

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION

**AGED 424: STATISTICAL AND RESEARCH METHODS IN AGRICULTURE
EDUCATION**

STREAMS: BSC (AGED) P/T

TIME: 2 HOURS

DAY/DATE: TUESDAY 03/12/2019

11.30 AM – 1.30 PM

INSTRUCTIONS:

- Do not write on the question paper
- Answer ALL questions in Section A and any other Three Questions in Section B

SECTION A

QUESTION ONE

- (a) State five main steps in the scientific process. [5 marks]
- (b) Discuss four roles that research serves in education. [8 marks]
- (c) The following is a set of marks in a class test; 45 50 35 80 95 40 55 65 60
Calculate the: [12 marks]
- Variance
 - Standard deviation

SECTION B

QUESTION TWO

- (a) Explain the importance of a research proposal. [10 marks]
- (b) Differentiate between the qualitative and quantitative research. [5 marks]

QUESTION THREE

- (a) Distinguish between deductive and inductive logic in research. [4 marks]
- (b) State three significance of literature review. [6 marks]
- (c) Explain five qualities of a research problem. [5 marks]

QUESTION FOUR

- (a) Explain the meaning of a research design. [3 marks]
- (b) Explain the strengths of using questionnaires for data collection. [5 marks]
- (c) Discuss the importance of using a sample in research rather than a population. [7 marks]

QUESTION FIVE

- (a) During the last two decades, there has been a dramatic change in the business environment. The trend towards complexity has increased the risk associated with business decisions, making it more important to have a sound information base. In view of the above statement, discuss the role of research in today's organizations. [10 marks]
 - (b) Discuss the five probabilistic sampling techniques that a researcher may use to select a sample from the population giving an advantage and disadvantage for each. [5 marks]
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