UNIVERSITY OF SWAZILAND

FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT

FINAL 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

1. Good test-taking strategy is to:
   a. limit the time on any one item
   b. spend more time on items that are worth more points
   c. scan the whole test first to estimate time
   d. all of the above

2. The crucial aspects of the evaluation of school learning is:
   a. Measuring growth
   b. Measuring status
   c. Preparing tests
   d. Judging adequacy

3. Which of the following is not a scale of measurement?
   a. Ratio scale
   b. Ordinal scale
   c. Magnitude scale
   d. Interval scale

4. The ultimate value of any given instrument lies in:
   a. The interpretability of its outcomes
   b. Its validity
   c. Its reliability
   d. The equality of its units

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

6. Multiple-choice and true-false items are preferred to essay items on the basis of their:
   a. Scope and speed
   b. Scoring reliability and aptitude validity
   c. Scoring reliability and content coverage
   d. Objectivity and accuracy

7. 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

8. Objective items are "objective" in terms of their:
   a. Answer choices
   b. Content
   c. Directions
   d. Scoring

9. Selected-response items tend to have objective scoring. This increases the test's:
   a. Measurement errors
   b. Reliability
   c. Subjectivity
   d. Difficulty

10. The usability of a test refers to its:
    a. technical adequacy
    b. content validity
    c. convenience
    d. approval by department of education

11. Grammatical clues are most likely to be a problem for which item format?
    a. Fill-in blanks
    b. Short-answer
    c. Multiple-choice
    d. True-false

12. Which type of item is least susceptible to guessing?
    a. Matching
    b. Multiple-choice
    c. True-false
    d. Short-answer

13. Matching items lend themselves well to testing:
    a. Computational procedures
    b. Knowledge of relationships
    c. Writing skills
    d. Application of principles

14. Factors such as room temperature, lighting, noise, and disruptions:
    a. are not significant effects in testing situations
    b. are weak excuses for poor test performance
    c. can affect test scores, especially for young students
    d. are seldom controllable in most test situations

15. Multiple-choice items should:
    a. Use a short stem and longer options
    b. Have alphabetically ordered distractors
    c. Have reasonable distractors
    d. Provide grammatical clues to the right

16. What is the mean of the following scores? 120, 30, 40, 8, 5, 20, 29?
    a. 15
    b. 21
    c. 36
    d. 20

17. The odd item in the list below is:
    a. scorer
    b. content
    c. test-retest
    d. temporal

18. Good true-false items:
    a. tend to be no longer than one line.
    b. are more often false than true.
    c. must be clearly true or false.
    d. have a penalty for guessing.

19. When a student critiques a given test, the task is at which level of the Bloom's taxonomy?
    a. Application
    b. Analysis
    c. Evaluation
    d. Comprehension

20. The problems of guessing the right answer on a multiple-choice item can be lessened by:
    a. making the right answer more obvious.
    b. increasing the number of options.
    c. writing items at higher taxonomic levels.
    d. varying the length of the options.

21. 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

22. Three test types listed below are from the same classification. Which one of the four does not belong to their classification?
    a. Matching type
    b. Multiple choice type
    c. Essay type
    d. True-False type

23. One of the most frequent pitfalls in the use of completion-type items is the tendency:
    a. To require too much recall
    b. To permit guessing
    c. To permit subjectivity in scoring
    d. To restrict the test to measurement of facts

24. Which of the following would not be of significant consideration when constructing a test?
    a. Stating test objectives
    b. Specifying content covered
    c. Distribution of test-items by content
    d. The distribution of the scores

25. Stratifying on variables such as geographic region, socio-economic status, and percentage minority:
    a. Ensures a random sample
    b. Ensures a representative sample
    c. Eliminates the need for local norms
    d. Ensures recency

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

27. A multiple choice item is made up of:
    a. yes-no answers
    b. true & false answers
    c. a stem and yes-no answer choices
    d. a stem and at least three answer choices

28. The validity of most concern with teacher-constructed tests in school subjects is:
    a. concurrent
    b. construct
    c. content
    d. predictive

29. The correlation coefficient can take on values between:
    a. Zero and plus infinity
    b. -1.0 and +1.0 inclusive
    c. Minus infinity and plus infinity
    d. Zero and +1.0 inclusive

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

31. Diagnostic tests are used primarily for:
    a. Summative evaluation
    b. University admission
    c. Grouping for instructional purposes
    d. Identification of individual weaknesses

32. 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

33. Which of the following is the greatest weakness of essay-type items from the standpoint of usability?
    a. It does not test all that it purports to test
    b. It requires a great deal of time to grade
    c. It is time-consuming to prepare
    d. The grading is subjective

34. The most desirable length of a matching item for typical classroom testing is:
    a. 9 to 12 premises
    b. 2 to 4 premises
    c. 5 to 8 premises
    d. 13 to 15 premises

35. As teachers score essay responses, the score on an item:
    a. tend to be highest middle in the scoring
    b. tend to be highest early in the scoring
    c. tend to be highest later in the scoring
    d. are unaffected by position in the scoring

36. The normal curve equivalent score:
    a. Can take on values 1 through 99
    b. Has a mean of 100
    c. Is based on an ordinal scale
    d. Has a standard deviation of 10

37. When a distribution of achievement test scores is positively skewed, one might infer that the test was:
    a. Too hard
    b. Too easy
    c. Unreliable
    d. Poorly standardized
    e. Incorrectly administered

38. The combination of item formats which can accommodate the largest number of items in a specified testing time is:
    a. Multiple-choice and matching
    b. Multiple-choice and true-false
    c. Multiple-choice and short-answer
    d. Matching and short-answer

39. What level of measurement are standard scores?
    a. Nominal
    b. Ratio
    c. Ordinal
    d. Interval

40. An item has a discrimination index of -.40. This means that the item:
    a. Should be revised or eliminated
    b. Has a satisfactory difficulty index
    c. Is too easy for the good students
    d. Has a satisfactory discrimination index

SECTION B

Answer any three (3) questions from this section.

Question 1 *(20 marks)*

Describe the characteristics of the following measures of central tendency:
   a. The Arithmetic mean
   b. The median
   c. The mode

Question 2 *(20 marks)*

Discuss the following measures of shape of the distribution:
   a. Skewness
   b. Kurtosis

Question 3 *(20 marks)*

Discuss the following issues about instructional objectives:
   a. How to state general instructional objectives
   b. How to state specific objectives
   c. How to select appropriate objectives
   d. What to consider when stating instructional objectives

Question 4 *(20 marks)*

Briefly describe characteristics, uses, advantages, limitations, and rules for construction of any two of the following:
   a. True-false items
   b. Short-answer items
   c. Matching exercise
   d. Multiple-choice form

Question 5 *(20 marks)*

Name 3 measures of dispersion and write brief notes on each one of them.