



# Technical University of Mombasa

*Faculty of Applied and Health Sciences*

**DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES**

DIPLOMA IN COMMUNITY HEALTH AND HIV MANAGEMENT  
(DCH 12)

**APH 2303 : PREVENTION OF COMMUNICABLE DISEASES**

**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) Differentiate between the following terms
- (i) Infectivity and infectiousness of a pathogen. (2 marks)
  - (ii) Disease extinction and disease elimination (2 marks)
- b) Briefly describe any four types of disease carriers (4 marks)
- c) Briefly explain the following terms
- (i) Disease incidences (1 mark)
  - (ii) Endemic disease (1 mark)
  - (iii) Disease cluster (1 mark)
- d) (i) Distinguish between a primary pathogen and an opportunistic pathogen (2 marks)
- (ii) State two factors that may cause a host to be susceptible to a particular pathogen (2 marks)
- (2 marks)
- e) Briefly describe two methods used in control of communicable diseases (4 marks)
- f) Outline four factors that cause changes in disease patterns in the world today. (4 marks)
- g) Using relevant, list the main components of the chain of infection of a communicable disease (3 marks)
- (3 marks)
- h) Distinguish between mechanical and biological vectors (4 marks)

### QUESTION TWO

- a) Using a well labelled diagram, briefly describe the epidemiological trial of disease causal factors (3 marks)
- b) Provide a detailed description of the stages of a natural disease cycle. (12 marks)

### QUESTION THREE

- a) Differentiate between pre-pathogenesis and pathogenesis periods of the disease cycle. (4 marks)
- b) Using HIV/AIDs as an example, describe the chain of infection of a communicable disease (11 marks)

## QUESTION FOUR

Malaria is a deadly vector borne disease that is prevalent in tropical countries.

- a) Briefly describe two types of disease vectors. **(2 marks)**
- b) Describe the fundamental principles for control and prevention of malaria as a vector borne disease **(13 marks)**

## QUESTION FIVE

- a) Define the term “disease determinant” and give an example **(2 marks)**
- b) Discuss in detail the host factors of a communicable disease. **(13 marks)**