

NOTE: Attempt five questions in all - four from the first eight questions (s.No. 1-8) and ninth question is compulsory. All questions carry equal marks.

1. Discuss the steps of identifying and defining a research problem. ✓
2. Discuss with examples phenomenological and ethnographic methods of research. ✓
3. Define sample. Differentiate between probability and non-probability sampling techniques. ✓
4. Explain the development and standardisation of a research instrument.
5. Discuss the criteria of a good research proposal. ✓
6. Explain different styles of reference writing. ✓
7. (a) List the characteristics and applications of NPC.  
(b) Given a distribution of scores with a mean of 20 and  $\sigma$  of 5. Assuming normality, what percentage of cases (i) fall between 15 and 25? (ii) lie above 10? ✓
8. (a) Discuss the assumptions of ANOVA.  
(b) For the given data on reading comprehension, compute F and discuss results.  
Boys: 15 23 20 11 17 9 5 14 12 20 21 8 11 15 7  
Girls: 21 18 17 19 20 11 8 19 22 10 19 22 23 18 13
9. Write short notes on the following:  
(a) Trend analysis ✓  
(b) Ex-post facto design ✓  
(c) Questionnaire / Observation ✓  
(d) Meta-analysis ✓  
(e) Descriptive and inferential statistics ✓  
(f) One-tailed and two-tailed tests ✓