



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

**SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE**

**PUBLIC HEALTH/COMMUNITY HEALTH AND DEVELOPMENT**

**3<sup>RD</sup> YEAR 1<sup>ST</sup> SEMESTER 2024/2025 ACADEMIC YEAR**

**MAIN/KISUMU CAMPUS**

---

**COURSE CODE:** HCB 1311

**COURSE TITLE:** NON-COMMUNICABLE DISEASE,  
CONTROL AND PREVENTION

**EXAM VENUE:** STREAM: BSc Public/ Comm. Hlth & Dev

**DATE:** EXAM SESSION:

**TIME: 2.00 HOURS**

---

**Instructions:**

- 1. Answer all the questions in Section A and 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.**



Registration No.....

**Answer all questions in section A – 30 marks.**

1. Define the following key concepts in relation to noncommunicable diseases:
  - a. Disease burden .....[2 marks]
  - b. Disease distribution [2 marks]
  - c. Disease trends .....[2 marks]
  - d. Multimorbidity [2 marks]
2. Explain using at least two specific examples, how communicable diseases can influence the incidence or severity of noncommunicable diseases, or vice versa. [3 marks]
4. Highlight key strategies that could be implemented to address both communicable and noncommunicable diseases in a comprehensive health policy framework [3 marks]
5. Compare and contrast the following concepts:
  - a. Incidence versus prevalence. [3 marks]
  - b. Disability versus Impairment [3 marks]
  - c. Disease burden versus disease control [3 marks]
  - d. Epidemiologic transition versus demographic transition [3 marks]
  - e. Primary prevention versus tertiary prevention [3 marks]
6. Explain sources of morbidity and mortality data and their challenges. [3 marks]

**SECTION B – 40 MARKS**

Answer any two questions – 20 marks each

1. Study designs:
  - a. Identify and describe the main and sub-categories of epidemiologic designs 6 marks
  - b. Using an example of the designs identified above, explain how they help increase our understanding of the relationship between ageing and hypertension 6marks
  - c. Define sampling and explain why it is an important research strategy. 8marks
2. Regarding NCDs Prevention and control in Kenya;
  - a. Describe using examples strategies that could be implemented for prevention and control of diabetes in the context of primary care context in Kenya. [6marks]
  - b. Discuss why these strategies mentioned in 2a above may be performing sub-optimally in Kenya. [6 marks]
  - c. Identify and explain FOUR key information points you use to promote uptake of prevention methods for NCDs among the youth in your community. [8 marks]
3. Discuss noncommunicable diseases under the following sub-titles:
  - a. Define disease burden and explain its significance in public health. [4marks]
  - b. Impact of demographic transition [6 marks]
  - c. Role and impact of screening [4 marks]



Registration No.....

- d. Strategic approaches to achieve universal healthcare for NCDs *[6 marks]*
4. Highlight the ways by which the following interventions contribute to NCD prevention and control in Kenya.
- a. Diet and nutrition *[4 marks]*
  - b. Health education and promotion *[4 marks]*
  - c. Control of communicable diseases *[4 marks]*
  - d. Service delivery strategies *[4 marks]*
  - e. Regular technical support and evaluation for healthcare workers *[4 marks]*