MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

BACHELOR OF EDUCATION

AEE 222: MEASUREMENTS AND EVALUATION IN AGRICULTURAL EDUCATION AND EXTENSION

DATE: 24/7/2019   **TIME:11.00-1.00 PM**

INSTRUCTIONS;
Answer question ONE and any other TWO

QUESTION ONE: (30 MARKS) (COMPULSORY)

a)   Giving a relevant example in each case, describe the following scales of measurements

　　i.   Nominal scale   (2 marks)

　　ii.   Ordinal scale   (2 marks)

　　iii. Ratio scale   (2 marks)

b)   Choose a topic of your choice in Agriculture with four instructional objectives and plan for its test using a **test table of specification**   (6 marks)

c)   State FOUR ways of measuring reliability of a test   (2 marks)

d)   Differentiate the meaning of the following terms as used in measurements and evaluation in Agriculture

　　i.   Examination and Tests   (2 marks)

　　ii.   Measurement and assessment   (2 marks)

　　iii. Summative and formative evaluation   (2 marks)

　　iv.   Test validity and test reliability   (2 marks)

e)   Explain FOUR reasons why marking schemes should be prepared at time of test construction   (2 marks)

f)   Discuss EIGHT Techniques you can use to curb exam cheating in Kenyan Universities?

                                                                                            (4 marks)

QUESTION TWO (20 MARKS)

a)   Describe **FIVE** guidelines for constructing a multiple choice test in agriculture (5 marks)

b)   An agriculture teacher in Tawa secondary school gave an 80 items **MULTIPLE CHOICE TEST** with four options for each item. Kioko, a student guessed all 80 items and scored 20 items correct. The teacher decided to do a correction for guesswork during scoring. Calculate John's corrected score and show your working
        (5 marks)

c)   Explain THREE types of test validity a teacher should consider during test construction

                                                                                            (5 marks)

d)   Prepare a tool that can be used for assessing field management practices in an agricultural project on cabbage growing in a school farm.   (5 marks)

QUESTION THREE (20 MARKS)

a)   Construct a THREE items multiple choice test from any topic in agriculture and prepare the marking scheme   (4 marks)

b)   Describe the THREE domains of educational objectives   (6 marks)

c)   Giving a relevant example in each case, explain how the domains in (b) above have been categorized into levels complexity/sophistications   (10 marks)

QUESTION FOUR (20 MARKS)

a)   Explain SIX disadvantages of essay items in Agriculture tests   (6 marks)

b)   Construct one essay question (worth 20mks) from any topic in agriculture and prepare a marking scheme for it   (14 marks)

QUESTION FIVE (20 MARKS)

In a class of one hundred (100), students scored marks shown in table 1 below in an agriculture test

Table 1: scores obtained by students in an agriculture test

Scores interval	frequency
60-62	5
63-65	8
66-68	42
69-71	27
72-74	8

a)   Calculate the class mean score and show your working   (5 marks)

b)   Calculate the variance   (5 marks)

c)   Calculate the standard deviation of the scores   (4 marks)

d)   With an aid of a histogram and a frequency polygon show how the teacher can display the marks shown in table above to enhance quick interpretation of the marks.(use the graph paper at the back of exam booklet)   (6 marks)