

**2019**

**MBA**

**2<sup>nd</sup> Semester Examination**

**RESEARCH METHODOLOGY**

**PAPER – MBA-204**

**Full Marks : 50**

**Time : 2 Hours**

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

**(Turn Over)**

**Group - A**Answer any **FOUR** questions

2 X 4

1. What are the objectives of research?
2. Define hypothesis
3. Define the concept of sampling design
4. Differentiate type I error and type II error.
5. Define analysis of variance.
6. What is Eigen value in factor analysis?
7. What is sampling?
8. Distinguish between hypothesis and assumption.

**Group - B**Answer any **FOUR** questions

4 X 4

9. Distinguish between probability and non-probability sampling.
10. A study is to be performed to determine a certain parameter in a community. From a previous study a sd 62 was obtained. If a sample error of up to 5 is to be accepted. How many subjects should be included in this study at 95% level of confidence? ( $z=1.96$ )
11. State the properties of the correlation coefficient.
12. Explain the purpose of 'factor analysis'.
13. What is the objective of 'conjoint analyses'? Explain

14. An e-commerce research company claims that 65% or more graduate students have bought merchandise on-line. A consumer group is suspicious of the claim and thinks that the proportion is lower than 70%. A random sample of 100 graduate students to test the level of significance of 0.03. Write  $H_0$ .
15. Suggest two methods of reliability.
16. What is the need for test of validity? Suggest one test of validity.

### Group - C

Answer any **TWO** questions

8 X2

17. In an anti-diabetes campaign in a certain area, a particular medicine say x was administered to 812 persons out of a total population of 3248. The number of diabetes cases is shown below:

Treatment	Diabetes	No Diabetes	Total
Medicine x	20	792	812
No Medicine x	220	2216	2436
Total	240	3008	3248

Discuss the usefulness of medicine x in checking malaria.

18. The following are data on Advertising Expenditure (in Rupees Thousands) and Sales (Rupees in lakhs) in a company.

Advertising Expenditure:	18	19	20	21	22	23	24
Sales:	17	17	18	19	19	19	20

Determine the correlation coefficient between them and interpret the result.

19. The following are the details of income and expenditure of 10 households.

Income: 40 70 50 60 80 50 90 40 60 60

Expenditure: 25 60 45 50 45 20 55 30 35 30

Determine the regression of expenditure on income and estimate the expenditure when the income is 65.

20. Design a questionnaire to address the behavior of the online buyers by using various type of measurement scale.

**(Internal Assessment : 10 Marks )**