BCA 204

B.C.A. (PART-I) EXAMINATION, 2023-24

(Second Semester)

Paper : IV

INTRODUCTION TO OBJECT ORIENTED PROGRAMMING & C++

Time : Three Hours] [Maximum Marks : 70

Note: (i) Answer **Five** Questions in all.

(ii) Question No.**1** is **Compulsory**.

(iii) Answer remaining **four** questions, selecting **two** questions from each Section **'A'** and **'B'**.

(iv) All questions carry equal marks.

1. Answer all parts of the following :

(a) Explain different components of a function.

(b) What is data hiding in OOPs ?

(c) Explain features and characteristics of C++ programming language.

(d) Explain different data types supported in C++ in brief.

Section-A

2. What do you understand by the oops concepts ? Give an example and explain its advantages over traditional programming approach.

3. What are operators in C++ ? Give their types and explain each with an example.

4. What do you mean by constructor ? Explain about different ways to use a constructor with examples. Also, explain about the destructor with an example.

5. What do you mean by Inheritance ? What are its advantages ? Explain its types with examples.

Section-B

6. (a) Step out the execution steps of C++ source code.

   (b) Explain the string in C++. Also, Write a C++ program to reverse the given string.

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7. (a) Explain access specifiers in C++.

 (b) What do you mean by Call by value and Call by Reference ? With a proper example also implement a C++ program to show how to use reference and dereference operators.

8. (a) Briefly explain the use of the following keywords in C++ with example.

 (i) Enum

 (ii) This

 (b) Write a program to swap two numbers by user defined function that not allow to use of the third variable.

9. Write notes on any two of the following :

 (a) Friend function

 (b) Abstract class

 (c) Templates in C++

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