

## TECHNICAL UNIVERSITY OF MOMBASA

# 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:3HOURS

DATE: Pick Date May 2016

#### **Instructions to Candidates**

Section A

You should have the following for this examination -Answer Booklet, examination pass and student ID
This paper consists of Choose NoSection(s). AttemptALL questions.

Circle the correct answer in section A.

Section A (30 Marks)			
1.Entry in the following laboratory is highly restricted			
a) Biosafety level 3			
b) HIV diagnostic laboratory			
c) Teaching laboratory			
d) Biosafety level 4			
e) Laboratory for cholera studies			
2. Persons or Institutions who fund health research projects are referred to as			
a) Bill Gates			

b) Sponsor

C)	County governments					
d)	WHO					
e)	Principle investigator					
3. Services offered by the laboratory are internationally recognized if the laboratory						
a)	Acquire ISO certification					
b)	Is approved by KEMRI					
c)	Has a license					
d)	Is in a level 5 hospital					
e)	Can carry out all biomedical tests					
4.The	following statements are correct about the consent forms except the form must					
a)	Be understood by participants					
b)	Show compensation					
c)	Be Signed by participant					
d)	Indicate risks involved					
e)	must be in Kiswahili or English language					
5.Clin	ical trial samples are collected by any of the following except the?					
a)	Principle investigator					
b)	Nurse					
c)	Technologist					
d)	Sponsor					
e)	Research student					
6.Mini	utes of the ethical review committee are signed by					
a)	The Imam					
b)	The priest					
c)	The chairman					
d)	The participants					
e)	The laboratory director					

a)	Heavy objects	
b)	Bacteria	
c)	Acids	
d)	Sharps	
e)	Syringes	
8. The	following is not advisable to wear when carrying out centrfugation	
a)	Long sleeved laboratory coat	
b)	Neck tie	
c)	Hand gloves	
d)	goggles	
e)	Metallic watch	
9. The manufactures instruction on a kit can be used as		
a)	SOP	
b)		
- /	Job aid	
ŕ	Job aid Laboratory policy	
c)		
c) d)	Laboratory policy	
c) d) e)	Laboratory policy External quality control document	
c) d) e) 10. Wi	Laboratory policy External quality control document Experimental protocol	
c) d) e) 10. Wi	Laboratory policy External quality control document Experimental protocol hich one of the following shows formal communication in the laboratory	
c) d) e) 10. Wi a) b)	Laboratory policy External quality control document Experimental protocol hich one of the following shows formal communication in the laboratory Work schedules	
c) d) e) 10. Wi a) b) c)	Laboratory policy External quality control document Experimental protocol hich one of the following shows formal communication in the laboratory Work schedules Time tables	
c) d) e) 10. Wi a) b) c) d)	Laboratory policy External quality control document Experimental protocol hich one of the following shows formal communication in the laboratory Work schedules Time tables SOPs	
c) d) e) 10. Wi a) b) c) d) e)	Laboratory policy External quality control document Experimental protocol hich one of the following shows formal communication in the laboratory Work schedules Time tables SOPs Laboratory organizational charts	

7. Which of the following can be foud in the MSDS

d)	Using for short periods				
e)	Consuming large amounts of fluids				
12. Which of the following statements is not found in the material qualitycontrol SOP					
a)	Expired materials can used in case of emergency				
b)	Proper storage				
c)	Use of positive quality control				
d)	Use of negative quality control				
e)	Results of quality control material is indicated				
13.Bio	phazards symbols can be found in all of the following except				
a)	Biosafety cabinets				
b)	Entrance of Biosafety levels				
c)	On Packages transporting biological specimens				
d)	Entrance of Scientific conference hall				
e)	Laboratory waste bags				
14.Pat	ient specimen request form must contain the following except				
a)	Marital status				
b)	Age of patient				
c)	Signature of Clinician				
d)	Date				
e)	Name of health facility				
15.Wi	thdrawal of study participants is indicated in				
a)	SOPs				
b)	Specimen request form				
c)	Consent forms				

b) Wearing double laboratory coats

c) Wearing gloves

d)	The proposal					
e)	references					
16. Which one of the following is used by laboratory staff to protect confidentiality of patients?						
a)	Initials of patient name					
b)	Surname of patient					
c)	Codes					
d)	Name of specimen only					
e)	Date of specimen					
17.A c	chart written by laboratory staff to assist them in carrying out routine work is the					
a)	Laboratory manuals					
b)	SOPs					
c)	Manufactures instructions					
d)	Job aid					
e)	Reference chart					
18.Wł	ich of the following regulationis used for transport of infectious materials from Brazil to Kenya					
a)	Zika control regulations					
b)	IATA regulation					
c)	CDC regulations					
d)	WHO guidelines					
e)	Public Health Cap 242					
19. In	which one of the following Biosafety levels, infection is acquired through ingestion					
a)	Food microbiology laboratory					
b)	Biosafety level 3 laboratory					
c)	Teaching laboratory					
d)	Biosafety level 2 laboratory					
e)	Biosafety level 4 laboratory					

20.To upgrade county laboratories the most important exercise is to		
a)	Educate members of staff	
b)	Employ experts	
c)	Build new laboratories	
d)	Carry out a gap analysis	
e)	Write proposals	
21. La	boratory testing personnel can perform the following except	
a)	Log in equipment performance	
b)	Apply coding of specimen	
c)	Develop a Quality Management Program	
d)	Disinfect the workbench	
e)	Attend seminars	
22.SO	Ps are owned by?	
a)	Laboratory director	
	Laboratory director patients	
b)	•	
b) c)	patients	
b) c) d)	patients  Laboratory staff	
b) c) d) e)	patients  Laboratory staff  The authors	
b) c) d) e)	patients  Laboratory staff  The authors  The institution	
b) c) d) e) 23. On	patients  Laboratory staff  The authors  The institution  e of the earliest researches which failed in good clinical practice was	
b) c) d) e) 23. On a)	patients  Laboratory staff  The authors  The institution e of the earliest researches which failed in good clinical practice was  Ebola study	
b) c) d) e) 23. On a) b)	patients  Laboratory staff  The authors  The institution e of the earliest researches which failed in good clinical practice was  Ebola study  Discovery of penicillin	
b) c) d) e) 23. On a) b) c)	patients  Laboratory staff  The authors  The institution  e of the earliest researches which failed in good clinical practice was  Ebola study  Discovery of penicillin  Cholera studies	
b) c) d) e) 23. On a) b) c) d) e)	patients  Laboratory staff  The authors  The institution e of the earliest researches which failed in good clinical practice was  Ebola study  Discovery of penicillin  Cholera studies  HIV research	

b) Inventory book

•	c)	Equipment logs
(	d)	SOPs
(	e)	Control charts
25.	The	e most sensitive specimen in the clinical laboratory is the
;	a)	Blood sample
	b)	Typhoid samples
	c)	Frozen samples
	d)	Cerebral Spinal fluid
(	e)	Sputum
26.4	<b>A</b> 11	proposals which handle human specimens are cleared by
i	a)	The cabinet secretary of health
	b)	Universities
	c)	Scientific steering committees
	d)	KMLTTB
,	e)	Ethical Review Boards
27. <i>A</i>	Alio	quots of clinical specimen are prepared for
i	a)	Economic purpose
	b)	archiving
	c)	labeling
	d)	to save space
,	e)	training students
28.7	Γhe	role of the sponsor inclinical trials is
i	a)	To employ scientists
1	b)	To ship in reagents
	c)	To report to the WHO
	d)	To provide quality assurance
	e)	To provide financial support
29 .	The	e first document to refer to if laboratory equipment is shifted is the
;	a)	Inventory

- b) Work sheet
- c) Transport files
- d) Audit reports
- e) Equipment maintenance records

30. What action is taken if unlabelled specimen is received?

- a) Report the clinician to the Laboratory director
- b) Process specimen and indicate not labeled
- c) Accept specimen and search for the patient
- d) Test specimen but withhold results
- e) Reject the specimen

#### Section B

#### Question 31.

- a) Describe the types of laboratory hazards (10 Marks)
- b) Define the following
  - i. The ethical review committee (6 marks)
  - ii. The scientific steering committee (4 marks)

#### Question 32

Discuss in details the main documents required to carry out clinical trials and good laboratory procedures (20 Marks)