

Roll No.

97675

BCA 4th Semester (Full & Re-Appear)
Examination – May, 2024

OBJECT ORIENTED PROGRAMMING USING C++

Paper : BCA-208

Time : Three Hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all, selecting one question from each Unit. Question No. 1 is compulsory. All questions carry equal marks.

1. Explain the following :

- (a) Friend Function
- (b) Virtual Functions

- (c) Iterators
- (d) Differentiate between Procedural Language and Object Oriented Approach
- (e) Namespace in C++
- (f) Object copying
- (g) Abstract class
- (h) Polymorphism

UNIT – I

- 2. (a) What is C++ Programming language ? Explain its syntax and data types in detail.
- (b) What is Object Oriented Programming ? Discuss the characteristics of Object-Oriented of OOP in detail.
- 3. (a) What is Flow control ? Explain the types of flow control statement in C++.

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(b) Explain the following in detail :

- (i) Array and pointer
- (ii) Variables and string

UNIT - II

4. What are Constructors and Destructors in C++ ? What are the advantages of using constructors ? Explain in detail.
5. What is Memory management ? Explain the concept of copy constructor and assignment operator in detail.

UNIT - III

6. Explain the following in detail :
 - (a) Overriding member function through suitable example
 - (b) Ambiguity in Multiple inheritance
7. What is inheritance ? Explain the types and need of inheritance with example.

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UNIT - IV

8. What are templates ? Why are they needed ? Explain the concept of Class Templates with multiple parameters and overloading of Template function in detail.
9. What are exceptions ? How is an exception handled in C++ ? What is the need of exception handling ? Explain in detail.