



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

**UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE  
PUBLIC HEALTH / COMMUNITY HEALTH AND DEVELOPMENT**

**3<sup>RD</sup> YEAR 2<sup>ND</sup> SEMESTER 2018/2019 ACADEMIC YEAR**

**KISII**

---

**COURSE CODE: SBI 3325**

**COURSE TITLE: RESEARCH METHODS**

**EXAM VENUE: STREAM: (BSc. P. Health / Comm Hlth & Dev)**

**DATE: 23<sup>RD</sup> APRIL 2019**

**EXAM SESSION: 12.00 – 2.00 PM**

**TIME: 2.00 HOURS**

---

**Instructions:**

- 1. Answer all the 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: 30 MARKS**

1. Briefly discuss three uses of research in Health (3 marks)
2. Briefly discuss three qualities of a good research question (3 marks)
3. Explain briefly how conducting a literature review enables a researcher refine their statement of the problem (3 marks)
4. "The task of defining the research problem often follows a sequential pattern". Briefly explain (3 marks)
5. Briefly explain three sets of information that should be included in the statement of the problem in research (3 marks)
6. Briefly discuss the importance of objectives in research (3 marks)
7. Distinguish between target population and study population (3 marks)
8. Briefly describe three ethical rules in research (3 marks)
9. Briefly explain three uses of a work plan when conducting Research (3 marks)
10. Distinguish between Interval and Ratio scales and give an example of each (3 marks)

### **SECTION B: 40 MARKS**

1. Describe the main elements of a Research Report covering all the relevant areas (20 marks)
2. a. Probability sampling is generally preferred in comparison to non-probability sampling. Discuss. (10 marks)  
b. Compare and contrast Stratified and Quota sampling techniques, and show how each can be used for data collection (10 marks)
3. a) discuss Four factors that a researcher should consider before selecting an appropriate method for data collection (8 marks)  
b) Discuss Interview as a data collection technique (12 marks)
4. An investigator wants to assess whether smoking is a risk factor for pancreatic cancer. Electronic medical records at a local hospital will be used to identify 50 patients with pancreatic cancer. One hundred patients who are similar but free of pancreatic cancer will also be selected. Each participant's medical record will be analyzed for smoking history
  - a) Identify, giving reasons the type of study proposed above (4 marks)
  - b) Indicate its specific strengths and weaknesses (4 marks)
  - c) Explain three potential biases in this study (6 marks)
  - d) Using the figures presented above, construct a properly labeled 2x2 table (3 marks)
  - e) What is the appropriate effect measure for this type of study? Explain (3 marks)