(Time: $2\frac{1}{2}$ 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 labeled diagrams** wherever **necessary**.
(6) Use of **Non-programmable** calculator is **allowed**.

1. Attempt *any two* of the following: 12

a. Define the term 'Business Research'. Explain managerial value of Research.
b. What do you mean by scientific method and explain.
c. Define the following: Concept, Proposition, Hypothesis, Theory, Decision Support System
d. Define ethics and explain the importance of ethics in business research with suitable examples.

2. Attempt *any two* of the following: 12

a. Define Problem Definition. Enumerate the steps of the research process
b. Explain the following terms w.r.t research:
Phenomenology, Ethnography, Grounded theory, Case studies
c. What is a Focus Group Interview? Explain its advantages and disadvantages.
d. Define qualitative and quantitative research. Compare and contrast the two approaches.

3. Attempt *any two* of the following: 12

a. Explain Categories of Survey Errors.
b. List and Explain different types of observation techniques
c. Explain steps in experimental research
d. Explain the following types of surveys: Telephone Survey, Internet Survey, Mall intercept Survey, Email Questionnaire Survey

4. Attempt *any two* of the following: 12

a. Explain the following w.r.t sampling;
Simple Random Sampling, Statified Sampling, Systematic Sampling, Cluster Sampling, SnowBall Sampling
b. Describe the various steps which are used in designing a questionnaire. Indicate its advantages and limitations
c. What is measurement in research? List different types of scales. Explain giving examples
d. What is hypothesis testing? Explain steps in it.

5. Attempt *any two* of the following: 12

a. Explain stages of Data Analysis.
b. Distinguish between Type I and Type II error
c. Explain chi square test with example. Hence write steps in it.
d. A sample of 400 male students is found to have a mean height 67.47 inches. Can it be reasonably regarded as a sample from a large population with mean height 67.39 inches and standard deviation 1.30 inches? Test at 5% level of significance.
