

**UNIVERSITY OF SWAZILAND
INSTITUTE OF POST-GRADUATE STUDIES
MASTER OF EDUCATION IN ADULT EDUCATION
FINAL EXAMINATION PAPER DECEMBER 2011**

TITLE OF PAPER : MEASUREMENT AND EVALUATION

COURSE CODE : MAE 601

TIME ALLOWED : THREE (3 HOURS)

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

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

SECTION A

Instruction: Answer one (1) question.

QUESTION 1 [40 marks]

(a) Critique the use of any set of the following approaches to measurement and evaluation of education and training programmes for adults:

- (i) Affective outcomes and cognitive outcomes of education;
- or
- (ii) Battery of tests and the critical incident
- or
- (iii) PIE (Planning, Implementation and Evaluation) cycle and Evaluation plan/Log-matrix/Logical Framework.
- or
- (iv) Norm-referenced tests and Criterion-referenced tests

(b) Attempt either (i) or (ii):

- (i) Use an education and training programme you are familiar with to discuss the importance of diagnostic evaluations, programme monitoring and accountability.
- (ii) Create a scenario in which you could use both objective test items and essay test items. Generate test items appropriate to scenario and defend the rationale for their inclusion.

QUESTION 2 [40 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?
- (iii) Discuss ways in which you could improve test reliability?

- (b) *'In measurement the term 'validity' means the accuracy with which a set of test scores measures what it ought to measure, while 'reliability' means the consistency with which a set of test scores measures whatever it does measure.'*

Use relevant examples to discuss the role of measurement in the education and training of adults.

SECTION B

Instruction: Answer one (1) question.

QUESTION [30 marks]

Using relevant examples, discuss the use personality, attitude and interest tests in the education and training of adults.

QUESTION 5 [30 marks]

'The problems of educational measurement are persistently perennial; the problems 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 [30 marks]

- (a) Use a setting of your choice to examine the utility of the test, the essay and the project in the education and training of adults.
- (a) Do educational evaluations have utility?

SECTION C

Instruction: Answer one (1) question.

QUESTION 7

Table 1.1 gives scores of Ms. Thoko Simelane, a Sebenta instructor on an instructor's course in your class, on a series of tests of basic skills. Ms. Thoko Simelane is expected to be posted to Sithobela REC on completion of the course. The tests were taken at mid-year. Complete the table by determining stanine equivalents for the local percentiles. Mrs. Manana, the Director of Sebenta, has made an appointment to talk with you about the test scores, which she has not seen. Write out the main ideas that you would try to use to explain to her. The following guideline will probably aid you areas you need to touch:

1. What raw score, grade equivalents, percentiles and stanines mean. (These tests were not corrected for guessing. The standard error of measurement of the grade equivalent scores is about 0.4)
2. Why local percentile differ from publisher's percentile, and what the differences indicate in this case.
3. What the scores indicate about the achievements of Ms.Thoko Simelane, in general and more specifically.

Table 1.1 BASIC SKILLS TEST SCORE FOR MS. THOKO SIMELANE

Test	Raw Score	Grade Equivalent	Publisher's Percentile	Local Percentile	Local Stanine
Vocabulary	21	5.3	46	46	
Reading	37	5.3	46	37	
siSwati	78	5.7	55	49	
Study skills	57	5.3	48	42	
Arithmetic	27	4.2	16	9	
Composite	--	5.2	45	37	

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QUESTION 8Complete the following Table for Dr. Samuel Lije's course: *Test Construction*.**TABLE 1.2. CLASS RECORD DATA AND MARK ASSIGNMENT****Course:** Test Construction**Date:** Semester I 2011/2012 Academic Year

Source of Scores		Multiple-Choice Items (20)	True-False Items (20)	Discrimination Items (15)	Article Reports (10)	Mid-Semester Test (150)	Mean and Sigma (35)	Percentile Ranks (30)	Discrimination Indices (30)	Test Project (75)	Take home Test (150)	Final Test (175)	Sum (710)	Stanine
Names	Dates	10.02.	08.14	08.25	09.06	09.13	09.28	09.10	10.16	10.15	11.20	11.23		
Bongiwe		9	7	7	5	80	21	17	16	53	91	83	389	
June		16	8	12	9	100	18	19	29	66	133	125	535	9
Jimmy		3	1	2	1	69	12	20	16	47	88	73	332	4
Carol		13	18	7	6	102	31	15	16	61	111	125	505	
Ngcobo		7	13	10	6	62	14	12	18	43	85	75	345	
Rose		10	5	2	7	115	25	25	17	67	86	113	472	
Sunshine		12	5	6	4	70	8	8	14	29	87	23	266	
Mbelu		16	16	11	7	124	18	28	22	68	134	135	579	9
Sonto		9	12	6	5	99	15	19	21	55	92	94	427	
Lwati		17	16	14	4	108	30	14	20	63	90	120	496	
Nathi		14	9	10	6	144	30	18	22	70	125	137	585	
Samu		10	5	8	2	75	20	20	20	60	79	97	396	6
Sindi		5	5	1	2	83	17	13	11	41	69	64	311	4
Khanya		6	2	3	2	78	22	15	25	62	94	103	412	
Liso		4	6	2	7	134	21	24	26	70	145	157	596	
Fana		8	8	4	2	118	18	18	24	60	136	123	519	
Ruth		4	2	6	1	83	20	17	30	66	98	86	413	6
Esther		5	7	3	3	104	19	10	18	47	90	70	376	
Ntfombi		4	4	6	5	98	24	15	24	62	100	104	446	
Thobi		6	10	3	2	117	18	16	17	50	81	117	437	
Sisi		9	8	3	4	121	16	14	30	60	93	105	463	7
Wena		5	10	7	1	104	18	19	22	59	107	110	462	7
Peter		7	3	4	3	91	20	14	12	46	87	94	381	5
Paulo		3	5	5	5	85	15	10	16	41	109	97	391	6
SD		4.08	4.58	3.33				4.75			19.5		86.75	