



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

**UNIVERSITY EXAMINATION FOR:**

DEGREE

AML 4101: GOOD CLINICAL LABORATORY PRACTICE

END OF SEMESTER EXAMINATION

**SERIES:** Select series 2016

**TIME:** 3 HOURS

**DATE:** Pick Date May 2016

## Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **TWO** Section(s). Attempt **ALL** questions.

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

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## Section A

1. The laboratory director must be alerted before the following specimen is rejected

- a) Serum samples
- b) Blood smears
- c) Post mortem samples
- d) Cerebral Spinal fluid
- e) Pus swabs

2. The following body is responsible for reviewing the techniques in a proposal

- a) Quality control team
- b) University council
- c) NEMA

- d) Ethical Review Boards
- e) Scientific steering committees

3. The following statement is correct on aliquots of clinical specimen, except

- a) Specimen can be retested
- b) Preserved for commercial purposes
- c) Are preserved in the freezer
- d) Are preserved in formalin
- e) Can be used for future research

4. Which of the following is not a role of the principle investigator in clinical trials?

- a) To supervise scientists in the project
- b) To oversee the running of the program
- c) To prepare reports
- d) To prepare consent forms
- e) To provide financial support

5. Distribution of equipments in various sections of a laboratory is found in\_\_\_\_\_

- a) Inventory
- b) Equipment logs
- c) Lost and found files
- d) Audit reports
- e) Equipment service records

6. Which of the following is correct about rejected specimens?

- a) The specimen is not disposed
- b) The specimen is stored
- c) Specimen is returned to the patient
- d) The specimen is tested but not reported
- e) A request is made for new specimen

7. The mode of infection in this laboratory may be unknown\_\_\_\_\_

- a) Food microbiology laboratory
- b) Biosafety level 3 laboratory
- c) Teaching laboratory
- d) Biosafety level 2 laboratory
- e) Biosafety level 4 laboratory

8. The first step for clinical trials is to\_\_\_\_\_

- a) Alert the ERB
- b) Employ experts
- c) Buy equipment
- d) Write proposals
- e) Seek for funds

9. Laboratory testing personnel can perform the following except

- a) Wear blue laboratory coats
- b) Wash glassware
- c) Mouth pipette solutions
- d) Disinfect the workbench
- e) Attend seminars

10. Which of the following is not found in an SOPs?

- a) signatures
- b) date
- c) principle of the test
- d) references
- e) Local translation

11. Good clinical practice was first structured to \_\_\_\_\_

- a) distribute antibiotics
- b) Finance poor families
- c) Save slum dwellers
- d) For HIV research
- e) Protect patients from malpractice

12. The management of a pH meter is recorded in the

- a) Staff note book
- b) Manufacture's list
- c) Equipment logs
- d) SOPs
- e) Manuals

13. Recommended international transport package of highly infectious specimen is by using\_\_\_\_\_

- a) cryotubes
- b) Puncture-less plastic container
- c) Hard cardboard with biohazard label
- d) Triple containers with biohazard symbol
- e) Laboratory yellow bags

14. Which of the following equipment protects laboratory staff from acquiring infections from specimen that can form aerosols?

- a) Incubator
- b) Centrifuge
- c) Water bath
- d) Autoclave
- e) Biosafety cabinet

15. The following can be members of a scientific steering committee except?

- a) technologist
- b) Nurse
- c) Microbiologist
- d) A pastor
- e) Biostatistician

16. Study subjects in a research program are also referred to as\_\_\_\_\_

- a) Research students
- b) interns
- c) The participants
- d) Lay persons
- e) Study guides

17. The hazards of handling volatile chemicals is documented in \_\_\_\_\_

- a) SOPs
- b) Proposal
- c) MSDS
- d) Student guide
- e) Job aid

18. The speed of the following equipment is recorded in equipment log

- a) Autoclave
- b) Centrifuge
- c) Spectrophotometer
- d) Weighing balance
- e) pH meter

19. Patient specimen request form must contain the following except

- a) signature of the patient
- b) Sex of patient
- c) Date
- d) Test requested
- e) Address of the laboratory

20. The following is not part of a research consent form \_\_\_\_\_

- a) Benefits
- b) Right to withdraw
- c) Forced consent
- d) Third party consent
- e) Compensation

21. Codes are used in entry patient data to in order to \_\_\_\_\_

- a) To save on time
- b) To limit cost
- c) Protect patient confidentiality
- d) Avoid errors
- e) To protect laboratory personal

22. Which of the following is not found in rapid diagnostic kits?

- a) Manufacturer's instructions
- b) SOPs
- c) Positive QC specimen
- d) Negative QC specimen
- e) Test reagents

23. The Gnatt chart is used for \_\_\_\_\_

- a) Recording experimental values
- b) SOPs
- c) Laboratory organizational charts
- d) Work schedules
- e) Ordering reagents

24. The most commonly used PPE in teaching laboratory is

- a) Laboratory coats
- b) Face masks
- c) goggles
- d) open shoes
- e) White shorts

25. The daily activities carried on a specimen are recorded in

- a) SOP
- b) Work manual
- c) Work flow
- d) work book
- e) job aid

26. IATA regulations in laboratory SOPs are followed for

- a) Transportation of specimen
- b) Transportation of laboratory personnel
- c) attending medical conferences
- d) Coding reagents
- e) monitoring and evaluation

27. The abbreviation ISO stands for

- a) International standard organization
- b) International organization for standards
- c) Isotopes
- d) International sensor ship organization
- e) institute for international standards organization

28. Which one of the following specimens require a primary, secondary and tertiary container for transportation

- a) sputum from patient with tuberculosis
- b) poisoned meat
- c) Zika samples
- d) cholera stool
- e) Fluid from an Ebola patient

29. Which one of the following is not required in examination of blood, urine and stool samples from food handlers:

- (a) BSL 3
- (b) BSL 2



- (c) Quality controls
- (d) Coding
- (e) Rejection SOP

30. Long term correction measures in the laboratory are recommended after

- (a) Audit reports
- (b) Proficiency testing
- (c) continuous assessment
- (d) review of QC data
- (e) Recruitment of new staff

## Section B

Question 31.

- a) List the criteria which is used for specimen rejection (6 Marks)
- b) Outline the contents of a consent form which is required to study prevalence of HIV in commercial sex workers (14)

Question 32

Discuss in details the classification of Biosafety level laboratories and the precautions required for each level for the protection of laboratory staff (20 Marks)



