

### TECHNICAL UNIVERSITY OF MOMBASA

# FACULTY OF APPLIED AND HEALTH SCIENCES DEPARTMENT OF ENVIROMENT & HEALTH SCIENCES

## **UNIVERSITY EXAMINATION FOR:**

## DIPLOMA IN COMMUNITY HEALTH AND HIV MANAGEMENT

#### DCHM 16S/YEAR 1/ SEMESTER 2

# AML 2104: FUNDAMENTALS OF IMMUNOLOGY SPECIAL SUPPLEMENTARY EXAMINATION

SERIES: sept. 2017 TIME: 2 HOURS

## **Instructions to Candidates**

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions

This paper consists of two printed pages.

Mobile phones are NOT allowed in the examination room

# **Question ONE**

(a) State the two main subdivisions of the immune system	(2 marks)
(b) Give the types of hypersensitivity as classified by Gell and Coombs	(4marks)
(c) Tabulate any differences between innate and adaptive immunity	(4 marks)
(d) List any four organs of the immunological apparatus	(5 marks)
(e) Briefly explain characteristics of IgM	(6 marks)
(f) Explain factors that determine immunogenicity	(5 marks)
(g) Distinguish between active and passive immunity	(4 marks)

# **Question TWO**

- (i) Outline the following methods by which non-specific immunity operates
- a) Physical barriers (6 marks)
- b) Chemical barriers (6 marks

(ii) Explain how the body's natural microbial flora helps in pathogens. (3 marks)	preventing the establishment of	
Question THREE		
Discuss the hemolytic disease of the new born	(15 marks)	
Question FOUR		
(a) Using appropriate illustrations describe the classical and activation. (7 marks)	d alternative pathway of complement	
(b) Outline the differences between primary and secondary	immune responses (8 marks)	
Question FIVE		
(a) Describe the major characteristics and give one role of t molecules	he following immunoglobulin	
(i) IgG		
(ii) IgA	(9 marks)	
(b) Give an example for the following types of acquired immunity		
(i) Natural passive		
(ii) Natural active		
(iii) Artificial passive		
(iv) Artificial active	(6 marks)	