



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF PURE & APPLIED SCIENCES
UNIVERSITY EXAMINATION FOR:
BTMB

Type unit code : ABT 4209

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

DATE: Pick Date May 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE (30 Marks)

- | | |
|---|--------|
| (a) Define the following terms | (3mks) |
| (i) Allergen | |
| (ii) Serology | |
| (iii) Immune disorders | |
| (b) Distinguish between T- dependent and T- independent antigens | (4mks) |
| (c) Outline the different types of traditional vaccines | (4mks) |
| (d) Explain the mechanism of action of phagocytes | (6mks) |
| (e) State the primary lymphoid organs and explain their functions | (4mks) |
| (f) Describe the type 1 hypersensitivity | (6mks) |
| (g) Contrast natural and adaptive immunity | (3mks) |

Question TWO

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|--|---------|
| (a) Discuss active immunity | (13mks) |
| (b) Describe the major histocompatibility complex (MHC) class II | (7mks) |

Question THREE

Explain the role of the following cells of the immune system

- (a) Leukocytes (4mks)
- (b) Killer T cells (9mks)
- (c) B lymphocytes (7mks)

Question FOUR

- (a) Describe the compliment system (10mks)
- (b) Outline the likely causes of autoimmune disease (10mks)

Question FIVE

- (a) Describe the basic structure of an immunoglobulin (10mks)
- (b) Discuss the factors associated with immunologic diseases (10mks)