# **UNIVERSITY OF SWAZILAND**



# **FACULTY OF EDUCATION**

#### DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT

MAY, 2016

# **FINAL EXAMINATION PAPER**

COURSE CODE

: EDF 321

TITLE OF PAPER

: MEASUREMENT AND TESTING

TIME ALLOWED

: THREE (3) HOURS

INSTRUCTION

: SECTION A, ANSWER ALL QUESTIONS

**SECTION B. ANSWER ANY TWO QUESTIONS** 

SPECIAL CONDITION

: SCIENTIFIC CALCULATOR ARE NEEDED

MARKS ALLOCATED

: 100 MARKS

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

# SECTION A - ANSWER ALL QUESTIONS FROM THIS SECTION

Use the five (5) sampled learners' scores to compute the following:

Learners names	Scores
Α	26
В	28
C	29
D	32
E ·	35

- 1. Compute the inclusive range.
  - a. 11
  - b. 10
  - c. 13
  - d. 9
  - e. 9.5
- 2. Interpret the calculated range in number (1) above:
  - a. The scores are heterogeneous
  - b. The scores are homogeneous
  - c. The performance of the class is poor
  - d. The performance of the class is above average
  - e. The performance of the class is good
- 3. Compute mean of the given data
  - a. 30.0
  - b. 29.0
  - c. 29.4
  - d. 30
  - e. 28
- 4. Compute the variance of the given data
  - a. 14
  - b. 12.5
  - c. 12
  - d. 13
  - e. 13.5
- 5. Compute the standard deviation of the given data
  - a. 4
  - b. 3
  - c. 3.5
  - d. 3.8
  - e. 3.85
- 6. If a person's mark is the same as the class mean mark, his/her Z-score for the test is
  - a. 0.00
  - b. 1.00
  - c. -1.00
  - d. Doing well
  - e. Under performing

- 7. Compute the Z-score of learner B
  - a. 0.57
  - b. -0.6
  - c. 0.00
  - d. 0.6
  - e. -0.57
- 8. Interpret the calculated value of the Z-score above
  - a. The score of learner B is the same as the mean
  - b. The score of learner B is above the mean between 0.00sd and+1.00sd
  - c. The score of learner B is below the mean between 0.00sd and -1.00sd
  - d. The score of learner B is a well performing learner
  - e. The score of learner B is a bad performing learner
- 9. Compute the T-score of learner B
  - a. 44
  - b. 44.3
  - c. 45
  - d. 50
  - e. 60
- 10. Interpret the calculated value of the T-score above
  - a. The score of learner B is the same as the standardised pass mark
  - b. The score of learner B is above the standardised pass mark
  - c. The score of learner B is below the standardised pass mark
  - d. The score of learner B is a well performing learner
  - e. The score of learner B is a bad performing learner
- 11. A test was given to form 4 learners. The learners' response to one of the item which was a multiple choice is tabulated as follows:

*means correct answer (key)	Options			
	A*	В	С	D
Number in top group	17	9	0	4
Number in bottom group	13	6	0	11

Use the information on the table to answer the following questions:

- a) List any four (4) key reasons why teachers must perform item analysis after giving any assessment instrument. (8 marks)
- b) Compute item difficulty of the item and comment.

(6 marks)

c) Compute item discrimination of the item and comment.

(6 marks)

- d) Discuss the effectiveness of the three (3) destructors: B, C and D, make a decision about each destructor.
  (6 marks)
- e) On the bases of (b), (c) and (d) state your overall assessment of the item (4 marks)

Total marks [40 marks]

### SECTION B - ANSWER ANY TWO QUESTIONS FROM THIS SECTION

#### **QUESTION 1**

Write brief explanatory notes about the following types of tests. Use classroom examples to support your arguments where applicable.

a) Performance tests

(10 marks)

b) Aptitude tests

(10 marks)

c) Achievement tests

(10 marks)

Total marks [30 marks]

#### **QUESTION 2**

How would you ensure as a classroom teacher that the assessment instruments (tests, examinations etc.) that you administer to your learners are usable? Discuss any five (5) precautions you would do to ensure usability of your assessment instruments.

 $(5 \times 6 = 30 \text{ marks})$ 

Total marks [30 marks]

#### **QUESTION 3**

As a class teacher, you prepare and administer a final examination in the subject that you teach. After scoring and recording the marks, you discover that only two (2) learners got above 50% which is the pass mark of the school and the rest failed the examination. Discuss in details any three (3) measures that you would take as a class teacher to solve the problem.

 $(3 \times 10 = 30 \text{ marks})$ 

Total marks [30 marks]