

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

MAIN EXAMINATION PAPER, December 2017

TITLE OF PAPER: MEASUREMENT AND EVALUATION
COURSE CODE: AED 601
TIME ALLOWED: THREE (3) HOURS

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

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

SECTION A

QUESTION 1 [33.3 marks]

- (a) Write explanatory notes on the following terms used in educational measurement and evaluation in the education and training of adults:
- (i) Affective outcomes of education
 - (ii) Cognitive outcomes of education
 - (iii) Discrimination index
 - (iv) Difficulty index
- (b) Create a scenario in which you could use both objective test items and essay test items.
- (c) Generate test items appropriate to the scenario and provide the rationale for their inclusion.

QUESTION 2 [33.3 marks]

- (a) Using relevant examples, explain the use of personality, attitude and interest tests in the education and training of adults.
- (d) Create a scenario in which you could use attitude or interest tests items.
- (e) Generate test items appropriate to the scenario and provide the rationale for their inclusion.

SECTION B

QUESTION 3 [33.3 marks]

- (a) Examine the uses of (i) measures of central tendency and measures of dispersion in education and training programme for adults.
[15.0 marks]
- (b) The following results were obtained by 159 learners from two Regional education centres on the City and Guilds examinations (2017): Ntfontjeni REC A (6) , B(42) C (15); Sithobela REC A (8) B(42) C (46).
- (i) Critically examine the relationship between the Regional education centre attended and grades obtained in the City and Guilds examinations.
 - (ii) What is your overall rating of the performance of the two Regional education Centres?
[18.3 marks]

QUESTION 4[33.3 marks]

Read the following data to determine the ability of a learners on the Ngwane REC sewing and knitting programme, and answer (a), (b) and (c), below.

1. Class ability level measure:

- (i) Mean GPA on previous 2017 trade tests: **2.17**
- (ii) Mean percentile on sewing and knitting test: **56.3**
- (ii) Appropriate grade distribution: **Fair**

2. Achievement scores (number of learners =38).

112	100	93	84	78	72	66	51
109	97	91	83	75	71	62	47
106	97	90	82	75	70	59	44
105	95	89	81	75	69	59	
104	95	84	80	74	68	58	

3. Lower limits for A's on seven ability levels:

Exceptional	Superior	Good	Fair	Average	Weak	Poor
0.7	0.9	1.1	1.3	1.5	1.7	1.9

- (a) Determine the *median* and *standard deviation* for the achievement scores presented in (2) above. [6.3 marks]
- (b) Assign letter marks (A,B,C,D,E,F) , indicating (in tabular format) : mark, lower limits, intervals, number and percent. [17 marks]
- (c) What is your rating of the current ability of Ngwane REC learners on the Sewing and knitting programme. [10 marks]

SECTION C

QUESTION 5 [33.3 marks]

'The problems of educational measurement are persistently perennial; the problem of of what to measure and how to measure it, of objectivity, of reliability, and efficiency call for dynamic innovators'.

Discuss the above statement in the light of current developments in the education and training of adults in Swaziland and the SADC region.

QUESTION 6[33.3]

- (a) Do educational evaluations have utility?
[7.3]
- (a) Critique the use of cyclic and linear models in the evaluation of education and training programmes for adults. [13 marks]
- (b) Choose a theory or model of evaluation and explain the steps you would follow in evaluating an education and training programme for adults that you are familiar with.
[13 marks]

QUESTION 7 [33.3 marks]

'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 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.'

- (a) Explain settings that call for tests in the education and training of adults.
- (b) How can you objectively estimate and interpret tests?
- (c) Discuss ways in which you could improve test reliability?