



- Notes :
1. All questions carry equal marks.
 2. Answer **any five** questions.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain how you select & specify a research problem? Give two examples to illustrate your answer. 7
- b) Explain about the different aspects have to be given importance while designing a research work. 7
2. a) Discuss the criteria to select a good research problem. 7
- b) Define hypothesis and discuss the need for hypothesis in social research. 7
3. State the addition and multiplication rules of probability giving one example of each case. 14
4. a) Bring out the merits and demerits of both primary & secondary sources of data? 7
- b) Bring out differences between a questionnaire and schedule and describe the different types of questions that may go into a questionnaire and schedule. 7
5. a) Write down the different tests of significance used in engineering research. 7
- b) Explain in detail about correlation, types and methods of studying correlation. 7
6. a) Explain Randomized block design in brief. Also state the various advantages of completely randomized experimental design? 7
- b) Explain briefly about the presentation and analysis of data using computer. 7
7. a) Distinguish between an experiment & survey. Explain fully the survey method of research. 7
- b) Write short note on :- 7
 - i) Measures of Dispersion.
 - ii) Simple Regression analysis.
8. a) What points will you keep in mind while preparing a research report? Explain. 7
- b) Describe the presentations that the researcher should take while interpreting this findings. 7
