



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)  
(A Centre of Excellence)

## Faculty of Applied & Health Sciences

DEPARTMENT OF MEDICAL SCIENCES

**BACHELOR OF TECHNOLOGY IN MEDICAL LABORATORY SCIENCES**

AML 4151: GOOD CLINICAL LABORATORY PRACTICE

**END OF SEMESTER EXAMINATION**

**SERIES: AUGUST 2012**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consists of **TWO** sections **A & B**

Answer **ALL** questions in this paper

Section **A** is multiple choice questions

Circle the correct response and avoid guesswork half a mark will be deducted for any wrong response

Section **B** has essay questions. Attempt **ALL** questions in this section in the answer booklet provided

This paper consists of **THREE** printed pages

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**SECTION A (ANSWER ALL QUESTIONS – 1 MARK EACH)**

1. Which of the following is not essential for containment level 2 Laboratory?
  - a) Isolation of laboratory from main building
  - b) Avoid ingestion
  - c) Biosafety cabinet class 2
  - d) Use of laboratory coat
2. Which of the following ISO is for medical laboratories?
  - a) ISO 15189:2007

- b) ISO 20009
  - c) ISO 17025:2005
  - d) ISO SOP 25922
3. Which of the following SOP's are essential in the pre-analytical phase?
- a) Specimen transport
  - b) Data recording
  - c) Test selection
  - d) Specimen selection
4. Which one of the following differentiates laboratory containment Level 1 and 2?
- a) Type of Laboratory Clothings required
  - b) Pathogens spread by inhalation
  - c) Pathogens acquired through ingestion
  - d) Non-virulent pathogens
5. Which one of these activities are not carried out by Laboratory Quality Assurance Auditors.
- a) Labeling of specimens
  - b) Checking equipment logs
  - c) Following IATA regulations in transport of samples
  - d) Presenting reports to analytical managers
6. Which one of the following bags is used for disposal of infectious materials?
- a) Yellow bag
  - b) Black bag
  - c) Red bag
  - d) Stripped bag
7. Which one of the following specimens must be handled in level 4 laboratories?
- a) Sputum from patient with tuberculosis
  - b) Blood sample from persons with hemorrhagic fever
  - c) CSF from patients whose aetiology is known
  - d) Stool samples containing multiple drug resistant *Vibrio cholera* strains
8. Which one of these containment levels have restricted access.
- a) Containment Level 1
  - b) Containment Level 3
  - c) Containment Level 2
  - d) Containment Level 4
9. The gold standard test can be described as:
- a) Most reliable
  - b) Most rapid
  - c) Reproducible
  - d) Cost-effective
10. Which of the following statements are not true about SOP's
- a) They should be written in coded language
  - b) Should be lengthy and detailed

- c) Should be brief but detailed
- d) Can be developed by any professor

11. Quality control methods for serological agglutination tests are:
- a) Qualitative
  - b) Semi quantitative
  - c) Quantitative
  - d) None of the above
12. Which of the following must be included in specimen tracking system?
- a) Result card
  - b) Specimen receipt
  - c) Quality control reagents
  - d) Stored aliquots
13. Which of the following statements is true about the Levey-Jenning Chart?
- a) It is used to monitor presence of Mycobacterium tuberculosis
  - b) It is used in quantitative quality control programs
  - c) It can be employed in pregnancy test
  - d) It is constructed by repeatedly running control tests
14. Which one of the following is mandatory for one to practice medical laboratory science in Kenya
- a) A Degree in Medical sciences
  - b) Membership of the American Society for Microbiology
  - c) A Diploma in Medical Laboratory Sciences
  - d) Membership of the Kenya Medical Laboratory Technician and Technologists Board
15. Accuracy is the ability of a test to:
- a) Match the gold standard
  - b) Give precise results
  - c) Be measured
  - d) Closeness of measurement to true value
16. Which of the following practice is not mandatory for a general teaching microbiology laboratory?
- a) Wearing Laboratory Coats
  - b) Placing work book on the bench
  - c) Mouth pipetting distilled water
  - d) Wearing protective face mask

**SECTION B (Attempt ALL questions in this section in the answer booklet provided – 40 MARKS)**

**Question One**

- a) Define the gold standard test and give an example. **(10 marks)**
- b) Outline the activities of equipment management program. **(10 marks)**

**Question Two**

- a) Provide a rationale for rejection of clinical specimens. **(10 marks)**
- b) Illustrate the packaging of infections sample for transport from a satellite laboratory to a reference laboratory within the same country. **(10 marks)**