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

#### 762 EDUCATIONAL RESEARCH, MEASUREMENT AND EVALUATION

Time: 3 Hours Year: 2021

#### **Instructions**

- 1. This paper consists of sections A, B and C with a total of sixteen (16) questions.
- 2. Answer **all** questions in section A, and **two (2)** questions from each of the sections **B** and **C**.
- 3. Question 11 is COMPULSORY
- 4. Section A carries forty (40) marks, and sections B and C carry thirty (30) marks each.
- 5. Cellular phones and any unauthorized materials are **not** allowed in the examination room.
- 6. Non- programmable calculators may be used.
- 7. Write your **Examination Number** on every page of your answer booklet (s).

### **SECTION A (40 Marks)**

# Answer all questions in this section

- 1. (a) Describe extended response items as used in educational measurement and evaluation,
- (b) Describe restricted response items as used in educational measurement and evaluation
- 2. (a) Define taxonomy of educational objectives as used in educational measurement and evaluation,
  - (b) Explain three domains of instructional objectives as proposed by Benjamin Bloom.
- 3. Identify four physical environmental factors that can affect an individual's performance.
- 4. Explain the given concepts as used in assessing student's achievement in education.
  - (a) Rating scales
  - (b) Checklist
  - (c) Socio-metric
  - (d) Attitude test
  - (e) Guess who techniques and
  - (f) Anecdotal record.
- 5. Examine four characteristics of an action research.
- 6. Explain the following concepts as used in educational research:
  - (a) Longitudinal study
  - (b) Cross-sectional study
  - (c) Type I error and
  - (d) Type II error
- 7. Examine four qualities of a good evaluation in teaching and learning process.
- 8. Give four strategies that examiners may use to control cheating in examinations.
- 9. Outline eight sources of literature review in research.

10. Examine four factors to be considered by a teacher to ensure objectivity in scoring essay items.

### **SECTION B (30 Marks)**

# Answer two (2) questions from this section

11. Study the frequency distribution table representing English Language test results for 100 students from a certain Secondary School.

Table 1

Scores	0-10	11-21	22-32	33-43	44-54	55-65	66-76	77-87	88-98
Frequency	2	8	10	12	18	20	15	10	5

From the table 1, compute the following:

- (a) The mean score of the distribution.
- (b) The class interval size for the distribution.
- (c) The highest and lowest score in the distribution.
- (d) The modal class interval of the distribution.
- (e) The variance of the distribution.
- 12. Study the results obtained from 40 students taken as a sample for item X analysis

Item X	Possible Responses and Choice	Total					TOTAL
	Omit	A	В	C	D	E	
High Achievers	2	11	5	1	1	0	20
Low Achievers	0	12	2	2	4	0	20
Total	2	23	7	3	5	0	40

# Compute:

- (a) (i) the item difficult index and
  - (ii) the discrimination index.
- b) State the level of difficult of the item and to give the two reasons on the
  - (a) (i) and (ii) computation results
- 13.By using examples from own experience, explain five roles of measurement in education.

## **SECTION C (30 Marks)**

Answer two (2) questions from this section

- 14. Identify five characteristics which qualify educational research as a scientific process.
- 15. Evaluate three strengths and two weaknesses of using multiple choice questions in assessing students' achievement.
- 16. Examine five factors that affect test reliability.