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Total No. of Pages : 02

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BCA (2014 to 2018)/B.Sc. (IT) (2015 & Onward)
(Sem.-2)**OOPS USING C++****Subject Code : BSBC-203****M.Code : 10052****Time : 3 Hrs.****Max. Marks : 60****INSTRUCTION TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SIX** questions carrying **TEN** marks each and a student has to attempt any **FOUR** questions.

SECTION-A**1) Answer briefly :**

- a) What are characteristics of object oriented languages?
- b) Differentiate between Structures and Unions.
- c) Give the concept of Array within a class with suitable example.
- d) When inline functions are used?
- e) What is the benefit of copy constructor?
- f) Differentiate between privately derived and publicly derived single inheritance.
- g) List the operators that cannot be overloaded.
- h) What is early Binding?
- i) How to read and write character from a file in C++?
- j) What is this pointer? Give suitable example.

SECTION-B

- 2) What is object oriented programming? Explain any five characteristics of object oriented programming languages.
- 3) What is the constructor? List some of the special properties of the constructor functions. Describe the importance of destructor. Explain the use of destructor with the help of an example.
- 4) What are the different forms of inheritance? Give examples of each. Describe the syntax of single inheritance in C++.
- 5) Given a class Complex with real and imaginary part as data members. Write a C++ program to overload plus operator and minus operator to add and subtract two real numbers respectively.
- 6) What is the virtual function? Why do we need virtual functions? When do we make virtual function pure? Give suitable example of pure virtual function.
- 7) What is static data member and static member function? Write a C++ program demonstrating the use of it.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.