(2 Hours)

[Total Marks: 60]

N. B.: (1) **All** questions are **compulsory**.
(2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
(3) Answers to the **same question** must be **written together**.
(4) Numbers to the **right** indicate **marks**.
(5) Draw **neat labelled diagrams** wherever **necessary**.
(6) Use of **Non-programmable** calculators is **allowed**.

Q1) Attempt any two: (12 Marks)

A) What do you mean by scientific method and explain.
B) Define the following: Concept, Proposition, Hypothesis, Theory, Decision Support System.
C) Define ethics and explain the importance of ethics in business research with suitable examples.
D) Define Business Research. Discuss the considerations while determining the need to conduct a Business Research.

Q2) Attempt any two: (12 marks)

A) Explain the importance of Problem Definition and briefly explain the steps of Problem-definition Process.
B) Compare the approaches of Qualitative and Quantitative Research.
C) Discuss the advantages and disadvantages of a Focus Group Interview.
D) Describe the common research objectives of secondary data study using appropriate examples.

Q3) Attempt any two: (12 marks)

A) What are the common objectives of cross sectional surveys?
B) What measures will you adapt for increasing the response rates for mail questionnaire?
C) State the advantages and disadvantages of observation studies.
D) How to minimize demand characteristics? Explain with an example.

Q4) Attempt any two: (12 marks)

A) Define Validity. Discuss various components of construct validity.
B) Discuss the types of Fixed-Alternative Questions stating their purpose. How do the Fixed-Alternative Questions differ from Open-Ended Response Questions.
C) Describe the significance of Probability Sampling. Explain any 4 techniques of Probability Sampling stating their advantages and disadvantages.
D) Compare discrete and continuous measures.

Q5) Attempt any two: (12 marks)

A) Write a note on quadrant analysis. Describe Type I and type II Errors.
B) Describe the different types of hypothesis commonly tested for research. Differentiate between Type I and Type II errors.
C) Explain the purpose of Factor Analysis and give its broad classification. How does Factor Analysis help for data reduction?
D) What is Multivariate Statistical Data analysis? What are the steps of interpreting a multiple Regression Analysis results?

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