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No. of Printed Pages : 3

CS-72

**BACHELOR OF COMPUTER APPLICATIONS**

**(BCA) (Pre-Revised)**

**Term-End Examination, 2019**

**CS-72 : C++ AND OBJECT ORIENTED  
PROGRAMMING**

**Time : 2 Hours]**

**[Maximum Marks : 60**

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**Note : Question No. 1 is Compulsory. Attempt any three questions from the rest.**

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1. (a) Write a program in C++ to create a class Book, to keep records of books available in your library. This program should have proper constructor and member functions, to get the details such as publisher, author and price etc. of the books. Make necessary assumptions where ever required. [8]
- (b) Differentiate between Structured Programming paradigm and Object Oriented Paradigm. [8]
- (c) What is UML ? What is its Benefit ? Explain any two diagrams in UML with the help of an example. [8]

- (d) Explain the difference among private, protected and public access specifier with Respect to class and its object with the help of an example program. [6]
2. (a) What is Inheritance ? Explain different types of inheritance supported by C++. [5]
- (b) Explain call by value and call by reference with the help of a C++ program. [5]
3. Explain the use of the following operators in C++ with the help of an example for each. [10]
- (i) Bit wise AND Operator
  - (ii) Scope Resolution Operator
  - (iii) Arithmetic if operator
  - (iv) Size of Operator
4. (a) Differentiate between Default constructor and parameterized constructor with the help of an example. [5]

(b) What are function template and class template ?  
Write a function template SUM to add two numbers. [5]

5. (a) Write a program in C++ that prints numbers and its cubes from 1 to 10 by using if-then-else and for loop. [5]

(b) Explain friend function with the help of an example. [5]

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