



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF BIOLOGICAL, PHYSICAL MATHEMATICS AND ACTUARIAL
SCIENCES
DEPARTMENT OF BIOLOGICAL SCIENCES
UNIVERSITY EXAMINATIONS FOR THE DEGREE OF MASTER OF SCIENCE IN
APPLIED INSECT SCIENCE
1ST YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR

MAIN CAMPUS - REGULAR

COURSE CODE: SBI 5117

COURSE TITLE: Research Methods

EXAM VENUE:

STREAM: MSc. Applied Insect Science

DATE:

EXAM SESSION:

TIME: 3 HOURS

Instructions:

- 1. Answer question ONE and ANY other TWO Questions**
- 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.**

1. (a) Write two examples of null and alternative hypotheses that can be used during integrated vector management study (4 marks).
(b) Write four examples of ideal /SMART objectives generated in a tsetse fly control program (4 marks)
(c) What are the likely sources of a research topic (4 marks)
(d) Using specific examples, distinguish between action and applied research (4 marks)
(e) Distinguish between descriptive and correlation research (4 marks)
2. Discuss paradigms, methods and data collection techniques used in qualitative research (20 marks)
3. Highlight qualities of a good research, good researcher and basic principles that guide scientific research (20 marks).
4. Discuss the purpose and basic components of a good literature review (20 marks).
5. Describe basic principles and two broad categories of experimental designs (20 marks).