

Annexure-A

Item No.1:- Specifications for automated blood/body fluid culture system: (US FDA approved/ CE Certified).

- i) The system should be for minimum of 60 positions.
- ii) The system should be fully automated and should be capable of detecting growth of the pathogenic micro-organism from blood & Sterile body fluids.
- iii) The system should have the facility of detection of Mycobacterium tuberculosis and other atypical mycobacterium from the blood, blood fluids and sputum.
- iv) The system should be able to detect fungal, aerobic and anaerobic organism from the blood.
- v) The system should have the capability to process samples of adult and pediatric patients and should have dedicated media for pediatric samples.
- vi) The system should have the capability of continuous monitoring of the clinical samples.
- vii) It should have automated continuous instrument quality check facility.
- viii) The system should be provided with printer and UPS and should be able to display growth kinetics on the screen. The system should be modular and upgradable for future requirements.
- ix) The system should have the capability of analyzing and detection of delayed entry of specimens at growth, stationary and decline stage (both log & lag phase).
- x) The media provided for blood, sterile body fluid or fungal culture should be provided with additional antimicrobial substances.
- xi) Detection principle of the system should not have any bottle puncturing during sample analysis and thus no dangerous aerosols formation.
- xii) The system should use plastic bottles for safety and ease of disposal.
- xiii) 5 KVA UPS for use of automated blood/body fluid culture system.

Item No.2:- Specifications for fully automated bacterial identification and antimicrobial susceptibility system. (US FDA approved/ CE Certified).

- i) The system should have user interface screen and keyboard having the following specification.
 - Comprise the instrument User Interface (UIF)
 - Fill indicator LED-alerts user of the fill status
 - Load indicator LED
 - Fill door-provides access to the filler station
 - Front user access door-provides access to the optics, incubator, and a portion of the card transport system.
 - Top user access door-opens only when the front user access.
 - Door is open. Provides access to the optics and carousel. This door lifts from the front and remains in the open position until the operator closes it.
 - Load door-provides access to the cassette load/ unload station
 - A locking mechanism prevents the opening of this door during operation.
 - Waste collection door-provides access to the waste collection station where ejected cards are removed from the instrument. The door is held in place magnetically and opens from the right.
 - Optical sensor – senses when the door is opened or closed.
 - Door latch and lock- the latch holds the door closed. The locking mechanism consists of a pin extending from inside the cabinet into the latch.
- ii) The system should be made up of the following components.
 - Computer
 - Data terminal
 - Printer
 - Test Cassette
- iii) The system software should run in a windows XP environment with Advanced Expert system (AES)
 - Interface connection software
 - Easy to use to increases usability and speed to perform diagnostic test
 - Advanced colorimetric ID analysis
 - Automated susceptibility testing

- Test result validation & resistance detection
 - MIC determination and therapeutic interpretation
 - Should alert resistance mechanism.
- iv) Test kits should be
- Compact and light: 16g minimized biohazard
 - Closed test reagents minimized risk of contamination
 - Closed integrated transfer tube (Blue= ID, Gray =AST)
 - Minimised risk of error in card selection
 - Pre- inserted for optimal workflow
 - No risk of contamination
 - Positive ID of cards (Individual barcode)
 - Maximized security
 - No external mark required optimized workflow.
- v) The system should have
- identification card menu with advanced colorimeter gram negative bacilli identification.
- gram positive bacilli identification.
- The identification results should be obtained from 2 hrs.
- (vi) The system should have optics which allows the measurement of 3 wavelengths for identification card
- .568nm & 428 nm for T X 3
- .660 nm for T X 1
- (vii) 5 KVA UPS for use of fully automated bacterial identification and antimicrobial susceptibility system.



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