

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF COMPUTER APPLICATIONS (MCA)
EXAMINATION : DECEMBER - 2025
SEMESTER - III

Sub : Research Methodology (MCA- 305-22)

Date : 30/12/2025

Total Marks : 60

Time: 2.00 pm To 4.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2 - 3 lines. (Any 5) (10)

1. Define Research Methodology.
2. How do you define a research problem?
3. What is difference between Research methods and Research methodology.
4. What is the difference between the dependent variable and the independent variable?
5. Explain Likert scale
6. What is measurement.
7. What is Sampling error.

Q. 2. Answer the following in short. (Any 4) (20)

1. What is Research design
2. Write the Describe the quantitative research
3. Write a note on Criteria of good research;
4. Explain the Sources of collecting Secondary and primary data.
5. Write a note on Steps in Analysis
6. What are the characteristics of good sample

Q. 3. Answer the following in detail. (Any 3) (30)

1. What is hypothesis? What are the types of Hypotheses? What are the sources of hypothesis?
2. Explain the Research Process in detail.
3. Define sampling? Discuss the Techniques of sampling.
4. Explain Data processing operations in detail.
5. Explain in detail about various scales.
