



Technical University of Mombasa

Faculty of Applied and Health Sciences

DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES

CERTIFICATE IN COMMUNITY HEALTH AND HIV MANAGEMENT
(CCH 135)

AAB 1105 : 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

This paper consists of 2 PRINTED pages

QUESTION ONE

- a) Define the following terms:
 - (i) Culturing (1 mark)
 - (ii) Culture medium (1 mark)
 - (iii) Prokaryotes (1 mark)
 - (iv) Obligate pathogen (1 mark)
 - (v) Virulence (1 mark)
- b) Comment writing short notes on the virion structure (5 marks)
- c) Outline ways through which pathogens cause disease (5 marks)
- d) Differentiate between the following :
 - (i) Flagella and pili (2 marks)
 - (ii) Cytoplasmic membranes and cell wall (2 marks)
 - (iii) Ribosomes and Golgi apparatus (2 marks)
 - (iv) Gram positive and gram negative bacteria (2 marks)
 - (v) Disinfection and sterilization (2 marks)
- e) Explain differential media and selective media giving examples (5 marks)

QUESTION TWO

- a) Outline the steps in viral replication (8 marks)
- b) Explain the importance of fungi (7 marks)

QUESTION THREE

Distinguish between the fungi and bacteria (15 marks)

QUESTION FOUR

- a) Explain how the plasma membrane of fungi differ from that of the mammalian cell (5 marks)
- b) Explain the mechanism of genetic transfer between cells (10 marks)

QUESTION FIVE

Describe the properties of RNA Viruses (15 marks)