

Paper 2
TECHNICAL UNIVERSITY OF MOMBASA
FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DIPLOMA IN COMMUNITY
HEALTH AND HIV MANAGEMENT
DCH 16M/YEAR 1/ SEMESTER 2
AML 2104: FUNDAMENTALS OF IMMUNOLOGY

END OF SEMESTER EXAMINATION

SERIES:DECEMBER2016

TIME:2HOURS

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 **FIVE** Question(s). Attempt question ONE (Compulsory) and any other TWO questions.

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 preventing the establishment of pathogens. (3 marks)

Question THREE

Discuss the hemolytic disease of the new born (15 marks)

Question FOUR

(a) Using appropriate illustrations describe the classical and alternative pathway of complement activation.(7 marks)

(b) Outline the differences between primary and secondary immune responses (8 marks)

Question FIVE

(b) Describe the major characteristics and give one role of the following immunoglobulin molecules

(i) IgG

(ii) IgA (9 marks)

(c) Give an example for the following types of acquired immunity

(i) Natural passive

(ii) Natural active

(iii) Artificial passive

(iv) Artificial active (6 marks)