



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF HEALTH SCIENCES**

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

**1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER 2023/2024 ACADEMIC YEAR**

**MAIN/KISUMU**

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**COURSE CODE: HCD 1125**

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

**EXAM VENUE: STREAM: (Cert. CHD)**

**DATE: EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer all questions in section A and any other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

**SECTION A Answer all questions (30 Marks)**

1. Differentiate;
  - a) Communicable and non-communicable diseases (2 marks)
  - b) Epidemic and pandemic (2 marks)
  - c) Descriptive and analytic epidemiology (2 marks)
  - d) Vertical and horizontal transmission (2 marks)
2. Define
  - a) Host (1 mark)
  - b) Agent (1 mark)
  - c) Herd immunity (1 mark)
  - d) Carrier (1 mark)
3. Describe the natural history of disease (4 marks)
4. List SIX examples of non-communicable disease (3 marks)
5. Briefly discuss TWO risk factors for non-communicable diseases (4 marks)
6. Explain FOUR sources of epidemiologic data (4 marks)
7. In Siaya County 2006, there were 50 new cases of relapsing fever in Bondo town. The average total population of Bondo town was 5000. Calculate the incidence rate of relapsing fever in Siaya County 2006. (3mks)

**SECTION B ANSWER ANY TWO QUESTIONS (30 MARKS)**

1. Infectious communicable diseases can be transmitted through direct and indirect transmission. Discuss modes of transmission and give examples of communicable diseases under each (20 mks)
2. Using examples, explain three levels of prevention of diseases in a population (20 mks)
3. Giving examples, explain the epidemiological triad of infectious diseases (20 mks)
4. Discuss the systematic steps involved in outbreak investigations (20 mks)