

Code No: 761AD

R19

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

MBA-I Semester Examinations, February/March - 2024

RESEARCH METHODOLOGY AND STATISTICAL ANALYSIS

Time: 3hours

Max.Marks:75

- Note:** i) Question paper consists of Part A, Part B.
ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.
iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART - A

(25 Marks)

- 1.a) Distinguish between exploratory research and descriptive research. [5]
- b) What are the characteristics of good research design? [5]
- c) What are the various methods that are used for graphical representation of frequency distribution? [5]
- d) What are the advantages and limitations of Karl Pearson's coefficient of correlation? [5]
- e) What are the limitations of time series analysis in forecasting? [5]

PART - B

(50 Marks)

- 2.a) What are the steps involved in research process?
- b) Briefly mention the problems encountered in research. [5+5]

OR

- 3.a) What are the possible sources of error in measurement?
- b) What is plagiarism? What is its serious implication to research ethics? [5+5]
- 4.a) Bring out the differences between random sampling and non-random sampling.
- b) Explain 'before and after with control' experimental design. [5+5]

OR

- 5.a) How do you define a research problem? Give any two examples to illustrate your answer.
- b) What are the guiding considerations in the construction of questionnaire? [5+5]
- 6.a) Why tabulation is considered essential? What is cross tabulation?
- b) What are the different types of bar diagrams? Discuss their relative merits and demerits. [5+5]

OR

7. Ten students are selected at random from a school and their heights are found to be, in inches, 50,52,52,53,55,56,57,58,58 and 59. In the light of these data, discuss the suggestion that the mean height of the students of the schools is 54 inches. You may use 5% level of significance for applying 't' test. [10]
8. Calculate coefficient of correlation between X and Y from the following data:

Marks in English(X)	2	5	4	6	9
Marks in Mathematics (Y)	3	4	4	8	9

[10]

OR

9. The following table illustrates the sample psychological health ratings of corporate executives in the field of Banking, Manufacturing and Fashion retailing:

Banking	41	53	54	55	43
Manufacturing	45	51	48	43	39
Fashion retailing	34	44	46	45	51

Can we consider the psychological health of corporate executives in the given three fields to be equal at 5% level of confidence? [10]

10. Find the 5 yearly weighted moving averages with weights 1,2,2,2,1 respectively for measuring trend of the following time series:

year	1994	1995	1996	1997	1998	1999	2000	2001	2002
Sales (Rs. crore.)	2	6	1	5	3	7	2	6	4

[10]

OR

- 11.a) What is the importance of bibliography in the context of writing research report.
 b) What are the different forms in which a research work may be reported? Describe. [5+5]

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