



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

**UNIVERSITY EXAMINATION FOR:**

CERTIFICATE IN MEDICAL LABORATORY SCIENCES

AML 1214 :MEDICAL LABORATORY PRACTICAL

SPECIAL/SUPPLEMENTARY EXAMINATION

**SERIES: SEPTEMBER 2018**

**TIME: 3 HOURS**

**DATE: 11 Sep 2018**

## 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.

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## **Question ONE**

You are provided with overnight growth labeled X. With the reagents and stains provided identify the organism as far as possible (Procedures are required) (27 marks)

Identify **spot I** and its use (3 marks)

## **Question TWO**

You are provided with a urine specimen labelled "B" from a patient for a routine medical check up. With reagents and apparatus provided.

- (i) Perform urinalysis and record your findings (10 marks)
- (ii) Write a brief procedure (7 marks)
- (iii) If there are any analytes present, give medical terminologies for their presence in the specimen. (2 marks)

- (iv) Suggest other laboratory confirmatory test for any possible condition if any detected in your findings . (3 marks)

(B) Examine spots “II” and “III” and answer the questions below:

**SPOT “II”**

- (i) Name the spot (2 marks)  
(ii) Give two uses of the spot (2 marks)

**SPOT “III”**

- (iii) Name the spot (2 marks)  
(iv) Give one use of the spot (2 marks)

**Question THREE**

A patient sample ‘C’ is brought to the Laboratory with a request for MCHC perform the Hb estimation and the PCV and calculate the MCHC 30mks

**Question FOUR**

A validation report for the blood grouping sera is required. From the availed sera, perform an avidity and specificity test to confirm potency of the sera. 30Mks

**Question FIVE**

You are provided with tissue slide labeled Z, using the provided reagents, stain and report the results (15 marks)

**SPOTS**

**Spot IV**

- a) Identify **spot IV** (2 marks)  
b) Give three uses of the spot (3 marks)

**Spot V**

- a) Identify **spot V** (2 marks)  
b) Give two uses of the spot (2 marks)  
c) What are the advantages of spot V (6 marks)

### **Question SIX**

A clinician request for analysis of ova and cyst from the provided freshly collected specimen A. Analyze the specimen satisfactorily and give the results. (20mks)

#### **SPOT VI**

- a) Identify the **spot VI** (2<sup>1/2</sup>)
- b) State the disease associated with the spot A and the specimen it can be isolated from. (2<sup>1/2</sup>)

#### **SPOT VII**

- a) Identify the **spot VII** (2<sup>1/2</sup>)
- b) State the two diseases it transmits (2<sup>1/2</sup>)