-Screen LCD

8. Shelf : 5-6 Shelves

9. Drawer system : Sliding Drawer Rack

10. Security features: Alarm settings, password-protected controller, and padlock - compatible

- a. Doors and Access control system with biometric or access key card entry.
- 11. Data logging and temperature mapping features, data exportable via a built-in USB port.
- 12. Liquid Nitrogen (LN₂) / CO₂ Backup System to maintains temperature between -78 $^{\circ}$ C to 80 $^{\circ}$ C.
- 13. Stainless Steel Interior.
- 14. Gasket for tight sealing to avoid condensation/ice formation.
- 15. Two stage Compressor
- 16. Listed by CE, UL/CSA.
- 17. Standard Accessories:
 - i. Supplied with compatible, wall mountable stabilizer
 - ii. Supplied with following accessories:
 - iii. Stainless steel clip racks that can hold standard cryo boxes
 - iv. Supplied with cryo boxes and box dividers
- 18. Warranty: 3 years Comprehensive and 2 years Non-Comprehensive
- 19. Installation, validation/performance demonstration should be carried out at site.
- 20. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

Server: 1 No PP No. 1730

Bioinformatics and Data Management Group

Technical Specifications

E			
Form Factor/Height	1U rack server		
Compliance	Offered server should be certified for running Vmware latest edition and Windows OS		
Processors	Server to be configured with 2 * Intel Xeon Slver 4216 CPU or better		
Memory	Server to offer with 192 GB DDR4 2933 MHz memory Server should support upto 1 TB Memory & Intel optane DCPMM Server shall be offered with 2933MHZ DIMMs. Offered Server shall support SDDC ,ADDDC, Memory mirroring and memory rank sparing		
Expansion Slots	Server should support Up to 3x PCIe 3.0 via multiple riser options		
Drive Bays	Server shouild have 10 x2.5", Server shall support SAS/SATA HDD/SSD and PCIe NVMe SSD types drives Server shall offered with 2x 300 GB 10K hot swap SAS drives in RAID 1		
HBA/RAID Support	HW RAID controller with RAID 0,1, 5 support. Minimum 8 internal drive		
Security and	support TPM 1.2/2.0; PFA; hot-swap/redundant drives, fans, and PSUs;Six hot-		
Availability	swap dual-rotor system fans with N+1 redundancy; light path diagnostic		
Features	LEDs; front-access diagnostics via dedicated USB port		
Network Interface	2 x 1G ports; 1x dedicated 1GbE management port 1 * DP 16G FC HBA		
Power	Offered server should be Energy Star 3.0 compliant. Server should be configured with 2x hot swap/redundant: 550W 80 PLUS Platinum;		
Monitoring & Management	Server should have emnedded management solution with management software from the same OEM and management via dedicated 1G port. Management solution shall support centralized management and deployment. Offered solution shall be capable of monitoring the server storage network platfrom of the OEM from a single window Management system shall provide Proactive Platform Alerts (including PFA and SMART alerts) for processors, voltage regulators, memory, internal storage (SAS/SATA HDDs and SSDs, NVMe SSDs, M.2 storage, flash storage adapters), fans, power supplies, RAID controllers and support Continuously monitors system parameters, triggers alerts, and performs recovery actions in case of failure to minimize downtime. The offered solution should have call to home functionality to raise service ticket automatically		
Warranty	3-year Onsite support with defective media retention. Customer will retain the defective media		
OEM Eligibility	All the parts in the server shall have the OEM part code, same shall be part of technical bid		

Storage (associated with Servers)

Technical Specifications

Architecture	The proposed storage array should be configured in		
	No Single Point of failure including controller, cache, power supply and cooling fans with power cords, etc.		
	All the firmware, software upgrades and hardware spare replacements for storage should be non-disruptive and should be done online without any downtime.		
IOPS	The proposed storage array shall be capable of delivering more than 50K IOPS . Performance should not degrade during disk rebuild process.		
Power Supplies	Redundant Power Supplies with sufficient compatible power cords		
Protocol Support	Storage should be configured with FC / iSCSI protocol.		
Controllers	Dual Redundant Controllers with total of 12 no of 16Gbps FC front end ports across dual controller storage system. Ports should be evenly distributed across the controllers.		
	Active - Active controllers with automatic load balancing and failover across controllers		
Back End connectivity	Storage Subsystem should have a backend connectivity of 12 Gbps or higher. 2x 12 Gb SAS expansion ports on each of two controllers		
Raid Level /	Should Support RAID 5, RAID 6, RAID 10, RAID 0 and distributed spare for faster rebuilds.		
Disks/Capacity	Storage should be offerde with 12 * 1.2 TB 10K SAS drive. 2 * 800 GB SSD to be offered as extended cache for accellerating read performance. The storage should be scalable to 2 PB RAW under the same controller pair.		
Cache	Minimum 8 GB Cache per controller with Cache mirroring and battery backup. 16 GB cache across dual controller. Scalable upto 64GB cache.		
Scalability	The storage should be scalable to 2 PB usable under the same controller pair, same RAID configuration using same type and size of disks. The offered storage support minimum 180 drives		
Compatibility	Should be compatible with standard operating systems and hypervisors.		
Features required,	* Software to manage Storage LUNs, Hosts etc., monitoring, Multipathing, Load balancing and e-mail alerts capability.		
Software and Mgmt. Utilities	* Storage should support native Multipathing for all the leading industry standard operating systems. Vendor must provide Multipathing software for OS whose native Multipathing does not support proposed storage.		
	* Storage should have sufficient battery backup or better technology to destage the cache writes.		
	* Storage should have capability for online replacement of disks without affecting storage performance.		

	* The storage must provide features to support availability, integrity and reliability features to support 100% data availability * Storage should support snapshot * Storage should support synchronus and assynchronus replication * Storage should support dynamic volume and capacity expansion * Storage should support autoatoc load balancing to Provides automated I/O workload balancing of I/O traffic from the hosts across both controllers
Power Cords	Necessary Power Cords to be provided as per Indian standard
Warranty	Onsite Response (Parts + Labour), 365x24x7 mission critical support with same day 4 hrs. response for 3 years from OEM vendor
Mangement	In built Web GUI based management

G .	Perform hardware installation: BOM validation, racking,
Services scope:	stacking, power-on check, firmware update
	2) Assign management IP to all servers and storage
	3) Perform cabling between server and storage
	4) Configure DE storage, create RAID Group, volume and
	map to servers
	5) Install VMware ESXi on server and configure management network
	6) Install vCenter Server appliance and configure
	7) Configure VM Cluster with vSwitches and datastore
	8) Migrate upto 6 VMs from existing Hyper-v host to the new
	cluster.
	9) Test and validate the storage and VM HA
	10) Install and configure Administrator Appliance
	a. Integrate component for monitoring
	b. Configure firmware update
	c. Configure call-home
	11) Post-install as-is documentation, Knowledge transfer and handover.
	12) Assumptions:
	a. Customer to provide required downtime for the existing VMs after taking valid backup.
	b. Any issues on the existing systems/VMs to be resolved by customer before migration
	c. Customer would provide required switch ports from Ethernet and SAN Switches
	d. VM Migration (V2V) would happen continuously one after the other
	e. Services related OS hardening and security assessment

Server : 2 No PP No. 4610

Bioinformatics and Data Management Group

Technical Specifications

Г			
Form Factor/Height	1U rack server		
Compliance	Offered server should be certified for running Vmware latest edition and Windows OS		
Processors	Server to be configured with 2 * Intel Xeon Slver 4216 CPU or better		
Memory	Server to offer with 192 GB DDR4 2933 MHz memory Server should support upto 1 TB Memory & Intel optane DCPMM Server shall be offered with 2933MHZ DIMMs. Offered Server shall support SDDC ,ADDDC, Memory mirroring and memory rank sparing		
Expansion Slots	Server should support Up to 3x PCIe 3.0 via multiple riser options		
Drive Bays	Server should have 10 x2.5", Server shall support SAS/SATA HDD/SSD and PCIe NVMe SSD types drives Server shall offered with 2x 300 GB 10K hot swap SAS drives in RAID 1		
HBA/RAID	HW RAID controller with RAID 0,1, 5 support. Minimum 8 internal		
Support	drive support		
Security and	TPM 1.2/2.0; PFA; hot-swap/redundant drives, fans, and PSUs;Six hot-		
Availability	swap dual-rotor system fans with N+1 redundancy; light path		
Features	diagnostic LEDs; front-access diagnostics via dedicated USB port		
Network Interface	2 x 1G ports ; 1x dedicated 1GbE management port 1 * DP 16G FC HBA		
Power	Offered server should be Energy Star 3.0 compliant. Server should be configured with 2x hot swap/redundant: 550W 80 PLUS Platinum;		
Monitoring & Management	Server should have emnedded management solution with management software from the same OEM and management via dedicated 1G port. Management solution shall support centralized management and deployment. Offered solution shall be capable of monitoring the server storage network platfrom of the OEM from a single window Management system shall provide Proactive Platform Alerts (including PFA and SMART alerts) for processors, voltage regulators, memory, internal storage (SAS/SATA HDDs and SSDs, NVMe SSDs, M.2 storage, flash storage adapters), fans, power supplies, RAID controllers and support Continuously monitors system parameters, triggers alerts, and performs recovery actions in case of failure to minimize downtime. The offered solution should have call to home functionality to raise service ticket automatically		
Warranty	3-year Onsite support with defective media retention. Customer will retain the defective media		
OEM Eligibility	All the parts in the server shall have the OEM part code, same shall be part of technical bid		

Software (for virtualization)

Virtualization	Umrusana aggantial plug bit on botton with 2 waan CnC
Software	Vmware essential plus kit or better with 3 year SnS

Services scope:	1)	Perform hardware installation: BOM validation, racking,
	stacking, power	-on check, firmware update
	2)	Assign management IP to all servers and storage
	3)	Perform cabling between server and storage
	4)	Configure DE storage, create RAID Group, volume and
	map to servers	
	5)	Install VMware ESXi on server and configure
	management ne	
	6)	Install vCenter Server appliance and configure
	7)	Configure VM Cluster with vSwitches and datastore
	8)	Migrate upto 6 VMs from existing Hyper-v host to the
	new cluster.	
	9)	Test and validate the storage and VM HA
	10)	Install and configure Administrator Appliance
	a.	Integrate component for monitoring
	b.	Configure firmware update
	C.	Configure call-home
	11)	Post-install as-is documentation, Knowledge transfer
	and handover.	
	12)	Assumptions:
	a.	Customer to provide required downtime for the
existing VMs after taking valid backup.		er taking valid backup.
	b.	Any issues on the existing systems/VMs to be resolved
by customer before migration		Fore migration
	C.	Customer would provide required switch ports from
	Ethernet and SAN Switches	
	d.	VM Migration (V2V) would happen continuously one
	after the other	
	e.	Services related OS hardening and security assessment

Workstation: 1 No

PP No. 1429

Bioinformatics and Data Management Group Highend GPU System Technical Specifications

Processor GPU Min. Dual Intel Xeon 4215R (8 Cores, 16 Threads, 3.20 GHz, 130W)
 Min. 2 x Nvidia Quadro RTX A6000 (48GB DDR6/ECC) (Upgrade up to Total 4 GPU)

3. Chipset- Intel® C621 Chipset \ Compatible with the CPU

4. RAM- Min. 8 x 64GB (Total 512GB) DDR4-2400 ECC RDIMM (Total 16 DIMMs)

5. OS Drive- 2 x Min. 480GB SATA SSD 2.5" or better

6. Data Drive- 2 x Min. 8TB SATA Enterprise 7200 RPM 3.5" or better

7. RAID- Onboard SATA3 (6Gbps); RAID 0, 1, 10 (RAID 5 Windows only)

8. ODD- 1 x Optical Drive (DVD-RW)

Graphics- ASPEED AST2500 BMC Onboard or Similar
 Management- Integrated IPMI 2.0 and KVM with dedicated LAN

11. Audio- 7.1 HD Audio Onboard

12. NIC- Min. Dual 10Gbe (Base-T\RJ45) Ethernet LAN onboard

13. Exp. Slots- Min. 6 PCI-E 3.0 x16 slots

14. Ports- Min. 1 VGA, Min. 3 USB 3.0 ports and Min. 2 USB 2.0 ports, Audio

ports

15. Chassis- Full Tower Chassis (Min 8 x Hot Swap 3.5" drive bays)

16. P. Supply- Min 2200W (1+1) Redundant Power Supplies (Min. Titanium Level

Certified)

17. Kb/Mouse- 1 x USB Keyboard & Mouse

18. Monitor-19. OS-1 x Min. 27" LED Monitor (Full HD 1080) 1 x Microsoft Windows 10 (Pro \ 64 Bit)

Extended Technical Support:

- 1. Extended Technical Support with 5 years warranty which includes Installation and Configuration of OS, Drivers, All types of Scientific Applications (Like Bioinfo\Biology\Medical\Mathematical\Computational\AI-ML-DL\Earth Science-Geo\Simulation, etc related list of software), Frameworks & Libraries, Programming applications, etc.
- 2. Scope of Work:
- 3. Unboxing of System and Rackmount (If Rack Server)
 - * Configuration of HDD RAID & BIOS settings, etc.
 - * Installation and Configuration of OS, Drivers, List of Scientific Applications, Frameworks & Libraries as per request
- 4. Complete connectivity of System with your Network
- 5. Other Terms and Conditions:
- 6. Bidder/Vendor & OEM should not be blacklisted/banned in the past from any IIT's, Govt. Institution, Academic & Research Institution. A non-blacklist Certificate or declaration must be submitted along with Bid.
- 7. Vendor/Bidder should have experience in the deployment of the High Performance Computing Solution with Scientific Application Installation in Research

- Institutes/Centre, Govt of India. Purchase Order for same should be submitted followed by Intstalation Certificates mentioned with Scientific Applications.
- 8. Bidder & OEM should be registered in India under Company Act. for IT Hardware \ IT Service & support.
- 9. Bidder & OEM should be an ISO certified Company.
- 10. The vendor should submit complete scope of supply not limited to Racking, OS installations, Packages & other scientific applications. It will be the responsibility of the vendor to submit Linpack Benchmarks results of requested.
- 11. Bidder/OEM should have a entry in the list Supercomputers (Site of Top Supercomputers in India)
- 12. Vendor must have engineer/local support center in Pune Maharashtra for immediate support or response.
- 13. List of Deliverable/Bill of Material must be submitted with a technical offer.

Name of equipment : Micro volume spectrophotometer

 PP No
 : 003592/2021-22

 Department
 : MCL (BSL-IV)

Quantity: 1 No.

Technical Specifications

2) Specifications:

1. Path Length: 1 mm (with auto-ranging to 0.2 mm)

2. Light Source: Xenon flash lamp

3. Sample Size: 1 micro liter

4. Detector Type: 2048-element linear silicon CCD array

5. Wavelength Range: 220-750 nm6. Wavelength Accuracy: 1 nm

7. Wavelength Resolution: 3 nm (FWHM at Hg 546 nm)

8. Absorbance Precision: 0.003 absorbance (1mm path)

9. Absorbance Accuracy: 2% (at 0.76 absorbance at 257 nm)

10. Absorbance Range: 0.02-75 (10 mm equivalent absorbance)

11. Detection Limit: 1 -3 ng/microliter (dsDNA)

12. Maximum Concentration: 3700 -3800 ng/microliter (dsDNA)

13. Measurement Cycle Time: 8-10 seconds

14. For the detection of DNA/RNA/Protein concentrations.

15. It should contain touch pad/ PC for storage and display of the data

16. Operating Voltage: 12 Vdc Power Supply 230V 50Hz

17. The unit must be provided with all necessary accessories with 3 years comprehensive and 2 years non-comprehensive warranty.

- 18. After warranty spares should be available for additional 5 years.
- 19. Delivery, Installation, validation/performance demonstration should be carried out on site.
- 20. All the necessary documents (IQ/OQ/PQ) and certification should be provided at the time of installation.

ICMR-NATIONAL INSTITUTE OF VIROLOGY, PASHAN, PUNE

Part-II: TERMS & CONDITIONS

IMP Note:

- a) These Terms & Conditions may be downloaded and a copy of the same, duly signed on each page by the tenderer must be accompanied with each tender. Otherwise the tender will not be considered.
- b) The terms & conditions mentioned below shall be binding to the tenderer and no other terms and conditions of the tenderers shall be accepted by ICMR-National Institute of Virology, Pune. No correspondence in this regard will be entertained.
 - Tenderers are requested to give detailed tender separately in their own forms under Single Bid System for below Rs. 25 lakhs and Two Bid System for above Rs. 25 Lakhs. The bids which are in two bid system, create two separate bids for Commercial bid and Technical bid. EMD and Bank Guarantee should be a part of Technical Bid.

The equipment quoted should be readily available and should be delivered within 15 days from the date of issue of Purchase Order.

- 2) Submission and Opening of Bids
 - (a) Place for submission of bid: Admin, ICMR-NIV, Pashan, Pune 411021.
 - (b) Date and Time for submission of bid: 14th January, 2022 before 15.00 hrs.
 - (c) The envelope should be superscribed "Tender for (Name of the item); due on 14/01/2022 and to be submitted to the address given below so as to reach before due date & time.

The Director ICMR- National Institute of Virology, 20-A, Dr. Ambedkar Road, Pune – 411 011

Bidders full address should also be indicated on the envelope.

- (d) ICMR-NIV, Pune will not be responsible:
 - 1. For delayed/late bids submitted/sent by post/courier etc.
 - 2. For non receipt of bids at proper place.
 - 3. Any bid received by ICMR-National Institute of Virology, Pune after the due date and time will not be accepted/considered under any circumstances.
- (e) Opening of bids: Bidders/agents need not to be present while opening of bids under single bid system. Tender Opening Committee of the institute will open the bids internally. Subsequently Technical Committee of the institute will evaluate the bids. The lowest evaluated bidder (lowest of technically qualified bidder) as per recommendations of technical committee will be accepted in each case. Decision of technical committee/competent authority of this institute will be final and binding in this regard.
- 3) **BID SECURITY/EARNEST MONEY DEPOSIT (EMD):** A Bid Security or Earnest Money equivalent to two per cent of value of the system/equipment must be

furnished along with the Technical Bid in the form of Demand Draft from a scheduled Bank drawn in favor of the Director, ICMR-NIV, Pune payable at State Bank of India, Pune Main Branch. EMD can also be furnished in the form of Bank Guarantee, as per specimen enclosed at Annexure 'A'. Bank Guarantee furnished other than the given specimen format will not be accepted and such tenders will be rejected straight away. Offers, if received without Bid Security will summarily be rejected. Offers, if received without Bid security will summarily be rejected. In case of exemption of EMD, the copy of the document in support of exemption may be attached with the bid. Earnest Money of successful bidder will be returned only .after installation, commissioning, satisfactory demonstration, training and acceptance by the end user of this institute. The Earnest Money of unsuccessful bidder whose technical bid has not been found suitable will be returned after receipt of Technical Committee recommendations. Such bidders will have to furnish request letter for refund of their EMD along with a Pre-receipt, duly signed on a revenue stamp of one rupee by an authorized signatory. EMDs/Security Deposits that remains unclaimed for consecutive three financial years will be forfeited and credited to the Govt. treasury. No interest shall be payable on Bid Security/EMD/Security Deposit.

- 4) The tenders must be clearly written or typed without any cancellations / corrections or overwriting. If there exists a difference in the amount quoted in words and numeric the lowest of them will be taken as the tender amount.
- 5) The Bid should accompany with complete specification, Manufacturer's name, address and relevant Literature / Brochures with Warranty terms & an undertaking that the bidder agrees to give a security deposit etc.
- 6) In case of Foreign Quote, the address of Principal's / Manufacturer's and their Banker's details should be furnished. The mode of dispatch should be by Air Post Parcel/Ocean Freight/Air Freight (on competitive rates) and on Freight to-pay basis only. The approximate dimensions of the packages and weight of consignment are to be indicated.

The Principal supplier should clearly indicate the address of the Indian Agent and percentage (%) of Agency Commission payable if any, to be paid to them directly in Indian Currency, which will be paid after the receipt of consignment in good condition, satisfactory installation, commissioning and training of the ordered equipment.

Indicate the Client list and details of suppliers made to Government Organization with name and contact number.

- 7) The bidder who submits the tender on behalf of their principals should produce documentary evidence in support of their authority to quote or submit proforma invoice of their principals.
- 8) The make / brand and name and address of the manufacturer, **Country of Origin, Country of Shipment and currency** in which rates quoted are to be mentioned.
- 9) Details regarding terms of payment must be mentioned clearly.
- 10) Indicate the names of the reputed Indian Organizations including ICMR Institutes/Centers where similar equipment was supplied and may attach the satisfactory performance report of the equipment from user Organization and the price finally paid.

- 11) Based on the above information ICMR-National Institute of Virology, Pune will have its option to obtain details of the goods, their performance, after sales services etc. for evaluation of the tender, directly from the concerned Labs./Scientist etc.
- 12) Attach a copy of latest DGS&D, New Delhi registration Certificate under the compulsory Scheme of Ministry of Finance regarding the registration of Indian Agent of foreign supplier wherever it is applicable.
- 13) The Tenderer is required to furnish the Permanent Account Number (PAN) allotted by Income Tax Department. If registered with the National Small Industries Corporation, the registration number, purpose of registration and the validity period of registration etc. should also be provided in the offer/bid. Xerox copy of GST Number also required
- 14) The Tenderer has to state in details the Electrical Power/UPS requirements, floor Space, head room, foundation needed and also to state whether Air-conditioned environment is needed to house the system etc. and to run the tests. i.e. pre-installation facilities required for installation in the bid.
- 15) Cost of the items should be mentioned clearly in the Offer like:-
- a) The optional and any other essential items / accessories required for the maintenance of the equipment for the next **three years** should also be specified in the offer separately.
- b) Packing, Forwarding, Freight & Insurance and Commissioning Charges, if any extra, may be quoted separately in the Bid.
- c) In case if the quote is F.O.R./F.O.B. basis, estimated insurance coverage charges should be paid by supplier.
- d) CIF value both by Airfreight and Ocean freight.
- e) The actual Tax Percentage if any should be specified clearly.
- f) Equipment to be supplied should be insured by vendor against all risks for loss/damage from the date of shipment till such time it is delivered and installed at NIV in case of Indian Rupees or Foreign Currency transaction.
- 16) Discount offered should also be mentioned clearly in the bid.
- 17) All bank charges inside India to ICMR-National Institute of Virology, Pune account and outside India to Beneficiary's account.
- 18) The Tenderer's conditions printed on the tender or otherwise sent along with the tender shall not be binding on ICMR-National Institute of Virology, Pune.

19) Tenders which are submitted without following the proper procedure will not be accepted:

- (a) Late/Unsigned/Incomplete Tenders.
- (b) Conditional Offers.
- (c) Tenders submitted by Fax / E-mail / Telegraphic
- (d) Tenders, not accompanied an undertaking that the bidder agrees to give Security Deposit/Performance Bank Guarantee, will summarily be rejected.
- 20) Cargo consolidations and custom clearance: ICMR-National Institute of Virology, Pune has its own freight forwarder and custom house agent for all ICMR-National Institute of Virology, Pune imports. Please note that all the consignments have to be routed through our Freight Forwarder and Custom House Agent or their associates only. Name & address of our Custom House Agent can be obtained from Administrative Officer of this institute. While submitting your bid, you may confirm this condition.

- 21) **Penalty for delayed Services/LD:** If the supplier fails to Supply, Install, Commission and Training for the system as per the specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of one percent of order value per every week of delay subject to a maximum of 10% beyond the due date and such money will be deducted from any money due or which may become due to the supplier. ICMR-National Institute of Virology, Pune reserves the right to cancel the order in case the delay is more than 10 weeks. Penalties, if any, will be deducted from the Security Deposit.
- 22) Goods should not be dispatched until the Vendor receives a firm order.
- 23) Please indicate page nos. and put your seal on all pages of quotation.
- 24) The purpose of certain specific conditions is to get or procure best Equipment/service etc. for ICMR-National Institute of Virology, Pune. The opinion of Technical Committee shall be guiding factor for Technical short listing.
- 25) Firms, which have earlier supplied similar equipment to ICMR-National Institute of Virology, Pune and have not completed required installation/commissioning/after sales service/warranty replacements etc. their offers will not be considered for further evaluation and no enquiries thereafter will be entertained.
- 26) Interpretation of the clauses in the Tender Document/Contract Document: In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, Director, ICMR-National Institute of Virology, Pune's interpretation of the clauses shall be final and binding on all parties.
- 27) All disputes are subject to exclusive jurisdiction of Competent Court and Forum in Pune, India only.
- 28) The Director, ICMR-NIV, Pune reserves all the rights to accept or reject any/all tender in full or in part without assigning any reason.

29) Annual Maintenance Contract

The following conditions are included in the annual maintenance contract:-

- a) 3 years comprehensive warranty and 2 years non comprehensive services for equipment free of cost.
- b) Non-comprehensive annual maintenance from 6th to 10th years as decided by the appropriate Technical Committee.
- c) Provide spare parts to maintain the equipment, up to 10 years.
- d) Give discount on list price of all spare parts up to 10 years.
- e) Provide 2 preventive maintenance visits per year and also all the breakdown calls as and when required.
- f) Submit Performance bank guarantee of 5% of the FOB Value of the order and which will be retained by ICMR-National Institute of Virology, Pune till the end of warranty period.
- g) The duration of warranty period will start after proper installation of the equipment and submitting users satisfactory report.
- h) The maximum response time to supply the item(s) is one month from the date of placing PO for indigenous and two month for import.
- i) 0.1% of FOB as penalty per week till the warranty period, if the instrument remains in non working condition for more than 18 days.
- j) When the equipment is under warranty/comprehensive maintenance, it would be the responsibility of the manufacturer/dealer/agent to procure spare parts and the Institute will not incur any expense on duty, octroi or handling charges.

- k) The detailed circuit diagram along with trouble shooting procedure and operational manual would be provided to the Institute/Centre along with the equipment.
- I) Onsite training to the users after installation is to be given.
- 30) "The supplier should submit the IQ OQ/IQ PQ (Installation Qualification-Operational Qualification / Installation Qualification-Performance Qualification) certificate after successfully completion of installation and testing of equipment / installation".
- 31) A)We prefer to release the payment on BILL Basis (excluding Indian Agency Commission) after receipt of consignment in good condition and satisfactory installation, commissioning, training thereof. Alternatively, depending upon the value and foreign exchange regulations the payment can also be considered through FDD/Wire Transfer through State Bank of India for the order value excluding the Indian Agency Commission.
- B) **PAYMENT:** No advance payment is allowed under any circumstances. 100% payment will be released by wire transfer/FDD through the State Bank of India, Main Branch, Pune after receipt of the material, completion of satisfactory installation, commissioning, demonstration and training of the whole system.
- 32) Supply means, "Supply, Installation, Commissioning, demonstration of the whole system and training on the site as desired by this Institute". If any charges extra for Installation, Commissioning and training, the same should be specified in the offer. Goods should be insured against theft/loss/breakage/damage during transit and insurance charges should not exceed 3% of the cost of the materials supplied.
- 33) The item should be supplied with manuals and the manuals including technical drawings should be complete in all respects to operate the system without any problem.
- 34) The import license is covered under OGL policy of 2011 2016.
- 35) (A)In case of Indigenous Items, the offer should contain the Basic Price and percentage of Excise Duty and should be shown separately, since NIV, Pune is exempted from payment of Excise duty vide Govt. Notification No.10/97-Central Excise dated 1st March, 1997.
- (B) NIV is exempted from payment of Custom Duty vide Govt. Notification No.51/96-Customs dated 23rd July, 1996. However, custom duty if any will be paid by ICMR-NIV on production of Bills.
- 36) (A) Performance Security/Security Deposit: The successful bidder shall furnish an unconditional Performance Security in the form Bank Guarantee from a commercial scheduled bank for 5% or higher (as may be decided by the Competent Authority) of the order value within 15 days of placement of the order. An undertaking that the bidder agrees to give security deposit/performance bank guarantee must be submitted with the bid, failing which the bid shall not be considered. If the bidder fails to submit the Performance Security as mentioned above, the Contract shall be deemed as terminated and the order will be placed with any other bidder. Performance Security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. No interest is payable on the Performance Security.
- (B) For Indigenous items, 100% payment shall be made after 30-45 days of satisfactory supply, installation, commissioning, testing and training as per Purchase Order at site.
- 37) **Delivery Period:** As time is the essence of the contract, delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the Security Deposit furnished by the tenderer will be forfeited and also LD clause will be applicable/ enforceable.

- 38) **INSTALLATION:** The Bidder shall be responsible for installation, commissioning, demonstration, training including the identification of defect etc. and for after sales service during the warranty and thereafter. Installation, demonstration to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the goods at site and subsequently training is to be provided to the concerned officials of this institute.
- 39) After successful installation what will be the minimum down time of equipment/instrument in case of breakdown must be mentioned. If the identified firm or person fails to put the system into working condition the further alternative course of action should be suggested adhering to minimum down time.
- 40) **Period of validity of bids:** The bid should be valid/kept open for six months from the date of opening of the bid. Further, if extension of validity would be required in future, the bidder should extend the validity only and no other modifications shall be permitted in cost etc..
- 41) **Amalgamation/Acquisition:** In the event the Manufacturer/Supplier proposes for amalgamation, acquisition or sale of its business to any firm during the contract period, the Buyer/Successor of the Principal Company are liable for execution of the contract and also fulfillment of contractual obligations i.e. supply, installation, commissioning, warranty, maintenance/replacement of spares accessories etc. while submitting your bid, you may confirm this condition.
- 42) ICMR-National Institute of Virology, Pune will not provide any accommodation/ transportation for the Engineers/ Representatives for attending Installation, Commissioning, Demonstration, training etc. it is the absolute responsibility of the Principal Supplier/Indian Agent to make their own arrangements.
- 43) No sub-contracting will be allowed for installation or maintaining system/equipment / instrument during or after warranty period.
- 44) The total payable cost is to be quoted preferably in Indian Rupees for FOB at ICMR-NIV, Pune.

DIRECTOR ICMR-NATIONAL INSTITUTE OF VIROLOGY, PUNE.

I/We agree to abide by all the Terms & Conditions mentioned above.

Signature of the Tenderer

Date:

Name & Address of the Firm with Seal:

(Phone/Fax No./E-mail id may also be stated for easy communication)

Part-III: CHECKLIST

Bidders should indicate whether the following are enclosed with the offer.

- 1. Bid Security/EMD (YES/NO)
- 2. Undertaking that the bidder agrees to give a Security Deposit and

Performance Bank Guarantee for 10% of order value. (YES/NO)

- 3. Authorization letter from Principals. (YES/NO)
- 4. Self Attested copy of Tax Registration certificate

(GST etc) as applicable (YES/NO)

5. Agreements / Purchase orders, if any, from the clients for whom similar

Supply has been made by the bidder in last three years. (YES/NO)

- 6. Copy of ISO 9002 or equivalent Certificate if any. (YES/NO)
- 7. Copy of DGS&D Registration if any. (YES/NO)
- 8. Compliance sheet with any deviation with reference to the terms and

specifications. This should be furnished compulsorily. (YES/NO)

- 9. Acceptance of ICMR-National Institute of Virology, Pune Cargo Agent (YES/NO)
- 10. LD clause agreeable. (YES/NO)
- 11. Supply of spares for 10 years (YES/NO)
- 12. Amalgamation/Acquisition: Successor agreeable to fulfill the

contractual obligation. (YES/NO)

- 13. Free replacements during warranty period (YES/NO)
- 14. Payment terms of ICMR-National Institute of Virology, Pune acceptable (YES/NO)
- 15. Warranty clause of ICMR-National Institute of Virology, Pune acceptable (YES/NO)
- 16. IQ OQ/IQ PQ Certificate acceptable (YES/NO)

ANNEXURE - 'A' BID SECURITY FORM

Whereas	*(hereinafter
called "the Bidder") has submitted its bid dated	date of submission
of bid)for the supply ofgoods) (hereinafter called "the Bid").	_(Name and/or description of the
goods) (hereinafter called "the Bid").	
KNOW ALL PEOPLE by these presents that WE	
(name of bank) of(name of the countr at(address of bank) (hereinaf unto THE DIRECTOR, ICMR-NATIONAL INSTITUTE OF VIR "the Purchaser") in the sum of(mention here the well and truly to be made to the said Purchaser, the Bank assigns by these presents. Sealed with the Common Seal of the common Seal of the common Seal of the common Seal of the Bidder withdraws it's bid during the period of bid valid	ter called "the Bank"), are bound OLOGY, PUNE (hereinafter called EMD amount) for which payment binds itself, its successors, and the said Bank thisday of
Bid Form; or	any specified by the blader on the
2. If the Bidder, having been notified of the acceptance of it' period of bid validity:a) Fails or refuses to execute the Contract Form if required; orb) Fails or refuses to furnish the performance security, in a	
Bidders.	
We undertake to pay the Purchaser up to the above amound demand, without the Purchaser having to substantiate its derective the Purchaser will note that the amount claimed by it is due to of both of the two conditions, specifying the occurred condition. This guarantee shall remain in force up to one year after the demand in respect thereof should reach the Bank not later that	mand, provided that in its demand it, owing to the occurrence of one or conditions. period of the bid validity, and any
(Signature of the Bank) □ Name of Bidder	