## FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT JULY, 2017

SUPPLEMENTARY EXAMINATION PAPER

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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 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
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## 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 $I Q$.

## 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 |
| :--- | :--- |
| A | 26 |
| B | 28 |
| C | 29 |
| D | 32 |
| E | 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
C. 29.4
D. 28.0
d) Compute the variance of the given data
A. 14
B. 12.5
C. 12
D. 13
e) Compute the standard deviation of the given data
A. 4
B. 3
C. 3.5
D. 3.8
f) 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
g) Compute the $Z$-score of learner $D$
A. -0.57
B. -0.6
C. 0.6
D. 0.57
h) Interpret the calculated value of the $Z$-score above in (g)
A. The score of learner $D$ is the same as the mean
B. The score of learner $D$ is above the mean between 0.00 sd and +1.00 sd
C. The score of learner $D$ is below the mean between 0.00 sd and -1.00 sd
D. The score of learner $D$ is a well performing learner
i) Compute the T-score of learner D
A. 44
B. 44.7
C. 55
D. 55.7
j) Interpret the calculated value of the $T$-score above (i)
A. The score of learner D is above the standardised pass mark
B. The score of learner $D$ is below the standardised pass mark
C. The score of learner $D$ is a well performing learner
D. The score of learner $D$ is a bad performing leamer

## 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.

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\begin{aligned}
5 \times 6= & 30 \text { marks } \\
& \text { Total marks [ } 30 \text { marks] }
\end{aligned}
$$

## 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

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\begin{aligned}
& 6 \times 5=30 \text { marks } \\
& \text { Total marks [ } 30 \text { marks] }
\end{aligned}
$$

## 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.
( $2 \times 5=10$ marks)
b) Discuss the four key characteristics / features to be considered in the construction of multiplechoice Items

## THE END

