UG PROGRAM (4 YEARS HONORS) WITH SINGLE MAJOR AT THE END OF SECOND SEMESTER COMPUTER SCIENCE-PROBLEM SOLVING USING C (Minor)

(w.e.f. Admitted Batch 2023-24)

Time: 3Hours

Maximum: 70 marks

SECTION -A

Answer any Five Questions. Each Question carries 4 marks

 $(5 \times 4 = 20M)$

- 1. Explain about Flowcharts and Algorithms.
- 2. Write about Jump Control Statements.
- 3. Define Array? Write about memory representation of Arrays.
- 4. Define Recursion? Write a program for recursive function. 22
- 5. Write the differences between Structures and Union.
- 6. Define Variable? Write the rules for constructing variable names.
- 7. Write the Structure of C Program.
- 8. Define String? How do you initialize string variables?

SECTION - B

Answer All the Questions. Each question carries 10 marks

 $(5 \times 10 = 50M)$

9. a) Draw the Block diagram of Computer? Explain the functions of various components of computer?

(Or)

- b) Explain about Operators in C.
- 10. a) Explain about decision making statements.

- b) Write about Looping Statements with suitable Program.
- 11. a) Explain about different Types of Arrays.

- b) Write about String Handling Functions with a suitable Program.
- 12. a) Explain about Categories of Functions.

(Or)

- b) Define Pointers. How do you declare and initialize the Pointers? Explain.
- 13. a) Explain in detail about Dynamic Memory Allocation.

b) Explain about Structures in C Language.