

UNIVERSITY

## UNIVERSITY EXAMINATIONS

## EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF AGRICULTURE EDUCATION

AGED 424: STATISTICAL AND RESEARCH METHODS IN AGRICULTURAL EDUCATION

STREAMS: AGED Y4S1
TIME: 2 HOURS

DAY/DATE: TUESDAY 11/12/2018
11.30 A.M. - 1.30 P.M.

## INSTRUCTIONS:

- Answer question ONE and any other TWO questions.
- Do not write on the question paper.

Q1. (a) Explain the meaning of the following terms as used in statistics.
(i) Median
(ii) Null hypothesis
(iii) Ethics
(iv) Mode
(b) The following are scores of AGED students in a statistics test

| 35 | 50 | 30 | 40 | 42 |
| :--- | :--- | :--- | :--- | :--- |
| 50 | 40 | 45 | 35 | 38 |
| 60 | 48 | 38 | 92 | 59 |
| 56 | 45 | 40 | 61 | 72 |
| 70 | 69 | 08 | 37 | 64 |
| 11 | 51 | 91 | 12 | 08 |
| 36 | 37 | 84 | 96 | 13 |

(i) Construct a grouped frequency distribution using a class interval of 0-9, 10-19 etc.
(4 marks)
(ii) Calculate the mean, mode and median of the grouped frequency distribution in b(i) above.
marks)
(c) Human beings blood can be typed as either $\mathrm{O}, \mathrm{B}, \mathrm{A}$ or AB . The following is the distribution of blood of randomly chosen people

| Blood type | O | AB | A | B |
| :--- | :--- | :--- | :--- | :--- |
| Probability | 0.30 | 0.25 | 0.20 | - |

(i) What is the probability that two people can have blood group O and B ?
(ii) What is the probability of a person having blood group O or AB and B . (6 marks)

Q2. (a) What is a hypothesis?
(b) By use of examples, explain two types of hypothesis.
(c) Give six characteristics of a good hypothesis.
(d) Explain briefly three sources of literature.

Q3. A successful research undertaking depends on the good relationship between a researcher and the research respondent. Explain.
(20 marks)
Q4. Give and explain five advantages and five disadvantages of an interview as a research instrument used in qualitative research.
(20 marks)

