UNIVERSITY OF SWAZILAND

FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT

SUPPLEMENTARY EXAMINATION PAPER 2012/2013

TITLE OF PAPER: MEASUREMENT AND TESTING

COURSE NUMBER: EDF 321 PGCE

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: THERE ARE TWO SECTIONS IN THIS PAPER – SECTIONS A AND B.

ANSWER ALL ITEMS 1 TO 40 IN SECTION A. THERE IS ONLY ONE CORRECT ANSWER TO EACH ITEM. PUT A CIRCLE AROUND THE CORRECT RESPONSE ON THE ANSWER SHEET PROVIDED.

YOU ARE ADVISED TO SPEND 40 MINUTES ONLY IN SECTION A.

ANSWER THREE QUESTIONS IN SECTION B. USE ANSWER BOOK PROVIDED.

TOTAL MARK ALLOCATION: 100

Do not open until told to do so by the chief invigilator

Student ID# _____

1. Two terms which may be considered synonymous are:
   a. Assessment and evaluation
   b. Measurement and evaluation
   c. Measurement and assessment
   d. Testing and assessment

2. When a student lists the departments that are in the school, the task is at which level of the Bloom's taxonomy?
   a. Application
   b. Analysis
   c. Knowledge
   d. Comprehension

3. Which type of test would produce the highest score for a student who guessed on every item?
   a. Multiple-choice with four options
   b. Multiple-choice with five options
   c. True-false
   d. Matching

4. A student has an average quality response to an essay item. The score received by the student on this item will tend to be:
   a. Higher if preceded by low quality responses
   b. Higher if preceded by high quality responses
   c. Unaffected by the quality of preceding responses
   d. Lower if preceded by low quality responses

5. Which of the following descriptive statistics is NOT a measure of dispersion?
   a. Range
   b. Mean
   c. Standard deviation
   d. Variance

6. What is the median of the following scores? 8, 4, 9, 1, 3?
   a. 4
   b. 5
   c. 6
   d. 7

7. Percentiles, stanines, and standard scores are all examples of:
   a. Criterion-referenced scores
   b. Norm-referenced scores
   c. National scores
   d. Transformed distribution scores

8. What type of validity is sometimes established by having a panel of experts reviews the test?
    a. panel validity
    b. construct validity
    c. content validity
    d. expert validity

9. Percentiles form what kind of measurement scale?
    a. Nominal
    b. Ratio
    c. Ordinal
    d. Interval

10. Stanines assume that the distribution of scores is:
    a. Normal
    b. Discrete
    c. Rectangular
    d. Based on a large number of people

11. What would be a stanine of a person who was at the 55^{th} percentile?
    a. 4
    b. 5
    c. 6
    d. 7

12. In norm-referenced testing, we are primarily interested in comparing:
    a. group performance and a standard.
    b. two or more groups.
    c. an individual's performance to a domain.
    d. two or more individuals.

13. When a student can correctly define formative evaluation, the student is operating at which level of the Bloom, et al. taxonomy?
    a. Knowledge
    b. Comprehension
    c. Analysis
    d. Application

14. Diagnosis emphasizes three of the following except:
    a. deficiencies
    b. causes
    c. placement
    d. remediation

15. Selected-response items tend to have objective scoring. This increases the test's:
    a. measurement errors
    b. reliability
    c. subjectivity
    d. difficulty

16. Including increased numbers of items with more restricted responses in an essay test will tend to:
    a. increase test reliability
    b. decrease test reliability
    c. not affect test reliability
    d. affect test reliability in an unknown manner

17. An objective test is best determined in terms of:
    a. responses given by testees
    b. the uniformity of scoring procedure
    c. high validity it has
    d. the number of options it contains

18. Assigning letter grades to a Mathematics test is at best what scale of measurement?
    a. nominal
    b. ordinal
    c. interval
    d. ratio

19. Most of the scores in a frequency distribution are within two standard deviations from the _____.
    a. median
    b. mean
    c. mode
    d. range

20. Which of the following descriptive statistics involves only the extreme scores in its computation?
    a. mode
    b. standard deviation
    c. median
    d. range

21. Which of the following scores provides the least precision in reporting student achievement?
    a. T-scores
    b. Percentiles
    c. Z-scores
    d. Stanines

22. Which of these item difficulty indexes indicates the easiest item?
    a. .10
    b. .30
    c. .60
    d. .80

23. An item has a very low difficulty index. The discrimination index for the item will be:
    a. Low
    b. High
    c. Around .5
    d. We cannot tell

24. The variance of a distribution of test scores is a measure of:
    a. Dispersion
    b. Central tendency
    c. Relationship
    d. Location

25. Which of the following is most important in determining whether a test is criterion-referenced?
    a. A mastery cut-off score
    b. Specific instructional objectives
    c. A well specified domain of knowledge or skills
    d. A representative sample of examinees

26. When a first grader explains the process by which a caterpillar changes into a butterfly, she is operating at which level of the taxonomy?
    a. Analysis
    b. Comprehension
    c. Knowledge
    d. Application

27. The items on a test should be determined primarily by a consideration of:
    a. The ability levels of the students
    b. Our expectations of student performance
    c. The purpose of the test
    d. The attention span of students

28. An assignment to construct a table of specifications for a science test is at which level of the cognitive taxonomy?
    a. Evaluation
    b. Application
    c. Synthesis
    d. Comprehension

29. The most difficult part of writing multiple-choice items is:
    a. Estimating how long the test will take
    b. Thinking of reasonable distractors
    c. Having only one right answer
    d. Making the options roughly the same length

30. Which type of test would produce the highest score for a student who guessed on every item?
    a. Multiple-choice with four options
    b. Multiple-choice with five options
    c. True-false
    d. Matching

31. Which of these statistics is usually the largest for a given set of test scores?
    a. Mean
    b. Standard deviation
    c. Range
    d. Not necessarily any of these

32. Phinda scores at the median. What would be his score in percentiles?
    a. 25
    b. 50
    c. 75
    d. 100

33. An objective test is best determined in terms of:
    a. Responses given by testees
    b. The uniformity of scoring procedure
    c. High validity it has
    d. The number of options it contains

34. The most important advantage of the true-false test is:
    a. Its wide sampling
    b. Its elimination of guessing through correction
    c. The validity of the items
    d. Its high diagnostic value

35. Oral examinations tend to be:
    a. unstandardised
    b. susceptible to unreliable scoring
    c. of uneven difficulty
    d. all of the above

36. Reliability in a test refers to:
    a. Adequacy of standardization
    b. Consistency in the results
    c. Homogeneity in the content of the test
    d. Dependability of the author and publisher

37. Muzi had a score of 43 items correct on a 50-item test. What is the correct interpretation of this score?
    a. Muzi's percentile rank is 86
    b. Muzi's percentile rank is 43
    c. Muzi has a percentage-correct score of 86
    d. Muzi has a negative standard score

38. A set of scores is normally distributed and contains the middle 95% of the scores between 48 and 76. The standard deviation of the set of scores is about:
    a. 7
    b. 14
    c. 21
    d. 28

39. Khanda scores at median. What would be his score in perecntiles?
    a. 25
    b. 50
    c. 75
    d. 100

40. A table of specifications organizes the test items by:
    a. Content and process
    b. Content and item format
    c. Item format and content validity
    d. Type of item and rating of importance

SECTION B

Answer any three (3) questions from this section.

Question 1 *(20 marks)*

Write brief notes on the following scales of measurement:
a. Nominal b. Ordinal c. Interval d. Ratio

Question 2 *(20 marks)*

Explain any four (4) of the following terminologies in testing:

a. Reliability
b. Validity
c. Usability
d. Measurement
e. Formative evaluation

Question 3 *(20 marks)*

Write short notes on four (4) of the classification and types of tests listed below:

a. achievement tests
b. objective tests
c. standardized tests
d. intelligence tests
e. subjective tests
f. aptitude tests

Question 4 *(20 marks)*

A class of 12 students has the following scores:
22, 29, 27, 30, 12, 22, 31, 15, 26, 16, 48, 23

Compute the arithmetic mean, median, and mode.