

**B.C.A.**

**I Semester End Examination March/April-2022**

**Problem Solving Techniques**

**Course Code: BCA1DSC02**

**QP Code: 1031**

**Time: 2 Hrs**

**Max marks: 60**

**Note: Answer all sections.**

**PART A**

**I. Answer any TEN questions. Each question carries 2 marks.**

**10X2=20**

1. Write the basic structure of C program.
2. What is an algorithm? Write its features.
3. What is Growth of Functions?
4. Define the formatted output - printf.
5. Explain for loop.
6. What is one dimensional array?
7. Define pointer with example.
8. Differentiate between break and continue.
9. Write an algorithm to check whether the given number is odd or even.
10. Define sorting mention different types of sorting.
11. Define searching list any two types of searching technique.
12. Define Histogram?

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QUESTION PAPER**

**PART – B**

Answer any **SIX** questions. Each question carries **5** marks.

**5X6=30**

13. Write an algorithm to find Fibonacci series of two integers and explain. (5)
14. Write an algorithm and flowchart to find biggest of three numbers. (5)
15. Short note on switch case with example. (5)
16. Explain classification of function arguments with example. (5)
17. Explain looping statement with syntax and examples. (5)
18. Write a program for array order reversal. (5)
19. Write an algorithm and trace for 5 and 25 Greatest Common Divisor. (5)
20. Explain Asymptotic notation. (5)

**PART – C**

Answer any **ONE** question. Each question carries **10** marks.

**10X1=10**

21. Write a C program to read marks score card by n students and find average of marks (single dimensional array). (10)
22. Explain classification of datatypes available in C with an Example. (10)
23. Explain Text processing and pattern searching with example. (10)

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