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(21223)

Roll No. ....

BCA-I Sem.

**18002**

**B.C.A. Examination, Dec.-2023**

**PROGRAMMING PRINCIPLES AND**

**ALGORITHM**

**(BCA-102)**

*Time : Three Hours ]*

*[Maximum Marks : 75*

**Note :** Attempt questions from **all** sections  
as per instructions.

**Section-A**

**(Very Short Answer Type Questions)**

**Note :** Attempt **all** questions. Each question  
carries **3** marks. Very short answer is  
required not exceeding 75 words.

3×5=15

1. What is compiler?

**P.T.O.**

2. What is Actual Parameter?
3. Define Recursion?
4. Explain any two problem solving techniques.
5. What do you mean by primitive and non primitive data types.

#### Section-B

##### (Short Answer Type Questions)

**Note :** Attempt any **two** questions out of the following three questions. Each question carries 7.5 marks. Short answer is required not exceeding 200 words.  $2 \times 7.5 = 15$

1. What is loop? How can do.... while loop vary from while loop.
2. Explain if.....else with example.
3. Differentiate between call by value and call by reference with the help of example.

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#### Section-C

##### (Long Answer Type Questions)

**Note :** Attempt any **three** questions out of the following five questions. Each question carries 15 marks. Answer is required in detail.  $3 \times 15 = 45$

1. Distinguish between break and continue statement.
2. (a) Explain static and register storage class with example.  
(b) What are the advantages of C language?
3. (a) Write a 'C' program to check whether the given number is prime or not.  
(b) Write a 'C' program to calculate Fibonnaci series.

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P.T.O.

4. Differentiate between flowchart and algorithm. Write an algorithm to compute the Sum of a digits.
5. Write the asymptotic notations used for best case, average case and worst case analysis of algorithms?