



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2012/2013

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR
THE DEGREE OF BACHELOR OF EDUCATION WITH
INFORMATION TECHNOLOGY
(CITY CAMPUS)

PSY 410: EDUCATIONAL TESTS, MEASUREMENTS AND EVALUATION

Date: 16th July, 2013

Time: 9.00 – 11.00 a.m.

INSTRUCTIONS:

- ◆ This paper has two Sections, A and B.
- ◆ Answer TWO (2) Questions from SECTION A and TWO (2) Questions from SECTION B.

SECTION A

INSTRUCTIONS: Answer two questions from this section.

1. (a) Define the following terms:
 - (i) Test
 - (ii) Measurement
- (b) Explain the importance of measurement and evaluation to school administrators
- (c) Explain B.S. Bloom's Cognitive domain of educational objectives

(17 ½ Marks)

2. (a) (i) State six characteristics of good educational objectives.
(ii) Using relevant examples, explain factors to consider in construction of essay type questions.
- (b) Describe the various scales of measurement.

(17 ½ Marks)

3. (a) Explain the various causes of measurement error.
- (b) Using examples, explain the various dimensions of educational objectives.

(17 ½ Marks)

SECTION B

Q4. The following are scores in a class test:

85	95	78	81
101	95	95	87
102	94	86	83
96	96	75	105
102	77	91	83
85	84	84	88
101	96	81	101
88	112	85	

- (a) Tabulate a grouped frequency distribution for the above data given a class interval of 5.
- (b) Construct a frequency polygon for the grouped frequency distribution in Q4 (a).
- (c) Explain any three (3) reasons why a frequency polygon should be used in graphic presentation of data compared to histogram.

(17.5 marks)

Q5. Calculate the mean, 60th percentile and standard deviation for the grouped frequency distribution tabulated in Q4 (a). (17.5 marks)

- Q6. (a) In a class of fifty students, the mean score for mathematics is 47 while its standard deviation is 6. Three students; A, B and C have scored 30, 60 and 70 respectively. What will be their standard scores?

(c) The following are scores for X and Y tests:

<u>X</u>	<u>Y</u>
70	80
65	70
50	60
58	65
55	62
49	64
62	72
75	90
45	36
60	75

- (i) Calculate the co-efficient of correlation for the tests using Spearman's rho.
- (ii) Interpret the result in Q6 (i).
- (b) Discuss any four (4) uses of the coefficient of correlation in educational tests and measurements. (17.5 marks)