AMREF INTERNATIONAL TRAINING CENTER

Qualification Code **:**   102106T4COH

Qualification   **:**   Community Health Level 6

                              Health Records and Information Technology Level 6

Unit Code   **:**

Unit of Competency :   Apply Epidemiology in Community Health

WRITTEN ASSESSMENT

Time: 3 HOURS

INSTRUCTION TO CANDIDATE

1. Marks for each question are indicated in the brackets

2. This paper consists of **TWO** sections: **A** and **B**

3. Candidates are provided with a separate answer booklet

4. **DO NOT** write on this question paper

This paper consists of FOUR (4) printed pages

Candidates should check the question paper to ascertain that
all pages are printed as indicated and that no questions are
missing.

SECTION A: (40 MARKS)

*Answer **ALL** the Questions in This Section*

1. Define the following terms;
   a) Epidemic   (2 Marks)
   b) Mortality   (2 Marks)

2. Secondary data means data collected by someone else earlier. Highlight FOUR secondary sources of epidemiologic data   (4 marks)

3. Distinguish between Odds Ratio and Relative Risk (RR)   (4 Marks)

4. Study design is a crucial part of research. State TWO main types of the study designs   (2 Marks)

5. The epidemiologic triangle, is a model that explains how diseases spread by identifying three factors that contribute to their transmission. Highlight THREE components of the disease triangle   (3 Marks)

6. Community diseases are determined based on the mode of transmission of the infectious agents. Outline FOUR modes of diseases transmission   (4 Marks)

7. Disease progression describes the natural history of disease. Identify FOUR main stages of disease progression   (4 Marks)

8. Identify FOUR ethical issues to consider when collecting health-related data in the community   (4 Marks)

9. The Wilson criteria for screening are a set of guidelines for screening programs. Outline FOUR components of the criteria you may consider before conducting population screening   (4 marks)

10. A tuberculosis screening was carried out in Kalundu market in January 2017. Out of the total 100 people screened, 20 were true positive, 40 were false positive, 10 were false negative and 30 were true negative.
    a) Draw a contingency table and enter the above information   (2marks)
    b) Calculate the specificity of the screening   (2marks)
    c) Calculate the sensitivity of the screening   (2marks)

SECTION B: (60 MARKS)

Answer any THREE questions in this section. Question 12 is compulsory

Case Study: Addressing Childhood Obesity in a Community

Background:

11. In a mid-sized urban community, recent health surveys have shown that the prevalence of childhood obesity has increased significantly over the past five years. Data indicate that 30% of children aged 6-12 are classified as obese, with higher rates in low-income neighborhoods. Factors contributing to this trend may include lack of access to healthy foods, limited recreational spaces, and high screen time.

    a) Identify FOUR epidemiological indicators would you use to assess the severity of childhood obesity in this community   (4 Marks)

    b) Based on the provided information. Explain FOUR potential risk factors for childhood obesity in this community   (8 Marks)

    c) Discuss FOUR community intervention programs aimed at reducing childhood obesity rates   (4 Marks)

    d) Describe TWO strategies you will use to engage local stakeholders in your proposed interventions   (4 Marks)

12. Anthrax outbreak has been reported in your village and you have been appointed as the head of epidemic investigation for that cause.

    a) Describe SEVEN steps you would take to successful investigation

                                                                (14marks)

    b) Discuss THREE control measures against the above disease   (6 marks)

13. A Notifiable disease is a disease that, when diagnosed, requires health providers, by law, to report to state or local public health officials.

    a) Describe THREE criteria used to identify notifiable diseases   (6 Marks)

    b) Discuss SEVEN notifiable diseases in Kenya.   (14 Marks)