

**TECHNICAL UNIVERSITY OF MOMBASA** 

# FACULTY OF APPLIED AND HEALTH SCIENCES

## DEPARTMENT OF MEDICAL SCIENCES

# **UNIVERSITY EXAMINATION FOR:**

## DIPLOMA IN MEDICAL LABORARATORY SCIENCES

# AML 2314 : MEDICAL LABORATORY PRACTICALS

# END OF SEMESTER EXAMINATION

# SERIES:DECEMBER2016

# TIME:3 HOURS

## DATE:Pick DateDec2016

### **Instructions to Candidates**

You should have the following for this examination -Answer Booklet, examination pass and student ID This paper consists of **SIX**Question(s). Attempt ALL questions.

## Question 1 Microbiology (30 marks)

The specimen M3 was obtained from a patient

a)	) Using the provided reagents attempt to identify the organism(s)		8 Marks		
b)	Name the medium used to culture the specimen	4Mark	CS		
c)	Name the suspected disease affecting the patient		4 Marks		
d)	Comment on the quality of the specimen		4 Marks		
SPOTS					
Spot I					
	a) Identify the spot labeled M1		2 Marks		
	b) List two uses of M1		2 marks		

c)	Name 2 media which can be placed in	1 mark			
Spot II					
a)	Identify the spot labeled M2	1 Mark			
b)	Name the medium which was used for the test	1 Mark			
c)	Record the results	2 marks			

### **Question 2 Clinical Chemistry (30 marks)**

You are provided with a specimen labeled B. With reagents provided, perform Pandy test and answer the following questions:

A) Describe the test performed and report your findings (13 Marks)

B) (i) What name describes the procedure for collection of specimen "B"

(3 Marks)

(ii) Name the important precaution to be considered during the procedure in B "I" above (2 Marks)

C) Name any three pathological conditions which may be diagnosed using the specimen "B"

(6 marks)

## **SPOT III**

i)	Name the spot	(3 marks)
ii)	Give one use of the spot	(3 Marks)

### **Question 3 Hematology (30 marks)**

A. You are provided with a hematological sample labeled N, using the reagents and apparatus provided, perform a reticulocyte count. (Brief procedures are required). (20 marks)

### B. SPOTS

**Spot IV** 

### 5mks

- a. Identify spot IV
- b. State the use of the spot
- c. Give the alternative of the spot

### Spot V 5mks

- a. Identify the clinical feature in spot V
- b. What is the cause of the condition occasioned by the above

### **Question 4 Blood Transfusion (30 marks)**

You are provided with a blood sample O, patient serum P and patient cells X and request for unit of blood from the Ante Natal Clinic.

With reagents and apparatus provided, perform crossmatch and issue blood for transfusion (brief procedures are required) (30mks)

## **Question 5 Histology (30 marks)**

- 1. You have been provided with a tissue section labelled H, using the reagents provided, stain and give the results (12 marks)
- 2. SPOTS

i.

SPOT VI

- i. Name spot VI (1 mark)
- ii. Name the use of spot VI (1 mark)
- iii. Name five parts of spot VI and their functions (5 marks)

#### SPOT VII

- i. Name spot VII (1 mark)
- ii. Name the function of spot VII (2 marks)
- iii. Nam two other materials used for making spot VII ( 3 marks)

#### SPOT VIII

- i. Name spot VIII (1 mark)
- ii. Write three uses of spot VIII (3 marks)
- iii. Describe the condition of its storage (1 mark)

### **Question 6 Parasitology (30 marks)**

You are provided with stool specimen labelled S using the reagents and apparatus provided. Carry out a laboratory procedure and discuss your findings. (20marks)

### SPOT IX

i.	Identify the spot	(2.5 marks)			
ii.	What is its medical importance	(2.5marks)			
SPOT X					
Identify the spot		(2.5marks)			
What is its medical importance		(2.5marks)			