

MEDC22

N.V.K.S.D. COLLEGE OF EDUCATION, ATTOOR
(AUTONOMOUS)

M.Ed. Degree Second Semester Examination, July 2022
(For the candidates admitted during the academic year 2021-2022)

**Tool course: ESSENTIALS IN EDUCATIONAL RESEARCH AND
STATISTICS**

Course code: MED2TC002

Time: 3 Hours

Maximum Marks: 70

SECTION A (10 x 1 = 10 marks)

Answer ALL the questions by selecting the appropriate answers.

1. A research instrument giving inconsistent result has
 - a) High validity
 - b) Low reliability
 - c) Low validity
 - d) Low practicability
2. Test that measures a person's ability before he undergoes special training to develop those abilities is called as
 - a) Achievement test
 - b) Prognostic test
 - c) Aptitude test
 - d) Diagnostic test
3. A tentative proposition with unknown validity that specifies a relationship between two or more variables is called
 - a) Research problem
 - b) Research proposal
 - c) Research design
 - d) Research hypothesis
4. Generalized conclusion on the basis of a sample is technically known as
 - a) Statistical inference
 - b) Data analysis and interpretation
 - c) Parameter Inference
 - d) All the above
5. Validity of a test is
 - a) Subjective interpretation
 - b) Objective scoring
 - c) Consistency in scoring
 - d) Purposiveness
6. The method for establishing reliability associated with internal consistency of the test is
 - a) Test-retest method
 - b) Split half method
 - c) Parallel forms method
 - d) Criterion test method
7. When the sample size increases, the standard error
 - a) Decreases
 - b) Increases
 - c) Remains the same
 - d) Becomes zero
8. The value of correlation coefficient when there is perfect positive correlation between the variables
 - a) 1
 - b) <1
 - c) 0
 - d) >1

9. The measure of central tendency useful in manufacturing ready made garments is
 a) Arithmetic mean b) Median c) Geometric mean d) Mode
10. The median of 8, 12,14,16, 18, 20 is
 a) 14 b) 16 c) 20 d) 15

SECTION B (5 x 3 = 15 marks)

Answer all the FIVE questions in about 100 words each.

11. Mention the criteria for the selection of tools and techniques of research.
12. Prepare any three items for measuring the interest in learning of secondary school students.
13. Write a short note on Central limit theorem.
14. What are the characteristics of normal distribution curve?
15. What is sampling error?

SECTION C (5 x 5 = 25 marks)

Answer any FIVE questions in about 200 words each.

16. Explain the characteristics of a good research tool.
17. Discuss the different types of interviews with their relative merits and demerits.
18. Explain the different types of scales with an example each.
19. Describe the projective techniques used in educational research.
20. Explain the uses of biserial and point biserial correlation in educational research.
21. Calculate the standard deviation for the following data.

Sl. No	1	2	3	4	5	6	7	8	9	10
Marks	23	27	31	38	29	16	19	21	19	25

22. Write the applicability of correlation in research with suitable examples.

SECTION D (2 x 10 = 20 marks)

Answer BOTH the questions in about 500 words each.

23. a) Explain the construction and standardization of a research tool.
 (or)
 b) Describe the characteristics of a good attitude scale. Explain the Thurstone method of constructing an attitude scale.
24. a) Explain the concept of linear regression mentioning its major uses.
 (or)
 b) Calculate and interpret the Pearson's correlation coefficient for the following data.

Sl. No	1	2	3	4	5	6	7	8	9	10
Age (X)	23	27	31	38	29	16	19	21	19	25
Social adjustment(Y)	56	60	60	62	56	54	45	51	47	50

