


KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF THE
DEGREE OF BACHELOR OF EDUCATION (ARTS)
SECOND SEMESTER 2016/2017
(JANUARY - MAY, 2017)

EPSC 311: MEASUREMENT AND EVALUATION

STREAM: Y3S1

TIME: 2 HOURS

DAY: TUESDAY, 3:00-5:00 PM

DATE: 16/05/2017

INSTRUCTIONS

1. *Do not write anything on this question Paper.*
2. *Answer question ONE and any other THREE questions.*

QUESTION ONE

- (a) Define the following terms:
- | | |
|--------------------|-----------|
| (i) Validity | [1 mark] |
| (ii) Reliability | [2 marks] |
| (iii) Test | [2 marks] |
| (iv) Evaluation | [2 marks] |
| (v) Test usability | [2 marks] |
- (b) Identify and explain five purposes of educational measurement. [10 marks]
- (c) Discuss the ethical issues in measurement and evaluation. [6 marks]

QUESTION TWO

- (a) Differentiate between objective and essay type tests. [4 marks]
- (b) (i) Which types of test will give the most reliable result? [1 mark]

- (ii) Give two reasons why you think this is so. [2 marks]
- (c) Discuss the suggestions which have been put forward for scoring essay tests. [8 marks]

QUESTION THREE

- (a) State one reason why a teacher should conduct item analysis. [1 mark]
- (b) Study the following item analysis data for an item in a primary school Maths test and answer the questions which follow.

RESPONSE	A*	B	C	D	OMITS
UPPER 50	36	5	0	6	0
LOWER 50	16	29	0	8	0

A* - Key

Compute:

- (i) The item difficulty index [2 marks]
- (ii) The item discrimination index [2 marks]
- (iii) Arrange the distracters from the best to the poorest [2 marks]
- (c) Give three benefits of item analysis in teaching and learning. [3 marks]
- (d) List five criticisms leveled against the use of the tests or examinations as a means of determining student achievement. [5 marks]

QUESTION FOUR

Two physics tests (X) and (Y) were administered to ten form four students in a secondary school in Kericho County and the following scores were obtained by the students:

X; 23, 27, 28, 28, 28, 30, 30, 33, 35, and 38
 Y; 18, 20, 22, 27, 21, 29, 27, 29, 28, 29

- (a) Compute the range, mean score, modal score and standard deviation for each of the tests. [12 marks]
- (b) Give two properties of the mean which make it the most suitable measure of central tendency. [2 marks]
- (c) Give one measure of variability that is commonly used in measurement and evaluation. [1 mark]

QUESTION FIVE

- (a) Discuss five measures or principles to ensure that a test is well administered. [10 marks]
- (b) State five factors that influence the reliability of a test. [5 marks]

QUESTION SEVEN SIX

- (a) What is a scale? [1 mark]
- (b) Describe the properties of each of the four types of scales used in educational measurement. [8 marks]
- (c) Using the Spearman Brown formula calculate a reliability of the whole test if the reliability of the half test is 0.1. [2 marks]
- d) State 4 characteristics of a good test. [4 marks]