Annexure A

Specification for the Automated Nucleic Acid Extraction System	Criteria Matching(Yes/No)	Remarks
Make and Model		
1. The instrument should perform automated, medium-to high-throughput purification of nucleic acids such as aspirating, dispensing, filtering, and sequential transfer of liquids for Extraction of DNA From all types of Human Samples		
2. The instrument should deliver high performance and reliability, enabling purification of high-quality nucleic acids from 8–96 samples per run, in increments of 8 samples.		
3. The instrument features should ensure reliable purification of Nucleic Acid and minimize the risk of contamination.		
4. The Extraction of Nucleic Acids should be based on Silica membrane technology, the manufacturer should have specific kits for DNA Extraction for each type of samples with pre validated protocol in the system software		
5. The software of the system should be flexible to edit the protocol at every step as per user requirement to get required yield of the DNA, RNA and Viral RNA		
6. The vendor should provide specific and dedicated plasticware for the instrument along with chemistry		
7. The lid of the instrument should provide both an isolated enclosure for performing purification and safety mechanisms; like lid incorporates a magnetic sensor to determine whether the lid is closed or not. Under no circumstances should this sensor be bypassed, lid must be closed for the software and hardware to initialize upon start-up and for a run to proceed.		
8. A UV lamp in the instrument lid and in built HEPA Filter, should provide efficient worktable decontamination and helps to prevent contamination.		
9. The instrument lid may remain open when calibrating the position and height of plates, It Should not interfere with robotic arm movement during these calibrations and keep all body parts out of reach of the robotic arm while it is moving.		
10. Liquid-handling tasks should be performed by the multichannel pipetting head, which provides a motor-driven, backlash-compensated pipetting mechanism. Tips attach to the pipette barrels of the pipetting head.		

11. The instrument vacuum chamber should composed of two separate compartments for waste andelution. This configuration is one of many measures that minimize sample cross-contamination during purification.		
12. The waste sink/mat support, located in the waste side of the vacuum chamber, should provide support for the silicone mat that seals the capture plate and channels the waste from each well in the plate separately to prevent cross-contamination.		
13. The vacuum control station should be an integral component of the instrument. It should provide vacuum to the vacuum chamber for processing. The vacuum should be precisely controlled by the user using the instrument Software.		
14. The instrument should be operated through a compatible laptop provided by the vendor. The software should be user friendly, the standard protocol for the nucleic acid purification should be scripted.		
15. Any upgrade in the software for the period of 5 years will be automatically updated.		
16. The instrument should have fully integrated solution and vendor should provide reagents, plastic ware, and optimized protocols for nucleic acid purification from virtually any type of sample.		
17. Electrical Requirements: - As per Indian Standard laboratories		
18. The vendor should provide training to 2-3 users of the lab		
19. Include consumables for 2000 samples Mtb DNA extraction, including tips, kits etc.		
Company must provide a compliance statement supported by technical literature and website.		
Authorisation certificate from the OEM must be included in the technical bid		
Unpacking and shifting of the instrument including manpower during installation must be in the vendor scope.		
User list must be enclosed for the quoted model supplied to any other institute/Organization in Delhi and NCR.		
Certificate for spare availability upto 10 years for quoted model to be provided from OEM alonwith the technical bid.		
Min.3 Customer satisfactory / performance certificate for specific quoted model from the end user should be included in the quote.		
Warranty 5 years including all spares , PM kit and calibrations of instrument on regular basis as and when required.		
Consumables required during installation to setup the new instrument must be quoted along with the instrument.		

AMC & CMC Charges for the next 5 years after standard warranty must be quoted in optional item		