

- N.B. (1) All questions are compulsory.
(2) Make suitable assumptions wherever necessary and state the assumptions made.
(3) Answers to the same questions must be written together.
(4) Numbers to the right indicate marks.
(5) Draw neat labeled diagrams wherever necessary.

Q1. Attempt the following (Any Four)

20M

- What are the criteria of good research?
- Write a note on research methodology.
- What are the Basic Principles of Experimental Designs?
- Explain the concept and need for defining research problem.
- Write a note on identifying variables.
- What do you mean by hypothesis? How can we construct it?

Q2. Attempt the following (Any Four)

20M

- Write a note on secondary data collection.
- Explain two types of primary sampling method in detail.
- Differentiate between null hypothesis and alternative hypothesis.
- Write a note on developing sampling frames.
- What is the procedure for hypothesis testing?
- Write a note on reliability and validity of research.

Q3. Attempt the following (Any Four)

20M

- How to write a research proposal? Discuss
- Explain the submission of manuscript for publishing research paper.
- What are the ethical issues in research?
- How to prepare effective graphs and photographs?
- Write a note on citation reference.
- Discuss preparation of title and abstract.

Q4. . Attempt the following (Any Five)

15M

- Explain quota sampling in detail.
- What are the motivations in research?
- What are the steps involved in sampling design?
- What is a scientific paper?
- How to design effective tables?
- What is a one sided and two-sided hypothesis?