Reg. No.						

B.M.S COLLEGE FOR WOMEN, AUTONOMOUS BENGALURU – 560004 SEMESTER END EXAMINATION – JANUARY/FEBRUARY 2023

B.Voc - IT - I Semester

PROBLEM SOLVING TECHNIQUES (NEP Scheme 2021-22 onwards F+R)

Course Code: BVIT1DSC02 Duration: 2 ¹/₂ Hours

Instruction: Answer all the sections.

PART-A

Answer any TEN questions. Each question carries TWO marks.

- 1. Define algorithm.
- 2. What is standard Notation?
- 3. Write rules for declaring variables in 'C'.
- 4. Mention the classification of array.
- 5. Define Pointers.
- 6. What is command line argument?
- 7. Give the difference between * and & in C pointer.
- 8. Define Histogramming?
- 9. What is binary searching?
- 10. What is Text processing?
- 11. Define Sorting.
- 12. What is Pattern searching?

PART-B

Answer any FIVE questions. Each question carries FOUR marks. (5X4=20)

- 13. Write an algorithm to find factorial of a given number.
- 14. Explain any two types of Asymptotic Notation.
- 15. Write a C program to generate Fibonacci sequence.
- 16. Short note on if loop and if-else.
- 17. Write the procedure for finding kth smallest element.
- 18. Describe selection sort with an example.
- 19. Explain linear search with an example.

(10X2=20)

OP Code: 1034

Max. Marks: 60

PART-C

Answer any TWO questions. Each question carries TEN marks

(2X10=20)

20. Write an algorithm and flowchart to find given number is prime or not.

21. Explain the different types of looping statements with an example.

22. Describe hash searching with an example.

23. Write C program to perform insertion sort.
