



*"Investing in Africa's future"*

**COLLEGE OF HEALTH, AGRICULTURE AND NATURAL  
SCIENCES**

**ACP 204: RESEARCH METHODS**

**END OF SECOND SEMESTER EXAMINATIONS**

**APRIL/MAY 2019**

**LECTURER: Mrs. Mazvita Chiduwa**

**DURATION: 3 HRS**

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**INSTRUCTIONS**

Answer **ALL** QUESTIONS from Section A

**Questions carry 10 marks**

Answer any **THREE** questions from Section B

**Questions carry 20 marks**

Write legibly.



### **Section A: Answer all questions**

#### **Question 1**

What is research? (2)

What is the difference between basic and applied research? (4)

Name four sources of information that are not considered scientific/ authentic/ trustworthy (4)

#### **Question 2**

Name and briefly explain the elements of a research proposal. (10)

#### **Question 3**

State and briefly explain the steps involved in collecting data. (10)

#### **Question 4**

List and briefly explain (or give examples of) five of the 9 types of questionnaire questions. (10)



## **Section B: Answer three questions**

### **Question 5**

With the aid of examples, distinguish between descriptive and inferential statistics. (4)

Stating examples, distinguish between dependent and independent variables. (4)

Stating examples, distinguish between nominal, ordinal, interval and ratio data (12).

### **Question 6**

What are the characteristics of true experiments? (6)

Describe and distinguish between two experimental designs. (4)

Describe interview skills and tactics to improve data collection (10)

### **Question 7**

Why do researchers carry out sample research when entire populations are available? (8)

What is the difference between a population and a sample frame? (2)

Describe the different ways to obtain a representative sample. (10)

### **Question 8**

A researcher isolated a new rhizobia strain and decided to test it against the standard inoculant strain. Thirty farmers were split into two groups and asked to test the strains. Each farmer was asked to check the pod numbers on a representative plant and submit for preliminary analysis. The table below shows their submissions.

What are the mean, median, mode, range, variance and standard deviation of the figures given below? (12)

What does this information tell us about the two rhizobia strains? (4)

What options does the researcher have for graphical presentation of this data? (4)