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

B.C.A. - I Semester

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

Course Code: BCA1DSC02   **QP Code: 1031**
Duration: 2 ½ Hours   **Max. Marks: 60**
Instructions: *Answer all the sections,*

PART-A

I. Answer any TEN questions. Each question carries TWO marks: **(10x2=20)**

1. Define flowchart.
2. Mention any 4 advantages of Algorithm?
3. What are formatted input and output functions?
4. What are pre-processor directives?
5. Define pseudo random numbers.
6. What is type casting? Mention its types.
7. What you mean by actual and formal arguments.
8. Differentiate between structure and union.
9. What is Command line argument?
10. What is pointer? Give an example.
11. What is pattern matching? Mention its application.
12. Define Histogramming?

PART-B

II. Answer any SIX questions. Each question carries FIVE marks: **(5x6=30)**

13. Explain while loop with an example.
14. Write an algorithm to find first n Fibonacci sequence.
15. Explain the structure of C program.
16. What is data type? Explain different data types in C.
17. Explain different looping statements in C with an example.
18. What is an array? Explain memory representation of 2-D array.
19. Explain different string handling functions with an example.
20. Difference between call by value and call by reference.

PART-C

III. Answer any ONE question. Each question carries TEN marks: **(10x1=10)**

21. What is function? Explain different categories of functions.
22. Write a C program to add and subtract two matrices
23. Explain different types of operators in C.

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