

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN SECONDARY EDUCATION EXAMINATION

762

EDUCATIONAL RESEARCH, MEASUREMENT AND
EVALUATION

Time: 3 Hours

Tuesday, 12th May 2009 a.m.

Instructions

1. This paper consists of sections A, B and C.
2. Answer **all** questions in section A, **two (2)** questions from section B and **two (2)** questions from section C.
3. Question **11** is compulsory.
4. Sections A and B carry 40 marks each and section C carries 20 marks.
5. Cellular phones are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet (s).

This paper consists of 3 printed pages.

SECTION A (40 Marks)

Answer **all** questions in this section.

1. (a) Define reliability of a test.
2. (b) Which three (3) characteristics can reduce the reliability of a test considerably?
3. (a) Define validity of a test.
4. (b) Which three (3) characteristics can reduce the validity of a test considerably?
5. Tabulate the advantages and disadvantages of an interview as a research tool for data collection.
6. Differentiate educational measurement from educational assessment.
7. Give a short description of each of the four (4) scales of measurement in education.
8. Identify two (2) advantages and two (2) disadvantages of using an interview as a research tool for data collection.
9. In what ways does a criterion referenced measurement differ from a norm referenced measurement?
10. Give four (4) characteristics of a good hypothesis.
11. What is the difference between educational measurement and educational evaluation?
12. What is a standardized achievement test?

SECTION B (40 Marks)

Answer **two** (2) questions from this section.
(Question 11 is compulsory).

Convert the following raw scores obtained from a Science test into standard T-scores using a new standard deviation of 10 and a new mean of 50.

Raw scores: 54, 56, 86, 81, 50, 52, 67, 72, 65

1. (a) Prepare a Table of Specifications for a Civics test to cover the following topics:
 - (i) Democracy (one question on evaluation and three on synthesis)
 - (ii) Globalization (two questions on comprehension and four on analysis)
 - (iii) Gender (three questions on knowledge and two on application)
 - (iv) Life skills (four questions on synthesis and three on evaluation)
 - (v) Free market (two questions on analysis and four on knowledge)

part 1
test/examination

- (b) What is the total number of items in the test?
- (c) Which topic was given the greatest weighting?
- (d) Which levels of cognitive domain were given the greatest weighting?
- (e) Why should topics be given different weighting in the same test?
- (f) Why is a Table of Specifications important in the construction of a standard test?
13. Discuss characteristics of a good hypothesis. *Chance*
14. Discuss a strategy to employ elements of assessment, measurement and evaluation in a classroom process.

SECTION C (20 Marks)

Judgment

Answer **two (2)** questions from this section.

15. Discuss the basic characteristics of action research in the context of a school system.
16. Explain the advantages and limitations of an essay test.
17. Discuss the main characteristics of a qualitative research and how it is applied in education.
18. Describe briefly ten (10) of the main elements of an educational research report.

$$\begin{array}{r} \times 100 \\ 300 \\ \hline 14 \end{array}$$

$$2 \times 100$$

28

K
A

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

Fallacy
Judgment
Interview

90 + 102

| Cognitive ability of test | | | | | | no | percentage |
|---------------------------|---------------|-------------|----------|-----------|------------|----|------------|
| Knowledge | Comprehension | Application | Analysis | Synthesis | Evaluation | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |
| 1 | 1 | 1 | 1 | 1 | 1 | 6 | 100% |

Affective
Psychomotor

Judge

Judge