

**Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) Coimbatore – 641 043**

Master of Education Degree Examination – November 2018

I Semester

Class : I M.Ed.

Time : 3 Hours

Max.Marks: 60

18MEDC03 Introduction to Educational Research and Statistics

Part A

10 x ½ =5

Choose the Correct Answer

1. Research done to find ways to solve long standing problems in the field is called _____ research.
 - a. fundamental
 - b. qualitative
 - c. applied
 - d. action
2. Reasoning from examples to general rule is called _____ reasoning.
 - a. inductive
 - b. deductive
 - c. illogical
 - d. simple
3. If the population on which a study is based is such that all its units can be reached, it is termed as _____ population.
 - a. target
 - b. accessible
 - c. homogeneous
 - d. heterogeneous
4. Sampling frame means
 - a. identification of target and accessible population
 - b. defining sample unit and selecting units
 - c. preparing a complete list of the units of a finite population for drawing a sample
 - d. fixing the sample size and drawing a sample
5. Which is the best technique of measuring the internal feelings of a student ?
 - a. Questionnaire
 - b. Interview
 - c. Projective technique
 - d. Sociometry
6. Which is the most objective psychological tool ?
 - a. Thematic Apperception Test
 - b. Rorschach Test
 - c. Interview
 - d. Intelligence Test
7. What determines the choice of statistical test to be used in the analysis of the data of the quantitative research ?
 - a. The power of test
 - b. Kind of sampling used
 - c. Nature of population
 - d. All the above
8. The mean age of 40 students is 16 years and the mean age of another group of 60 students is 20 years. The mean age of all the 100 students is _____ years.
 - a. 16.8
 - b. 18
 - c. 18.4
 - d. 18.8
9. The _____ scale has a true or meaningful zero.
 - a. nominal
 - b. ordinal
 - c. ratio
 - d. interval
10. Data presented in descending order of values is called
 - a. array
 - b. grouped data
 - c. scaled data
 - d. raw data

Part B

5 x 4 = 20

Answer the following questions

Answers should not exceed 200 words or one page

11. a. Define Educational Research. Discuss the significance of Educational Research.
(or)
11. b. List the qualities of a researcher.
(or)
12. a. Record the sources of data collection in Historical research.
(or)
12. b. Make a note on internal validity.
(or)
13. a. Define hypothesis and explain Null hypothesis.
(or)
13. b. Define sampling and write the uses of probability sampling.
(or)
14. a. Distinguish ordinal data and ratio data.
(or)
14. b. What is Ogive ? List the advantages of bar diagram.
(or)
15. a. A newly qualified teacher was given the following information about the ethnic origins of the pupils in a class. Plot a pie chart representing the data.

Ethnic origin	Indian	White	Black African	Pakistani	Bangladeshi
No. of pupils	7	12	2	3	6

(or)

15. b. Find the Mean, Median, and Mode of the following set of data:
Ages of students in class: 17, 18, 17, 17, 16, 18, 17, 16, 15, 18, 17

Part C

5 x 7 = 35

Answer the following questions

Answers should not exceed 600 words or three pages

16. a. Explain in detail about the criteria of good research.
(or)
16. b. Evaluate the role of computer technology in research.
(or)
17. a. Compare conceptual and empirical research.
(or)
17. b. Propose the steps in the descriptive research with an illustration.
(or)
18. a. Define research problem and describe the various ways of selection of a research problem. CO2 K6
(or)
18. b. What is stratified sampling ? How could you prevent the sampling errors ?
(or)
19. a. How SPSS can be useful in organizing the data for statistical analysis ?
(or)
19. b. Compare and contrast probability and non-probability sampling.
(or)
20. a. Calculate mean, variance and standard deviation of the following frequency distribution :
(or)
20. b. Find QD and also its coefficient for the following data:

Classess	1-10	10-20	20-30	30-40	40-50	50-60
Frequency	11	29	18	4	5	3

Age in years	40-44	45-49	50-54	55-59	60-64	65-69
Employees	4	7	14	11	8	6