



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2015/2016

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL STUDIES

FIRST SEMESTER EXAMINATION FOR DIPLOMA IN AGRICULTURAL
EDUCATION

EAG 0201: MEASUREMENT AND EVALUATION IN AGRICULTURAL EDUCATION
AND EXTENSION

Date: 27/4/2016

Time: 11:00 – 1:00 PM

INSTRUCTIONS

This paper consists of FIVE questions

Answer question one and other two questions in this paper

SECTION A: 30 MARKS

QUESTION ONE

- a) State the meaning of the following terms as used in measurements and evaluation
- i) Assessment
 - ii) Measurement
 - iii) Test
 - iv) Examination
 - v) Evaluation (5 marks)
- b) Giving relevant examples, describe the following scales of measurements
- i) nominal scale,
 - ii) ordinal scale and
 - iii) ratio scale (6 marks)

- c) Differentiate between reliability and Validity of a test (4 marks)
- d) List two types of validity that a teacher has to consider when setting a test (2 marks)
- e) Mention two ways of measuring reliability of a test (2 marks)
- f) Define a marking scheme and state its importance (3 marks)
- g) State four reasons why a marking scheme should be prepared at the same time when setting the test. (4 marks)
- h) State two limitations of each of the following types of tests
 - i) True/ false tests
 - ii) Short answer test (4 marks)

QUESTION TWO

- a) Describe **FIVE** guidelines for constructing a multiple choice test (10 marks)
- b) An agriculture teacher in Migwani secondary school gave an 80 items **MULTIPLE CHOICE TEST** with **FOUR** options for each item. Simon, a student guessed all 80 items and scored 20 items correct. T he teacher decided to do a correction for guesswork during scoring. Calculate John’s corrected score and show your working (5 marks)
- c) Discuss five reasons why students cheat in examinations (5 marks)

QUESTION THREE

- a) Define a test table of specification (2 marks)
- b) Describe the major categories of educational objectives according to Benjamin Bloom, (1956) (6 marks)
- c) Choose a topic of your choice in either Biology or Agriculture with four instructional objectives and plan for its test using a test table of specification. (12 marks)

QUESTION THREE

- a) Explain disadvantages of essay items (6 marks)
- b) Construct one essay question from a topic in either Biology or Agriculture and prepare a marking scheme for it (14 marks)

QUESTION FIVE

- a) Find the median and the mode of the following scores 100, 90,80,80,70, 70, 70, 70, 60, 60, 60, 50, 50, 40, 40, 30, 30, 20, 10. (3 marks)
- b) In a certain school in west Pokot County, students scored marks as shown in the frequency distribution table below

| Score (X) | Frequency (no. of students who scored X) |
|-----------|---|
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 4 |
| 4 | 8 |
| 5 | 9 |
| 6 | 10 |
| 7 | 9 |
| 8 | 4 |
| 9 | 2 |
| 10 | 1 |

- i) Calculate the mean score of the students in the class (9 marks)
- ii) Using a histogram illustrate the distribution of scores (8 marks)