

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

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

STREAMS: B.SC AGED

TIME: 2 HOURS

DAY/DATE: FRIDAY 06/12/2019

11.30 A.M. – 1.30 P.M.

INSTRUCTIONS:

- **Answer question ONE (compulsory) and any other THREE.**
- **Do not write on the question paper.**

Q1. (i) Twenty one heavy smokers were put on a treadmill at a fastest setting. The time in seconds was measured until they fell off from exhaustion, 18, 16, 18, 24, 23, 22, 22, 23, 26, 29, 32, 34, 34, 36, 36, 43, 42, 49, 46, 46, 57.

Compute the following statistics

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|---------|-----------------------------------------------------------------|-----------|
| (a) | Mean | (5 marks) |
| (b) | Median | (3 marks) |
| (c) | Interquartile range | (5 marks) |
| (d) | Variance | (5 marks) |
| (e) | Standard deviation | (2 marks) |
| (ii) | State five disadvantages of internet as a source of literature. | (5 marks) |
| Q2. (a) | Define the term statistics. | (3 marks) |
| (b) | Distinguish between the following terms. | (8 marks) |
| (i) | Population and sample | |
| (ii) | Statistic and parameter | |

- (c) State four advantages of telephone interviews as a method of data collection. (4 marks)
3. (a) Enumerate the steps involved in literature search. (6 marks)
- (b) With an aid of examples describe two kinds of preliminary sources of literature that researchers consult when locating literature. (9 marks)
4. (a) Match the variables in the following table with the scales of measurements. (10 marks)

Variables	Scales of measurements
Gender	Ordinal
Position in race	Nominal
Age	Interval
Money	Ratio
Temperature	Ratio

- (b) Compare and contrast basic and applied research. (5 marks)
5. (a) Explain five reasons why sampling is importance in research. (10 marks)
- (b) Describe three probability and two non-probability sampling methods. (5 marks)
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