

**Technical Specification of Cartridge Based nucleic acid amplification test (CBNAAT) 10C 8 Modules system**

1. The System should be based on Automated Real Time PCR Technology including automated extraction and able to do Rapid on-demand Molecular tests such as MTB, SARS-COV-2, HIV, HCV, HBV, HPV, BCR-ABL etc.
2. The System should be based on the Single Cartridge use and comprise of all major steps (Extraction, amplification and detection) within the cartridges.
3. No human intervention is required between any of the PCR steps
4. The System should have self contained test cartridges which can do TB detection from along with Rifampicin Sensitivity/Resistance from both pulmonary and extrapulmonary samples.
5. The System should be controlled through stand-alone laptop or Desktop PC which should be supplied along with the machine
6. The System should have 8 Active Modules and be upgradable upto 16modules.
7. System can be independently used and controlled for any test cartridge.
8. The System should have 10optics channels for detection with the dye detection limit <1nM.
9. The system should be capable to detect 10 or more targets in a single PCR reaction.
10. Each Active Module have Solid State heater and forced air cooling that makes system more robust and intact for PCR application
11. Ramp rate- heating: 10°C/sec from 50°C to 95°C. Cooling :2.5°C/sec from 95°C to 50°C
12. The System should have endorsement by WHO.
13. The system should have FDA approval/European CE approved for in vitro diagnostic use.
14. The system should include built-in (quality) control for all test steps that makes system to give accurate results.
15. The System should able to be performed on-demand and random access.
16. The system should have option for easily connected to LIS/HIS for report management.
17. The System should require no special (PCR laboratory) environment to operate effectively



**DEPARTMENT OF MICROBIOLOGY  
DR. BABA SAHEB AMBEDKAR MEDICAL COLLEGE  
ROHINI, SECTOR -6 DELHI – 110085**

Notice for procurement of “GeneXpert XVI-8L-10C with 8 active modules” being Proprietary Article under Rule 166 General Financial Rules.

The Department of Microbiology of this institution intends to purchase GeneXpert XVI-8L-10C with 8 active modules as proprietary article under rule 166 of GFR

AS per knowledge of the Department of Microbiology and as per the Proprietary and authorization certificate provided by the manufacturer the GeneXpert XVI-8L-10C with 8 active modules is manufactured by M/s Cepheid, 904, Caribbean Drive, Sunnyvale, CA 04089 USA and their authorized India distributor M/s Cepheid India Private Limited, 9<sup>th</sup> floor, Tower B, Paras Twin Towers, Golf Course Road, Sector 54, Gurugram, Haryana -122002 is only affiliate to bid and conclude the contract in regard to the business across India

The specifications of the said system are enclosed with this notice. In case there is any other OEM for the above said article with the mentioned specification they are requested to submit their proposal to the Department of Microbiology BSAMCH, Sector-6 Delhi through email [purchase.bsamch@gmail.com](mailto:purchase.bsamch@gmail.com) and with a copy to Director principal, BSAMCH Sector -6, Delhi through email [bsamchdelhi@gmail.com](mailto:bsamchdelhi@gmail.com) or through hard copy latest by 21/03/2023 failing which it will be presumed that there is no other firm who manufactures the required equipment with required specifications and purchase will be processed and finalized from the available source as proprietary article.

Date: 16/03/2023

  
(Dr. Megha Maheshwari)

Professor & Head