



# Technical University of Mombasa

*Faculty of Applied and Health Sciences*

**DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES**

DIPLOMA IN COMMUNITY HEALTH AND HIV MANAGEMENT  
(DCH13S)

**AAB 2105 : GENERAL MICROBIOLOGY**

**SUPPLEMENTARY/SPECIAL: EXAMINATIONS**

**SERIES: MARCH 2014**

**TIME: 2 HOURS**

## **INSTRUCTIONS:**

You should have the following for this paper

- *Answer booklet*

This paper consists of **FIVE** questions.

Answer Question **ONE (compulsory)** and any other **TWO** questions

**Question ONE**

- (a) Define the following terminologies
  - (i) Binormal nomenclature (1 mark)
  - (ii) Infection (1 mark)
  - (iii) Commensals (1 mark)
  - (iv) Antibiotic (1 mark)
  - (v) Sterilization (1 mark)
  - (vi) Strain (1 mark)
- (b) Differentiate the following:
  - (i) Gram positive and gram negative bacteria (5 marks)
  - (ii) Aerobes and anaerobes (2 marks)
- (c) Outline the morphological classification of fungi (4 marks)
- (d) State FIVE uses of disinfectants (5 marks)
- (e) Outline methods of isolating a pure culture (4 marks)
- (f) Explain the difference between pathogenicity and virulence (2 marks)
- (g) State the difference between exotoxins and endotoxins (2 marks)

**Question TWO**

- a) Outline the purpose of culturing microorganisms (7 marks)
- b) Describe the streak method or microbial culture (8 marks)

**Question THREE**

- a) Discuss physical methods of sterilization (11 marks)
- b) Outline ways of testing disinfectants (4 marks)

**Question FOUR**

- a) Describe the procedure in handling clinical samples (10 marks)
- b) Discuss the precautions taken while collecting samples from a patient suspected to have aerobic infection (5 marks)

**Question FIVE**

Discuss the microbial growth curve (15 marks)