

102106T4COH

COMMUNITY HEALTH LEVEL 6

HE/OS/CH/CC/03/6/A

Apply Epidemiology in Community Health Works

Nov/Dec 2024



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

WRITTEN ASSESSMENT

Time: 3 HOURS

INSTRUCTIONS TO CANDIDATE

1. Marks for each question are indicated in the brackets.
2. The 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 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 the questions in this section.

1. Define the following terms as used in epidemiology. (3 Marks)
 - a) Endemic.
 - b) Incidence.
 - c) Outbreak.
2. Community health officers can disseminate screening reports in different ways. Identify THREE venues in which community health officers use to disseminate the reports to community members. (3 Marks)
3. Sampling involves the selection of several study units from a defined study population. Outline FOUR probability sampling methods used in epidemiological research. (4 Marks)
4. Disease investigation is a continuous process in Kenya. Highlight THREE types of disease surveillance. (3 Marks)
5. Infectious diseases are of a major public health concern in Kenya. Identify FOUR biological agents that cause infectious diseases in the population. (4 Marks)
6. Hypotheses serve as the foundation for designing experiments, studies and investigations. State THREE types of hypotheses in epidemiological research. (3 Marks)
7. Diseases are the main focus for the epidemiological studies. Identify FOUR epidemic prone diseases in Kenya. (4 Marks)
8. Disease surveillance supports the health sector in a variety of ways. Highlight FOUR functions of disease surveillance in Kenya. (4 Marks)
9. Early screening of diseases is advocated by health service providers. State FOUR factors to consider when planning for population screening activities. (4 Marks)
10. Epidemiology is important in health sector. Outline FOUR benefits of epidemiology in community health works. (4 Marks)
11. Study designs facilitate and improve epidemiological research. Outline FOUR study designs used in epidemiological research. (4 Marks)

SECTION B (60 MARKS)***Answer Any THREE Questions in This Section***

12. Disease manifestation is different from one person to another because each and every disease has its own natural history.
- Discuss SIX stages of disease progression in the body of the host. (12 Marks)
 - Explain FOUR modes of disease transmission. (8 Marks)
13. A group of 40 women shared a common meal while they were in a gathering, the following day 14 women were reported to be ill. They suspected food poisoning and they attributed it to the vegetable salad that was served and the analysis was as follows:

	Got ill	Not ill	Totals
Ate vegetable salad	10	6	16
Did not eat vegetable salad	4	20	24
Total	14	26	40

From the table above calculate and interpret;

- Relative risk. (6 Marks)
 - Odd ratio (6 Marks)
 - Explain FOUR measures of preventing food poisoning. (8 Marks)
14. Community health screening is important in identification of health interventions to curb community health problems.
- Define the term “population screening.” (2 Marks)
 - Describe FIVE steps of conducting population screening in the community. (10 Marks)
 - Explain FOUR ways of obtaining data from the community during the screening process. (8 Marks)
15. Epidemiological investigation of disease outbreaks plays an important function in determination of the main cause of the disease in the population.
- Discuss the epidemiological triad using a well-labelled diagram. (6 Marks)
 - Describe SEVEN steps used by epidemiologists in investigating a disease outbreak in a community. (14 Marks)