

BLOOD & COMPONENT BANK
J.N. MEDICAL COLLEGE & HOSPITAL AMU, ALIGARH

Tender under sealed cover are invited from reputed companies for **Fully Automated Nucleic Acid Amplification Testing (NAT)** with following specifications.

Specification –

- Fully Automated system and integrated (walk way) system.
- Target amplification by polymerase chain reaction / transcription mediated amplification..
- The system must perform all steps from sample processing and viral nucleic acid extraction to target amplification and detection automatically
- All equipment/components of the system supplied shall be of the latest version, consisting of all compatible equipment, hardware and software designated and set up to perform the offered NAT assay.
- The automation system provided must have the following features and must provide documentary evidence that it can be achieved.
 - Positive sample identification with barcode scanning.
 - Manually entered samples IDs shall be possible
 - Disposable filtered tips must be used to prevent carry over and cross contamination of samples.
 - Leaks, fibrin clots and bubble during aspiration and dispense cycles and samples and reagent can be detected and documented.
 - True level sensing or insufficient volume detection for sample and reagent can be detected and documented.
- The instrument must display on board the temperature for all temperature control functions wherever applicable.
- Reagent dispensing process shall be monitored to ensure that the accurate amount of fluid (sample, reagents, washing solutions etc are dispensed).
- The vendor shall supply appropriate and adequate units of decapper, if required for decapping of samples tubes for routine operation.
- The vendor shall supply appropriate and adequate units of air conditioning and humidification, as required, to be installed in the laboratory where the instrument is located. Any modification room partition, roof flooring civil and electrical work related to the functioning of the NAT Lab is the responsibility of the service provider.
- All essential accessories like electronic pipettes, bar code scanners, bar code printers, centrifuge machine, vacutainers (EDTA & plain) and other essential equipments may be provided by the vendor.
- The equipment/components of the system shall be provided with uninterrupted power supply (UPS) devices, which keep the system running for at least 30 minutes from the time of power failure without loss of any data.
- In the event that specific reagent preparation is required prior to loading onto the system, the manufacturer shall provide sufficient sets of automated reagent preparation instrument as part of the system to meet the throughput mention above and allow for back up.



