



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

**UNIVERSITY EXAMINATION FOR CERTIFICATE IN COMMUNITY HEALTH AND  
DEVELOPMENT**

**1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER 2022/2023 ACADEMIC YEAR**

**MAIN/KISUMU CAMPUS**

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**COURSE CODE: HDC 1125**

**COURSE TITLE: EPIDEMIOLOGY AND PREVENTION OF COMMON DISEASES**

**EXAM VENUE: STREAM: (Cert. Comm Health & Dev)**

**DATE: 07/12/2022 EXAM SESSION: 9.00-10.30AM**

**TIME: 1 ½ HOURS**

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**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: ANSWER ALL THE QUESTIONS (30 MKS)**

1. Explain the major components in the definition of epidemiology ( 3marks)
2. 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 incidence rate of diarrhea. (3mks)
  - i. Explain any three host factors necessary for disease occurrence (3mks)
3. Define the following epidemiologic terms (3mks)
  - a) Epidemic
  - b) Endemic
  - c) Sporadic
4. List three characteristics that descriptive epidemiology focus on (3mks)
5. Complete the following table for communicable and non-communicable diseases stating disease type,risk factor and prevention and control measures

DISEASE	Disease Type (Whether Communicable or Non Communicable)	Risk Factor	Prevention and Control Measures
Malaria			
Cancer			
Arthritis			
Diabetis			
Cholera			
Cardiovascular Diseases			

6. State three ways used to assess and measure the health status of a community (3mks)
7. Define the natural history of disease and list its different stages (6mks)

**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 the epidemiology of *Corona virus* disease (COVID-19) under the following headings: (20 mks)

- a) Origin
  - b) Mode of transmission
  - c) Risk factors
  - d) Prevention and Control
  - e) Roles and Responsibilities of a Community Health Officer in Prevention and Control
2. Discuss the major components in the definition of epidemiology (20mks)
  3. Using epidemiological triangle, discuss five circumstances that can lead to transmission of infectious diseases. (20 mks)
  4. Discuss in details four levels of diseases prevention (20 mks)