

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR DIPLOMA IN COMMUNITY HEALTH AND DEVELOPMENT

1^{ST} YEAR 2^{ND} SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: HDC 2122

COURSE TITLE: INTRODUCTION TO EPIDEMILOGY

EXAM VENUE: STREAM: (Dip Comm Health & Dev)

DATE:

EXAM SESSION:

TIME: 1 1/2.00 HOURS

Instructions:

Answer all the questions in Section A and ANY other 2 questions in Section B.

Candidates are advised not to write on the question paper.

Candidates must hand in their answer booklets to the invigilator while in the examination room.

SECTION A: ANWER ALL QUESTIONS IN THIS SECTION (30 MKS)

- **1.** State clearly three major applications of epidemiology in community health practice (3mks)
- 2. Define the natural history of disease and list its different stages (3mks)
- **3.** Define the following epidemiologic terms (3mks)
 - a) Epidemic
 - b) Endemic
 - c) Sporadic
- **4.** Distinguish between descriptive epidemiology and analytic epidemiology with specific examples to each (6mks)
- **5.** Complete the following table appropriately for the primary causes of diseases, environmental risk factors and host risk factors (3mks)

DISEASE	PRIMARY CAUSE	ENVIRONMENTAL RISK FACTORS	HOST RISK FACTOR
Cholera			
Typhoid			
Amoeba			
HIV and AIDS			
Pneumonia			
Tuberculosis			

- **6.** State three advantages of Cross-sectional study design as used in epidemiology (3mks)
- **7.** Explain any three uses of prevalence rate as a measure of health status of a community. (3mks)
- **8.** 350 people were invited by Jane for dinner. All of them ate the food that was served for dinner. The next day 100 of the 350 who ate that food developed diarrhea. Calculate the attack rate of diarrhea. (3mks)
- 9. State three ways used to assess and measure the health status of a community (3mks)

SECTION B: ANSWER ANY TWO QUESTIONS (30 MKS)

- 1. The major purpose of investigating an outbreak of a disease is to control and prevent future outbreaks. Discuss clearly Corona virus disease under the following headings: (15mks)
 - a) Origin
 - b) Mode of transmission
 - c) Risk factors
 - d) Prevention and Control
- 2. As a Community Health Officer, you have realized that there has been a recent case of Covid-19 outbreak in your area of juridiction. Clearly discuss how you would intervene. (15mks)
- 3. Using epidemiological triangle, discuss five circumstances that can lead to transmission of infectious diseases. (15mks)
- 4. Describe the public health importance of the following epidemiological study designs: (15mks)
 - i. Case-Control study
 - ii. Cohort Study
 - iii. Experimental study design
 - iv. Cross Sectional Study design
 - v. Longitudinal Study design