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5293

B.C.A. Examination, 2023

(II Semester)

Paper : I

Object Oriented Programming Using C++

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt any five questions. All questions carry equal marks.

1. Explain the various characteristics of object oriented programming language. Discuss in detail various advantages and disadvantages of object oriented programming language.
2. What are the various types of operation in C++? What do you mean by operator precedence & associativity? Explain with suitable example.

P.T.O.

(2)

3. Define function. What are the advantages of using functions? What are the various methods of parameter passing of function?
4. What are the purpose of friend functions and friend classes? Explain with the help of examples.
5. Difference between an iterative functions and a recursive function explain with examples. Which one will you prefer to use in which circumstances?
6. Discuss the following in detail.
 - (i) Aggregation
 - (ii) Operator overloading
 - (iii) Exception handling.
7. What is a Default constructor? What is its significance? In what way it is equivalent to a constructor having default arguments? What are various types of default constructors? Explain with suitable examples.

(3)

8. What do you mean by constructors and destructors? Also describe various properties of destructors. What are virtual destructors? What are the rules for destructors?

9. Write short notes on:

(i) Categorization of polymorphism techniques

(ii) Dynamic memory allocation

(iii) Multiple Inheritance

10. Explain the concept of class in C++. What is its importance? How do you declare a class in C++? Explain with examples. Explain the concept of data members and member function in a class?