



- Notes :
1. All questions carry equal marks.
  2. Answer **any five** questions.
  3. Assume suitable data wherever necessary.
  4. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain how you select and 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 and secondary sources of data? **7**  
b) Bring out the 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 designs 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 and survey? Explain fully the survey method of research. **7**  
b) Write a short note on:  
i) Measures of Dispersion  
ii) Simple Regression analysis **7**
8. a) What points will you keep in mind while preparing a research report? Explain. **7**  
b) Describe the precautions that the researcher should take while interpreting his findings. **7**

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