



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**FOURTH YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR THE DEGREE
OF BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT**

2016/2017 ACADEMIC YEAR

REGULAR

COURSE CODE: AAE 3412

COURSE TITLE: AGRIBUSINESS RESEARCH METHODS

EXAM VENUE: LR 5

STREAM: BSc. (Agribusiness Management)

DATE: 14/12/16

EXAM SESSION: 9.00 – 11.00 AM

TIME: 2 Hours

Instructions:

- 1. Answer ALL questions in section A and ANY other 2 Questions in section B.**
- 2. Candidates are advised not to write on question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A [30 MARKS]

Answer ALL questions from this Section.

1. (a) Explain the term ‘Scientific Research’ as used in agribusiness research methods [2 marks]
(b.) Mention three purposes why we conduct scientific research [3 marks]
2. (a) Distinguish between qualitative and quantitative data [2 marks]
(b) Describe the following terms as used in agribusiness research methods
(i.) Instrumentation [2 marks]
(ii) Randomization [2 marks]
(iii) Replication [2 marks]
(c) Scientific research is considered to be systematic in nature; describe the steps involved in conducting a research? [3 marks]
3. (a) Describe two importance of time series analysis [1 mark]
(b) Describe **four** methods of probability sampling [2 marks]
(c) Outline **four** most popular tools of collecting data in research [2 marks]
4. (a) Discuss and distinguish the following terms as used in agribusiness research methods
(i.) Qualitative and Quantitative data [2 marks]
(ii) Continuous and discrete data [2 marks]
(iii) Ordinal and Nominal data [2 marks]
(b) In the heart of all scientific explanation is the idea of causality, explain three operations employed in scientific research to demonstrate causality? [3 marks]

SECTION B [40 MARKS]

Answer ANY TWO questions from this Section.

5. Research design has four distinct components; Discuss with examples the four components of research design stating the functions of each component [20 marks]
6. A Bachelor of Science in agribusiness management student of JOOUST on process of conducting research project identified a problem with response of potted plant to a recently introduced foliar feed. The student intend to carry out an experimental research with four treatments A, B, C and D, each replicated five times. During randomization and layout process the outcome were as follows; Random number: 37, 80, 76, 02, 65, 27, 54, 77, 48, 73, 86, 30, 67, 05, 50, 31, 04, 18, 41, 89. Sequence: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 respectively.

Answer the following questions using the information provided above;

a) Describe the term ‘Completely Randomized Design’ as used in agribusiness research methods

[2 marks]

b) Describe step-by-step procedure for randomization and layout of a Completely Randomized Design

[18 marks]

Q7. a) Highlight the various ethical issues relating to the research participant

[12 marks]

b) What are the main sources of a research problem?

[8 marks]