



# MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

SECOND YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

AEE 222: EVALUATION AND MEASUREMENT IN AGRICULTURAL EDUCATION

AND EXTENSION

DATE: 23/11/2020

TIME: 2.00-4.00 PM

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## INSTRUCTIONS:

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

### SECTION A: COMPULSORY 30 MARKS

#### QUESTION ONE (30 MARKS)

- a) Explain the meaning of test reliability as used in measurements and evaluation (2 marks)
- b) Explain four factors that affect the reliability coefficient of an agriculture test (2 marks)
- c) Explain the following types of test validity
  - i. Content validity (2 marks)
  - ii. Construct validity (4 marks)
  - iii. Criterion-related validity (4 marks)
- d) Explain the meaning of the following terms as used in measurement and evaluation
  - i. Assessment (2 marks)
  - ii. Measurement (2 marks)
  - iii. Evaluation (2 marks)
  - iv. Testing (2 marks)
  - v. Examination (2 marks)
- e) Explain THREE uses of a tests (6 marks)

## **SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)**

### **QUESTION TWO (20 MARKS)**

- a) Formulate FOUR instructional objectives in the topic “Vegetable growing”, a form two agriculture topic (5 marks)
- b) Construct THREE multiple choice items and prepare a marking scheme for the items from the topic livestock diseases in form three Agriculture. (5 marks)
- c) Describe the procedure administering an agriculture test among farmers in an agricultural training centre (10 marks)

### **QUESTION THREE (20 MARKS)**

- a) Explain the meaning of a test table of specification (2 marks)
- b) Choose a topic of your choice in agriculture and prepare a test table of specification for a one-hour test with a total score of 50%. (8 marks)
- c) Explain FIVE rules that should be followed in construction of essay item. (10 marks)

### **QUESTION FOUR (20 MARKS)**

Explain the meaning of the following as used in scoring in agriculture tests

- a) Halo effect (5 marks)
- b) Item to item carry over effect (5 marks)
- c) Test to test carry over effect (5 marks)
- d) Order effect (5 marks)

### **QUESTION FIVE (20 MARKS)**

Explain the taxonomy of educational objectives in the following domains of learning

- a) Cognitive domain (10 marks)
- b) Psychomotor domain (5 marks)
- c) Affective domain (5 marks)