102105T4COH

COMMUNITY HEALTH LEVEL 5

HE/OS/CH/CC/02/5/A

APPLY EPIDEMIOLOGY IN COMMUNITY HEALTH

July/August 2024

TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION

COUNCIL (TVET CDACC)

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of two sections; **A** and **B**

2. Answer **ALL** the questions as guided in each section

3. Marks for each question are as indicated in the brackets

4. You are provided with a separate answer booklet to answer the questions

5. Do not write in this question paper

This paper consists of THREE (3) 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** questions in this section.*

1. Define the following terms;
    a) Epidemiology [2 Marks]
    b) Epidemic [2 Marks]

2. A health indicator is a measure designed to summarize information about a given priority topic in population health or health system performance. Highlight FOUR health indicators in the community. [4 Marks]

3. Reporting notifiable diseases is a public health measure to track the spread of infectious diseases. Outline FOUR notifiable diseases of public health importance. [4 Marks]

4. Disease surveillance requires several methods of collecting data. Outline THREE ways of collecting surveillance data in the community. [3 Marks]

5. A group of 20 women shared rice served with fish in a gathering. The following day, 7 women were reported to be ill of which 5 of them ate fish. Only 3 of the healthy women ate fish. They suspected food poisoning and they attributed it to the fish that were served.
    a) Calculate the odds ratio. [3 Marks]
    b) Interpret the findings in a) above. [1 Mark]

6. Stages of disease progression may vary depending on the types and nature of a disease. Highlight FOUR stages of disease progression. [4 Marks]

7. Identify THREE platforms a community health assistant can use to disseminate epidemiological data in the community. [3 Marks]

8. A screening plays a role in the early detection of potential health problems. Outline FOUR qualities of a good screening test. [4 Marks]

9. Determining the health status of a community and identifying risk factors requires a multi-faceted approach that considers various data sources. Outline THREE sources of epidemiological data. [3 Marks]

10. Data analysis provides the information used to take public health action. Outline THREE reasons for analyzing surveillance data. [3 Marks]

11. Epidemiology is the backbone of community health. State FOUR uses of epidemiology.
[4 Marks]

SECTION B: [60MARKS]

*Answer any **THREE** questions in this section.*

12. In County X, the disease outbreak of disease Y has been triggered by prolonged and severe floods, affecting mainly the under-five children and the elderly population.

    a) Describe the EIGHT steps involved in conducting a disease outbreak investigation.

    [16 Marks]

    b) Identify FOUR waterborne diseases that may be prevalent in county X.[4 Marks]

13. The epidemiological triangle is a model that is used to explain disease causation

    a) With the aid of a well labelled diagram, describe the epidemiological triangle.

    [10 Marks]

    b) Explain FIVE components of the chain of disease transmission.   [10 Marks]

14. Risk factors are attributes, characteristics, or exposures that increase the likelihood of a person developing a disease or health disorder.

    a) Explain FIVE non-modifiable risk factors for diseases.   [10 Marks]

    b) Explain FIVE ways of controlling modifiable risk factors of diseases.   [10 Marks]

15. Detectable breast cancer is more treatable and thus it is associated with a more favorable prognosis. As a community health Assistant, you are required to participate in a breast cancer screening program in your community health unit.

    a) Explain THREE benefits of conducting breast cancer screening tests.   [6 Marks]

    b) Explain SEVEN steps of conducting population screening.   [14 Marks]

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