



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

**FOURTH YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE
IN AGRICULTURAL EDUCATION AND EXTENSION**

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

TIME: 31/7/2017

DATE: 8:30 – 10:30 AM

INSTRUCTION TO CANDIDATES:

Answer ALL questions from Section A and any other TWO from Section B:

SECTION A: COMPULSORY: (30 MARKS)

QUESTION ONE (30 MARKS)

- a) Explain any four characteristics of good scientific research. (4 marks)
- b) Explain any five roles of theories in research (5 marks)
- c) With specific examples, explain four important types of variables in agricultural extension research (4 marks)
- d)
 - i) Explain any five advantages of personal interviewing (5 marks)
 - ii) Explain five factors that affect internal validity in research (5 marks)
- e) Distinguish between descriptive and inferential statistics (2 marks)
- f) Explain the purpose of sampling a sample size for a study. (5 marks)

QUESTION TWO (20 MARKS)

- a) With specific examples, explain four dimensions one can use in classifying research (16 marks)
- b) You have been asked by your employer to prepare a review on curriculum development in Kenya. Explain four reasons why literature review is important in your exercise (4 marks)

QUESTION THREE (20 MARKS)

- a) You have been appointed head of research section in your workplace. You are required to organize and collect data on adoption of irrigation by farmers in South Eastern Region. Explain five instruments you would use in collecting valid data for analysis. (10 marks)
- b) Explain five factors you will considered in choice of the above instruments (10 marks)

QUESTION FOUR (20 MARKS)

- a) As an extension officer in Makueni County, you intend to do a research on why improved maize variety, 628, failed to be adopted by farmers. Explain three methods of research designs you can use (12 marks)
- b) Explain four elements you would include in summarizing the report for this research (8 marks)

QUESTION FIVE (20 MARKS)

- a) You have been appointed by your employer to head in proposal writing on issues of governance and its influence in the country's agricultural development. Explain the areas you would consider in your write-up (10 marks)
- b) Explain five ethical issues one must adhere to when carrying out research in agricultural education and extension (10 marks)