



MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

**AGR 301: RESEARCH METHODS IN AGRICULTURAL EDUCATION AND
EXTENSION**

DATE: 25/4/2019

TIME: 2:00 – 4:00 PM

INSTRUCTIONS:

Answer Question One and Any Other Two Questions

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Distinguish between the following terms as used in research (4 marks)
 - i) Theory and fact
 - ii) Descriptive and inferential statistics
- b) Explain four reasons why in-house editing of data is necessary in research (2 marks)
- c) Explain four dimensions in classifying research (4 marks)
- d) You have been appointed to conduct research to establish why students fail in biological subjects. Explain four important types of variables that will be applicable in your data collection (4 marks)
- e)
 - i) Explain five disadvantages of personal interviewing over telephone. (5 marks)
 - ii) Explain five factors that affect internal validity in research (5 marks)
- f) Explain three reasons why pilot testing a questionnaire is relevant in research. (3 marks)
- g) Explain the any three types of literature reviews that you may conduct in your field of interest (3 marks)

QUESTION TWO (20 MARKS)

- a) You have been asked by your employer to prepare a review on successful adoption of current farming technologies in Kenyan urban cities. Explain four reasons why literature review is important in your exercise (8 marks)
- b) Explain how you would organize the above review in order to successfully write a good review (12 marks)

QUESTION THREE (20 MARKS)

- a) You have been appointed head of research section in your workplace. You are required to carry out a survey on adoption of irrigation by farmers in South Eastern Region. Describe the steps you would follow before implementing your research (10 marks)
- b) Explain five factors you will considered in choosing a data collection instruments in order to ensure valid data is obtained (10 marks)

QUESTION FOUR (20 MARKS)

- a) As an extension officer in Machakos County, you intend to do a research on why adoption of soilless farming failed in Mwala ward. Explain three reasons why you would choose interviewing over focus group discussion in your data collection (6 marks)
- b) Explain three ways in which you will present your data in question (a) above (6 marks)
- c) Upon successful data collection and analysis on the above research, you are required to submit a report to your employer. Explain four elements you would include in the summary of your report (8 marks)

QUESTION FIVE (20 MARKS)

- a) You have been appointed by your employee to head in proposal writing on policies affecting issues of governance and its influence in the country's agricultural development in Kenya. Describe the sections you would include in your proposal (15 marks)
- b) Explain five practices that are considered unethical during proposal development and research implementation (5 marks)