



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SPECIAL NEEDS EDUCATION

APRIL SESSION EXAMINATION FOR BACHELOR OF EDUCATION

EPS 400: EDUCATIONAL TESTING AND MEASUREMENT

DATE: SCHOOL BASED

TIME:

INSTRUCTIONS:

Answer QUESTION ONE and any other TWO QUESTIONS

QUESTION ONE

- a) State the scale (level) of measurement and type of variable (continuous or discrete) for each of the following:
- Age of students in a form two class.
 - Ranking of performance of schools after they have been designated as excellent, best, satisfactory and worst.
 - Classification of job applicants by counties.
 - Assigning of numbers to represent variables in a research.
 - Total number of students in fourth year of study at Machakos University.
- (10 marks)
- b) Distinguish between the following sets of terms:
- Test reliability and test validity.
 - Descriptive statistics and inferential statistics.
 - Norm-referenced and criterion-referenced testing.
 - Essay tests and objective tests.
 - Positively skewed distribution and negatively skewed distribution.
- (10 marks)
- c) Describe three test formats that a teacher may use in class tests
- (6 marks)

d) The table below shows a summary of students' responses on a multiple choice item.

GROUP	OPTIONS			OMITS		TOTAL
	A*	B	C	D		
UPPER GROUP	43	3	11	3	0	60
LOWER GROUP	35	0	25	0	0	60

A* Is the key (correct option)

Compute the:

- i. Difficulty index;
- ii. Discrimination index. (4 marks)

QUESTION TWO

a) Discuss how the following factors affect reliability of a test

- i. Speed
- ii. Test difficulty
- iii. Group homogeneity
- iv. Test length
- v. Subjective scoring (10 marks)

b) Distinguish between the following terms:

- i. Evaluation and measurement
- ii. Standard scores and standardized scores.
- iii. Measures of variability and measures of relationship.
- iv. Content and construct validity
- v. Test and Examination (10 marks)

c) Explain two reasons in each case why a report form is important to the following:

- i. Student
- ii. Teacher
- iii. Parents
- iv. Administrators (8 marks)

QUESTION THREE

- a) Explain two purposes of the tests and measurements to each of the following:
- i. Teacher; (4 marks)
 - ii. Learner; (4 marks)
 - iii. Administration. (4 marks)
- b) Explain four roles of evaluation in education. (4 marks)
- c) Differentiate between formative and summative evaluation and cite an example in each. (4 marks)

QUESTION FOUR

The frequency distribution table below shows the score on a form 2 English test.

Score	3	8	13	18	23	28	33	38
Freq	1	2	3	5	9	20	8	2

Using the information above, compute the following measures of:

- a) Central tendency;
- Mode (1 mark)
 - Median (2 marks)
 - Mean (3 marks)
- b) Variability
- Range (2 marks)
 - Mean deviation (5 marks)
 - Standard deviation (5 marks)
- c) Describe fully the shape of the distribution using the results in (i) above. (2 marks)

QUESTION FIVE

- a) Discuss five functions of the Kenya Certificate of Secondary Education (KCSE) examination in the Kenya Education System. (10 marks)
- b) Explain five factors that may affect the choice of an item format (or question type) to use on Classroom test. (10 marks)