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B.C.A.-I Sem.

(Printed Pages 4)

Roll No. ....

18002

B.C.A. Examination, Dec.-2024

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 : Answer all the **five** questions. Each question carries 3 marks. Very short answer is required not exceeding 75 words.   5×3=15

1. Define keyword and identifiers.

2. What do you understand by preprocessor directives in C?

3. Differentiate between break and exit statement.

4. What is problem solving in C programing?

5. What do you mean by function call in C?

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. 7.5×2=15

6. Explain any three types of statements used in C language.

7. What is flowchart? Draw a flowchart to find smallest number between three numbers.

8. Differentiate between call by value and call by reference with the help of an example.

Section-C

(Long Answer Type Questions)

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

9. Explain different data types used in C language.

10. Differentiate between while and do-while loop with the help of suitable example of each.

11. Describe Big-on notation in detail for determining time complexity of an algorithm.

12. (i) Write a C program to check whether the input number is even or odd.

   (ii) Write a program in C language to swap two numbers without using third variable.

13. Explain about different storage classes with examples. Discuss their use and scope.