



**AMREF INTERNATIONAL UNIVERSITY  
SCHOOL OF PUBLIC HEALTH  
DEPARTMENT OF COMMUNITY HEALTH  
NAME OF PROGRAM: HDCH  
SPECIAL AND SUPPLEMENTARY EXAMS 2024**

**UNIT CODE: HDCH 014**

**UNIT NAME: EPIDEMIOLOGY**

**DATE: Wednesday 13<sup>th</sup> March 2024**

**TIME: 2 HOURS**

**START: 4:30 PM FINISH: 6.30PM**

**INSTRUCTIONS**

1. This exam is marked out of 60 marks
2. This Examination comprises TWO Sections  
**Section A:** Compulsory Question (20 Marks)  
**Section B:** Long Answer Questions (40 Marks)
3. All questions in Section A are compulsory and Answer any TWO questions in Section B
4. This online exam shall take 2 Hours
5. Late submission of the answers will not be accepted
6. Ensure your web-camera is on at all times during the examination period
7. No movement is allowed during the examination
8. Idling of your machine for 5 min or more will lead to lock out from the exam
9. The Learning Management System (LMS) has inbuilt integrity checks to detect cheating
10. Any aspect of cheating detected during and or after the exam administration will lead to nullification of your exam
11. In case you have any questions call the invigilator on Head of Department on Tel +254720573449 or Ag Head of Department +254723742370
12. For adverse incidences please write an email to: [amiu.examinations@amref.ac.ke](mailto:amiu.examinations@amref.ac.ke)

## **SECTION A: COMPULSORY (20 Marks)**

### **Short Answer Questions**

1. Outline four uses of epidemiology in diseases control and prevention. [4marks]
2. Define with examples the following epidemiological terms. [4marks]
  - a) Epidemic
  - b) Endemic
3. Differentiate between diseases outbreak and diseases surveillance. [4marks]
4. Mention four sources of epidemiological data. [4marks]
5. Outline with examples two characteristics of disease distribution in the community. [4marks]

## **SECTION B**

### **ANSWER ANY TWO (2) QUESTIONS (40 Marks)**

#### **Long Answer Questions**

6. Malaria is an endemic disease in Kilindi district. Kilindi is characterised with heavy rainfall through out the year. This has led to most of the areas to be swampy, which are good breeds for mosquitos.
  - a) What do you understand by the concept disease determinant? [2 marks]
  - b) Explain three determinants of diseases in reference to the case study. [9 marks]
  - c) Explain three preventive measures against malaria based on the three determinants. [9 marks]
7. You are tasked to lead your Council Health Management Team (CHMT) to develop a guide for diseases prevention.
  - a) Define diseases prevention. [2marks]
  - b) Discuss three levels of disease prevention. [12 marks]
  - c) Mention two target groups at each level of disease prevention. [6 marks]
8. In March 2021, four cases of Covid-19 were reported in Kisumu county. The individuals in question were admitted in Kisumu hospital. Unverified information is that two of these patients arrived from a neighbouring country 5 days ago. As an epidemiologist, you are tasked to conduct surveillance for the mentioned patients.
  - a) Define diseases surveillance. [2marks]
  - b) Mention four sources of data you will use to verify these cases. [4marks]
  - c) Outline with reasons two surveillance methods you will employ. [4marks]
  - d) Explain the steps you will use to conduct Covid-19 surveillance. [10marks]