

## JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF AGRICULTURAL AND FOOD SCIENCES FIRST YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN AGRICULTURAL EXTENSION 2022/2023 ACADEMIC YEAR

REGULAR

 COURSE CODE: AEE: 5112
 STREAM: MSc. Extension

COURSE TITLE: Research Methods in Extension Date:

## **Instructions:**

Answer Question One (Compulsory) and ANY other TWO questions. Answers to Questions must be written in the Answer Booklets Candidates must hand in their answer booklets to the invigilator while in the examination room.

## 1. QUESTION ONE

- a. Identify a research topic and briefly illustrate the following: (10 marks)
  - i. The aim of the study
  - ii. TWO objectives of the study
  - iii. The null and alternative hypotheses of the research
- b. Explain FIVE research instruments that can be used in your research (5 marks)
- c. State FIVE ways that you can use to share your research findings (5 marks)
- 2. QUESTION TWO
  - a. Explain FIVE reasons why a literature review is important in the research process. (10 marks)
  - b. Identify FIVE sources of literature available for researchers (5 marks)
  - c. Explain TWO ways available for researchers to use information gathered from literature sources without accusation of plagiarism (3 marks)
  - d. Differentiate between in-text citations and a list of references (2 marks)
- 3. QUESTION THREE
  - a. Explain THREE advantages and TWO Disadvantages of sampling during data collection (10 marks)
  - b. Discuss the TWO main sampling techniques (5 marks)
  - c. Outline FIVE situations when large samples may be required (5 marks)
- 4. QUESTION FOUR
  - a. Explain FIVE reasons why the hypothesis is important in research (10 marks)

- b. Discuss TWO types of the alternative hypothesis (5 marks)
- c. Highlight FIVE characteristics of a good hypothesis (5 marks)

## 5. QUESTION FIVE

- a. Explain FIVE reasons why research is important (5 marks)
- b. Outline the research process (5 marks)
- c. Highlight FIVE factors to consider when selecting a research topic (5 marks)
- d. State FIVE components of an introduction section of a research report (5 marks)