

## III Semester M.C.A. Examination, April/May 2022 (CBCS Y2K20 Scheme) COMPUTER SCIENCE

3MCA3: Research Methodology

Time: 3 Hours Max. Marks: 70

Instructions: 1) Answer any five questions from Section – A, each question carries 6 marks.

 Answer any four full questions from Section – B, each question carries 10 marks.

SECTION – A  $(5\times6=30)$ 

- 1. Define Research. How to frame title of Research? Explain with examples.
- 2. All student in a class have age 20. What is the standard deviation? How to interpret the data?
- 3. What is the use of computer in research?
- Explain data analysis with GRETL tool.
- 5. Compare correlation and regression models.
- 6. Explain optimization using fuzzy system.
- 7. Summarize the outline of the popular report.
- 8. Discuss any three phases of genetic algorithm.

SECTION – B  $(4\times10=40)$ 

- 9. Explain various steps of research process.
- 10. How to test a hypothesis? Explain the chi-square test steps with example.
- 11. Explain how statistical measures of central tendency used in research.
- 12. Discuss any one time series model and its use.
- 13. Explain the role of simulation in research with example.
- 14. Explain the mechanism of writing a research report.