## UNIVERSITY OF SWAZILAND



## **FACULTY OF EDUCATION**

# DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT

JULY, 2017

# SUPPLEMENTARY EXAMINATION PAPER

COURSE CODE

: EDF 321

TITLE OF PAPER

: MEASUREMENT AND TESTING

TIME ALLOWED

: THREE (3) HOURS

INSTRUCTION

: THIS QUESTION PAPER HAS 3 PRINTED PAGES

SECTION A, ANSWER ALL QUESTIONS

SECTION B. ANSWER ANY  $\underline{\mathsf{TWO}}$  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 (2 MARKS / CORRECT ANSWER)

## **QUESTION 1**

Identify the measure – mode, mean and median – that best suits its type of scale:

- a) Ordinal
- b) Nominal
- c) Interval

### **QUESTION 2**

For each of the following cases, indicate which statistics should be used: quartile deviation, z-score, Pearson *r*, or mean.

- a) We want to know the how spread out or heterogeneous the scores of the class are.
- b) We want to determine how sihle's score compares to the rest of the class.
- c) We want to know how well the class as a whole did in an examination.
- d) We want to predict the future achievements of students from their IQ.

#### **QUESTION 3**

Identify the measure - mode, mean and median - that each term defines

- a) the middle score
- b) the arithmetic average
- c) the most frequent occurring score

#### **QUESTION 4**

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

Learners names	Scores
Α	26
В	28
С	29
D	32
Ę	35

- a) Compute the exclusive range of the sampled scores.
  - A. 11
  - B. 10
  - C. 9
  - D. 9.5
- b) 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 good
- c) Compute mean of the given data
  - A. 30.0

	B.	29.0	
		29.4	
		28.0	
d)		e variance of the given data	
′	, A.		
	В.	12.5	
	C.	12	
	D.	13	
e)	Compute the standard deviation of the given data		
	A.		
		3	
	C.	3.5	
		3.8	
f)	•	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	
g)		Compute the Z-score of learner D	
٠,	•	-0.57	
	B.	-0.6	
	C.	0.6	
	D.	0.57	
h)	Interpret the	nterpret the calculated value of the Z-score above in (g)	
	A.	The score of learner D is the same as the mean	
		The score of learner D is above the mean between 0.00sd and+1.00sd	
		The score of learner D is below the mean between 0.00sd and -1.00sd	
		The score of learner D is a well performing learner	
i)	•	e T-score of learner D	
		44	
		44.7	
		55	
:\		55.7	
j)		e calculated value of the T-score above (i)  The score of learner D is above the standardised pass mark	
	А. В.	The score of learner D is above the standardised pass mark  The score of learner D is below the standardised pass mark	
		The score of learner D is below the standardised pass mark  The score of learner D is a well performing learner	
	D.	The score of learner D is a well performing learner  The score of learner D is a bad performing learner	
	U.	Total marks [40 marks]	
		i Ctai marks [40 marks]	

# SECTION B - ANSWER ANY TWO QUESTIONS FROM THIS SECTION

#### **QUESTION 1**

Discuss any **five (5)** challenges that are likely to be experienced by classroom teachers in grading essay type of tests and how each of the identified challenges can be improved / resolved.

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

Total marks [30 marks]

## **QUESTION 2**

Write brief explanatory notes on each of the following, use classroom examples to support your arguments where applicable.

- a) Educational measurement
- b) The value of essay tests
- c) The test retest-method of estimating reliability
- d) Summative evaluation
- e) Item discrimination

6 x 5 = 30 marks Total marks [30 marks]

## **QUESTION 3**

Amongst the objective type of tests are the multiple choices which are most popular amongst educationist and examinations boards.

- a) Discuss any two (2) factors that make multiple choices to be more advantageous to use over the others objective types of tests.
   (2 x 5 = 10 marks)
- b) Discuss the four key characteristics / features to be considered in the construction of multiplechoice Items (4 X 5 = 20 marks)

Total marks [30 marks]

THE END