



**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 CAMPUS**

---

**COURSE CODE:** HCB 1301

**COURSE TITLE:** RESEARCH AND RESEARCH METHODS

**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.**

**SECTION A: Answer ALL questions in this section (30 marks)**

1. What is an outcome variable ( 2 marks)
2. Explain two descriptive study designs (4 marks)
3. Explain the difference between the following:-
  - a) internal and external validity
  - b) prospective and retrospective study design
  - c) A cluster and stratification sampling(2 marks each)
4. Explain target and study populations with specific example. (4 marks)
5. What is the significance of a concept note? (4 marks)
6. What are the key activities to consider when preparing a budget for a study? (6 marks)
7. Why is the importance of a literature review? (4 marks)

**SECTION B: Answer any 2 Questions in this section (40 marks each)**

1. You are to evaluate a problem statement drafted by a student, explain what you will consider during the evaluation. (20 marks)
2. What is a cohort study design and explain its benefits and limitations? (20 marks)
3. A student did a study that shows that bed net use is associated with the malaria infection. Could you explain what could have gone wrong with the listed?
  - a) Study design
  - b) Sampling
  - c) Data collection
  - d) Data analyses(20 marks)
4. You are interested in conducting a research on the causes of malnutrition in children under five years in a given ward. Explain the content of your data collection tool (20 marks)