



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

**UNIVERSITY EXAMINATION FOR:**

DEGREE

AML 4104 : GOOD CLINICAL LABORATORY PRACTICE

SUPPLIMENTARY/ SPECIAL EXAMINATION

**SERIES: SEPTEMBER 2018**

**TIME: 2 HOURS**

**DATE:** Pick Date Sep 2018

## **Instructions to Candidates**

You should have the following for this examination

*-Answer Booklet, examination pass and student ID*

This paper consists of Choose No Section(s). Attempt ALL questions.

**Circle the correct answer in section A.**

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Section A

Section A (30 Marks)

1. Good clinical laboratory practice includes all of the following except

- a) Staff training
- b) Manufacturing protocols
- c) Organization of facility
- d) SOP development
- e) Management of Equipments

2. Which of the following is not considered if a vaccination campaign results in death
- a) Storage conditions
  - b) Mode of transport
  - c) Batch number of the vaccines
  - d) Good manufacturing process
  - e) Previous immunization
3. Which one of the following equipment is included in the specimen tracking protocol
- a) Electronic microscope
  - b) Biosafety cabinet II
  - c) Incubator
  - d) centrifuge
  - e) Freezer
4. The Helsinki declaration is basis of \_\_\_\_\_
- a) GCP
  - b) GLP
  - c) GMP
  - d) COTU
  - e) KMLTTB
5. Which one of the following is handled in Biosafety level 4
- a) Cholera stool samples
  - b) Sputum with MDR- Mycobacterium
  - c) Anthrax bacilli
  - d) Blood with Dengue virus
  - e) Blood with Ebola virus

6. Records showing operation and maintenance of an equipment are found in the \_\_\_\_\_
- a) Inventory of Equipments
  - b) Workshop records
  - c) Equipment log
  - d) Temperature chart
  - e) Company files
7. Global transport of infectious samples is regulated by \_\_\_\_\_
- a) National carriers regulation
  - b) Biosafety protocol
  - c) Risks document
  - d) IATA regulations
  - e) Transport SOP
8. Which of the following document is used to identify location of equipments in an institution?
- a) Laboratory policy
  - b) Order list
  - c) Procurement policy
  - d) Tracking Equipments
  - e) Inventory
9. Which one of the following documents represents formal reporting and communication between the laboratory staff and management?
- a) Minutes of departmental meetings
  - b) Mobile network protocols
  - c) Personal files
  - d) Working manuals
  - e) Organizational charts

10. The speed of the following laboratory equipment is periodically recorded

- a) Centrifuge
- b) Incubator
- c) Portable Water bath
- d) Refrigerator
- e) pH Meter

11. The following statements are true about Quality Control logs except

- a) Disciplinary action against laboratory staff is recorded
- b) Ranges of results are availed
- c) Positive and negative controls are specified
- d) Laboratory staff indicate initials after control runs
- e) Corrective measures are recommended

12. Handling and storage of hazardous chemicals in the laboratory is found in

- a) Personal Protective equipment
- b) SOPs
- c) First Aid documents
- d) Chemical Inventory
- e) Material Safety Data Sheet

13. The lead person in clinical trials is the

- a) Laboratory director
- b) Sponsor
- c) The principal investigator
- d) Quality assurance officer
- e) Cabinet secretary of health

14. The following is true on the Tuskegee research except
- a) Good clinical practice was not followed
  - b) The study subject were not informed of the risks and benefits
  - c) The study was ethically biased
  - d) Subjects benefited from the discovery of penicillin
  - e) Participants were suffering from syphilis
15. Which of the following is the most common source of quantitative errors in the laboratory?
- a) Preparing normal saline
  - b) Using the weighing balance
  - c) Reading pH values
  - d) Adjusting temperature controls
  - e) Pipetting
16. Which one of the following is not included in maintenance logs?
- a) Validation
  - b) Cost of equipment
  - c) Inspections
  - d) Standardization
  - e) preventive maintenance
17. The laboratory director is consulted before rejection of the following specimen
- a) Blood from diabetic patients
  - b) Urine from expectant mothers
  - c) Cholera stool samples
  - d) Cerebral Spinal fluid
  - e) Sputum with MDR Mycobacterium

18. The national body that gives accreditation to Ethical Review Boards is
- a) Commission of Higher Education
  - b) KEMRI
  - c) NEMA
  - d) KMLTTB
  - e) NACOSTI
19. The following statements are true about Laboratory information Systems except
- a) Access by the study subjects is not restricted
  - b) The system generates final results
  - c) Coded information is entered
  - d) Access is restricted
  - e) The system is audited
20. Which of the following resulted from Helsinki Declaration?
- a) World Health Organization
  - b) Good manufacturing process
  - c) Good proposal writing
  - d) ISO
  - e) Good clinical Practice
21. Copies of accurate and complete results of a study are generated by
- a) Laboratory director
  - b) Principal Investigator
  - c) Laboratory personnel
  - d) Laboratory information Systems
  - e) Data entry clerks

22. Which one of the following document is immediately referred to, if a spill of pathogenic spores was reported.
- a) First Aid plan
  - b) SOPs
  - c) Laboratory policy
  - d) Decontamination plan
  - e) Evacuation plan
23. Which one of the following is not essential for Biosafety level 1?
- a) Labels
  - b) Use of disinfectants
  - c) Wearing gloves
  - d) Biosafety cabinet
  - e) Laboratory coats
24. Financial requirements of clinical trials are provided by
- a) Laboratory director
  - b) World Bank
  - c) The principal investigator
  - d) Quality assurance officer
  - e) Sponsor
25. Compensation of study subjects in clinical trials is indicated in
- a) The constitution
  - b) Bill of rights
  - c) Consent forms
  - d) Minutes of the Ethical review committee
  - e) Affidavits sworn by the Principal investigators

26. The laboratory director is consulted before rejection of the following specimen

- a) Blood from diabetic patients
- b) Urine from expectant mothers
- c) Cholera stool samples
- d) Cerebral Spinal fluid
- e) Sputum with MDR Mycobacterium

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28. The following statements are true about Laboratory information Systems except

- a) Access by the study subjects is not restricted
- b) The system generates final results
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## Section B

### Question 31

- i) Explain the packaging and transport of infectious specimen (10 Marks)
- ii) Differentiate the constitution and functions of an Ethical Review Board and Scientific Steering Committee (10)

### Question 32

Discuss in detail the safety policy for the different Biosafety levels (20 Marks)

