

Tender Notice

The P.G. Department of Zoology Maharaja Sriram Chandra Bhanja Deo University, Baripada, invites sealed tenders for the procurement of Incubator Shaker, StereoMicroscope with Camera, and Laminar Airflow through a two-bid system (Technical & Financial Bids). The last date for bid submission is 13.03.2025 at 03:00 PM. Bids will be opened on 17.03.2025 at 3.00 PM. Interested parties may download the tender document from the university website <https://www.nou.nic.in>. The university reserves the right to accept or reject any or all bids.
Principal Investigator, MRIP-2023

Specifications

1. Incubator Shaker

1. Certification: The incubator shaker must be ISI and CE certified to ensure compliance with safety and quality standards.
2. Capacity: The unit should have a working capacity of 100 ml flasks with multiple holders minimum 16 to accommodate various sample sizes.
3. Shaking Speed: The incubator shaker should have a variable speed up to 250 rpm, with digital control for precise adjustments.
4. Temperature Control: The unit must have a temperature range of at least 5°C above ambient to 60°C, with an accuracy of $\pm 0.5^\circ\text{C}$.
5. Shaking Mechanism: The instrument should support orbital shaking with a stable and uniform motion to prevent sample spillage.
6. Platform Size: The shaker platform should be large enough to hold multiple flasks securely, with non-slip rubber grips for safety.
7. Control System: The system should have a digital LED/LCD display for monitoring and setting temperature, speed, and time.
8. Timer Function: The incubator shaker should include a programmable timer (0-99 hours or continuous mode) for automated operation.
9. Power Supply: The equipment should operate on a standard power input (220-240V, 50Hz/60Hz) with an energy-efficient design.
10. Safety Features: The unit must have over-temperature protection, automatic shutdown, and an alarm system for user safety and sample protection with a stabilizer of 3KVA

2. Stereo Microscope

1. High-quality stereo zoomtrinocular optical system with parfocality, ensuring one-time focus for all zoom magnifications.
2. Zoom Ratio: 1:7 zoom ratio for a wide magnification range and smooth zoom functionality.
3. Eyepieces: Standard WF 10x eyepieces, with optional WF 5x, WF 20x, and WF 25x eyepiece accessories for flexible magnification.
4. Trinocular Head: Trinocular head with a 45° inclination, 360° rotatable, and an adjustable interpupillary distance (50-75mm) for comfortable viewing.
5. Objective Lenses: High-quality plan achromatic objectives with auxiliary lens options (0.5x, 1.5x, 2x) for enhanced imaging flexibility.
6. Both transmitted and reflected illumination options for versatile applications.
7. 6V 15W halogen top lamp for incident light illumination.
8. 5W fluorescent bottom lamp for transmitted light illumination.
9. Optional fiber optics illumination for enhanced brightfield or darkfield imaging.
10. Stage: Large working distance (90mm or more) with a glass and metal stage plate, supporting darkfield attachment for advanced observation.
11. Focus Mechanism: Coarse and fine focusing knobs with tension adjustment for precise and smooth focusing.
12. Ergonomic Design: Designed for ease of operation, reducing strain during prolonged use.
13. Build Quality: Durable metal frame with an anti-fungal and anti-reflective coating on lenses for long-lasting performance.
14. The camera having
15. Resolution: High-resolution digital camera (10MP or higher) with CMOS sensor for crisp, clear images.
16. Zoom & Frame Rate: Smooth zoom capability with a minimum 30fps at full resolution for real-time imaging.
17. Connectivity: USB 3.0 / HDMI / Wi-Fi options for seamless data transfer.
18. Image processing software with measurement, annotation, and editing tools.
19. Compatibility with Windows, Mac, and Linux systems.
20. Live View & Recording: Real-time imaging, video recording, and time-lapse photography support.
21. Color Reproduction: High color fidelity with low noise performance under brightfield and darkfield conditions.
22. Storage Options: Direct image saving to PC, external hard drives, or SD card.

23. Compatibility: Fully compatible with the trinocular microscope and standard mounting adapters.
24. Power Supply: USB-powered or external 100-240V, 50/60Hz power adapter.
25. Accessories: Includes calibration slide, necessary cables, software CD/USB, and a user manual.

Laminar Airflow

1. Type: Horizontal or Vertical Laminar Airflow
2. Airflow Velocity: 0.3 to 0.5 m/s (90 to 100 FPM) for uniform airflow distribution.
3. HEPA Filter with 99.99% efficiency at 0.3 microns to ensure contamination-free workspace.
4. Pre-filter with 90% efficiency at 5 microns to extend HEPA filter life.
5. Worksurface Material: Stainless Steel (SS 304/316) for corrosion resistance and easy cleaning.
6. Side Panels: Transparent acrylic/tempered glass for visibility and protection.
7. Fluorescent lamp (500-1000 lux) for adequate workspace illumination.
8. UV germicidal lamp with safety interlock for sterilization.
9. Noise Level: Less than 65 dB at working height to ensure a comfortable working environment.
10. Blower Assembly: Energy-efficient, dynamically balanced, low-noise motor blower for uniform airflow.
11. Control Panel: Digital/Analog controls for fan speed, light, UV, and power.
12. Work Area Dimensions: Customizable, with standard sizes such as 2ft, 3ft, 4ft, or 6ft widths.
13. Certifications: ISO 14644-1 Class 5, CE certified to meet international quality standards.
14. Power Supply: 220-240V, 50/60Hz with power-saving operation.
15. Safety Features:
 16. UV safety interlock to prevent accidental exposure.
 17. Airflow alarm system to indicate filter clogging.
 18. Vibration-Free Operation: Designed for precision applications like microbiology, tissue culture, and molecular biology.

Optional Accessories

19. Gas Burner/Flame Sterilizer for aseptic operations.
20. Magnetic Airflow Monitor for real-time airflow status.
21. Castor Wheels with Locking Mechanism for mobility.