



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

THIRD YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR
OF SCIENCE IN FOOD SECURITY - 2013/2014 ACADEMIC YEAR

AFB 3312: RESEARCH METHODS IN FOOD SECURITY

Instructions:

1. This paper consists of **TWO** sections, **A** and **B**.
2. Answer **ALL** questions from section **A** and any **TWO** from section **B**.
3. Write all answers in the booklet provided.

SECTION A [30 MARKS]

Answer ALL questions.

1. (a) What is research? [1 mark]
(b) List and explain three characteristics of research. [4 marks]
(c) List and explain three types of research. [4 marks]
(d) Describe the term sample design. [1 mark]

2. (a) List the four fundamental research questions whose answers would underpin the framework of any research. [2 marks]
(b) State two characteristics each of quantitative and qualitative research. [2 marks]
(c) Define the following terms as used in research:
 - i) Descriptive statistics. [1 mark]
 - ii) Inferential statistics. [1 mark]
 - iii) Sample. [1 mark]
 - iv) Statistic. [1 mark]
 - v) Population. [1 mark]
 - vi) Hypothesis [1 mark]

3. (a) Consider the following list of research titles and decides which projects are likely to be quantitative or qualitative in nature, and which might be a combination of both.
 - i) The effects of poverty on lifespan in twenty first century in Kenya. [1 mark]
 - ii) Archeology and tourism in East Africa. [1 mark]
 - iii) Reproductive and productive trends of the Jersey cattle breed in Smallholder dairy farms in the sub-humid Coastal Zone of Kenya. [1 mark]
 - iv) Disease resistance by two new bean varieties. [1 mark]
 - v) Food supply in Kenya in the post independence period. [1 mark]
- (b) List five purposes of a literature review. [5 marks]

SECTION B **[40 MARKS]**

Answer ANY TWO questions.

4. (a) Literature review should be carried out in four major directions, not just narrowly, confined to your specific subject area. Identify and briefly discuss the four directions for literature review. [10 marks]
- (b) Research hypotheses: Do we need them in research? Briefly discuss. [10 marks]
5. (a) Questionnaires are a key instrument in research. Explain what questionnaires are; and discuss briefly the process of constructing questionnaires. [10 marks]
- (b) Write short notes on the following:
- i) Probability samples. [2 marks]
 - ii) Non-probability samples. [2 marks]
 - iii) Focus group interviewing. [2 marks]
 - iv) Formulation of objectives. [2 marks]
 - v) Research design. [2 marks]
6. A good research project in food security, like other research initiatives, follows a logical process. Identify and discuss the eight steps in research process. [20 marks]