



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

SEMESTER: EXAMINATIONS

SERIES: DECEMBER 2013

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

This paper consists of 2 PRINTED pages

Question ONE

- (a) Define the following terminologies
- (i) Classification (1mark)
 - (ii) Microorganism (1mark)
 - (iii) Pathogen (1mark)
 - (iv) Antimicrobial agent (1mark)
 - (v) Sensitivity testing (1mark)
- (b) Differentiate the following
- (i) Flagella and fimbriae (pili) (4marks)
 - (ii) Obligate and facultative anaerobes (2marks)
- (c) State the conditions for binomial nomenclature (5marks)
- (d) Outline the characteristics of an ideal culture media (6marks)
- (e) Explain the difference between opportunistic and primary pathogens (2marks)
- (f) Describe the various mechanisms of action of antibacterial agents (4marks)
- (g) Differentiate bactericidal agents from bacteriostatics agents (2marks)

Question TWO

Discuss the physiological factors affecting microbial growth (15marks)

Question THREE

Discuss the morphological classification of the following

- (a) Bacteria (11marks)
- (b) Fungi (4marks)

Question FOUR

- (a) Discuss the modes of spread of infection (10marks)
- (b) Describe ways in which community infections can be controlled (5marks)

Question FIVE

- (a) Explain the difference between sterilization and disinfection (2marks)
- (b) Discuss chemical methods of sterilization (13marks)