

**UNIVERSITY OF ESWATINI
INSTITUTE OF POST-GRADUATE STUDIES
MASTER OF EDUCATION IN ADULT EDUCATION**

MAIN EXAMINATION PAPER, December 2018

TITLE OF PAPER: MEASUREMENT AND EVALUATION

COURSE CODE: AED 601

TIME ALLOWED: THREE (3) HOURS

- INSTRUCTIONS:**
- 1. ANSWER THREE (3) QUESTIONS ONLY**
 - 2. ONE (1) FROM SECTION A AND TWO (2) FROM SECTION B.**
 - 3. ANSWERS SHOULD BE WRITTEN IN THE ANSWER BOOKLET PROVIDED.**
 - 4. DO NOT WRITE ON THE QUESTION PAPER**

THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

SECTION A

Answer one (1) question only

QUESTION 1 [40 marks]

- (a) Examine the use of statistics in the measurement and evaluation of education and training programmes.
- (b) Dvokolwako REC welding instructor divides her class of forty (40) into two groups. Group A (20) was taught using **interactive** techniques and group B (20) was taught using **conventional** techniques. The two groups were given the same test of twenty (20) test items/tasks at the end of 6 weeks. The instructor wanted to determine which set of techniques was more effective. The results were as follows (in raw scores):
Group A(**conventional**) – 5,12,13,10,7,9,10,12,8,6,10,9,14,8,11,9,11,13,10,12
Group B (**interactive**) –
15,11,12,13,10,14,12,13,9,11,13,14,12,12,10,11,13,9,12,14
- (i) List the participants in the groups using the **raw score** and turn each raw score to a **ranked score**.
- (ii) Determine the mean, median and mode of the each set of raw scores.
- (iii) What is your interpretation of the performance of the two groups?
- (iv) If participants 1-10 and 21-30 were females, compare the performance of females to males on the test.
- (v) In what other format could the results for groups A and B be presented?

QUESTION 2 [40 marks]

- (a) Examine the use of measures of dispersion and tests of significance in the education and training programmes of adults.
- (b) Ms Manono, a Sebenta instructor, gave a test in English to a group of twelve (12) learners. She later gave her students daily take-home puzzles and cross-words expecting they would improve their performance in spelling. She gave another spelling test. The results of the two tests was as follows:
Test 1 (before doing puzzles and cross-words) -
45,10,50,44,17,58,36,39,55,20,45,48.
Test 2 (after doing puzzles and cross-words) -
56,22,75,45,35,60,45,43,50,43,50,39,60,70
- (i) What is your interpretation of the results?
- (ii) Use the sign test to justify your response.

SECTION B

Answer two (2) questions only

QUESTION 3 [30 marks]

- (a) Explain the use of the following terms and concepts in the measurement and evaluation of education and training of adults:
- (i) Education and training sector policy
 - (ii) National qualification authority and National qualification framework.
 - (iii) Affective outcomes of education
 - (iv) Cognitive outcomes of education
 - (v) Norm-referenced tests
 - (vi) Criterion-referenced tests
 - (vii) Evaluation plan/Log-matrix/Logical Framework.
- [16 marks]
- (b) (i) Use an education and training programme you are familiar with to discuss the importance of diagnostic evaluations, programme monitoring and accountability. [7 marks]
- (ii) Create a scenario in which you could use both objective test items and essay test items. Generate test items appropriate to the scenario and defend the rationale for their inclusion. [7 marks]

QUESTION 4 [30 marks]

- (a) *'For most tests of educational achievement, the reliability coefficient provides the most revealing statistical index of quality that is ordinarily available. If the scores yielded by any educational achievement test were all perfectly accurate, with no errors attributable to the particular sample of questions used, the alertness, anxiety, fatigue, or other factors that might affect examinee performances, to lucky guesses or unlucky slips, and with errors caused by mistakes or biases of the person scoring the test, then the test would have a perfect reliability coefficient of 1.00. No educational achievement test, no other type of mental test, and indeed no physical measurement has ever achieved this degree of perfection. Error is unavoidably involved in any measurement, but the goal of measurement specialists in all fields is to reduce these inevitable errors of measurement to a reasonable minimum.'*
- (i) Explain settings that call for tests in the education and training of adults.
 - (ii) How can you objectively estimate and interpret tests?
- [15 marks]

- (b) (i) Discuss ways in which you could improve test validity.
 - (ii) Discuss ways in which you could improve test reliability.
- [15 marks]

QUESTION 5 [30 marks]

- (a) Discuss the use of (i) personality tests, (ii) attitude and (iii) interest tests in the education and training of adults. [15 marks]
- (b) Construct a sample of (i) personality or (ii) interest and describe a setting in which you could use it for education and training of adults.
[15 marks]

QUESTION 6 [30 marks]

- (a) Use a setting of your choice, examine the utility of the (i) object test, (ii) essay and (iii) project in the education and training of adults.
[15 marks]
- (b) Do educational evaluations have utility?
[15 marks]