



122199

62471

Reg. No.

--	--	--	--	--	--	--	--	--	--

III Semester M.C.A. Degree Examination, April/May - 2026**COMPUTER SCIENCE****Research Methodology****(CBCS Scheme 2020-2021)****Paper : 3MCA3****Time : 3 Hours****Maximum Marks : 70****Instructions to Candidates :**

- 1) Answer any Five questions from - Section A.
- 2) Answer any four questions from - Section B.

SECTION - A**Answer any Five of the following questions. Each question carries six marks.****(5×6=30)**

1. What are the different types of Research? Explain applied and fundamental research with examples.
2. What is APA Ethics Code? Discuss the ethical principles relevant to research.
3. Define Standard Deviation and Variance. What is their significance in statistical analysis?
4. What is multivariate analysis? Explain briefly any two multivariate statistical techniques.
5. What is a cumulative frequency table? How is it constructed?
6. What is Fuzzy Logic? Discuss fuzzy system optimization with an example.
7. Discuss the process of referencing in academic writing. Compare APA and IEEE citation styles.
8. Describe briefly the different types of research reports.

SECTION - B**Answer any Four of the following questions. Each question carries Ten marks.****(4×10=40)**

9. Explain the various steps involved in the research process. How does each step contribute to the quality of the research?

[P.T.O.]



10. Discuss the statistical modelling and analysis techniques used in research with examples.
 11. What are the different methods used to show the relationship between two variables? Explain with examples.
 12. a) Explain Regression Analysis with an example. (5)
b) What is data cleaning? Explain its role in preparing data for analysis. (5)
 13. Explain neural networks and their role in optimization.
 14. What are the key components of a research report? Explain the steps involved in writing a good report.
-