BCA (2014 to 2018)/B.Sc. (IT) (2015 & Onward) (Sem.–2)

OOPS USING C++

Subject Code : BSBC/BSIT-203
M.Code : 10052

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS 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 students have to attempt any FOUR questions.**

SECTION-A

Answer briefly :

1. What are unions?

2. Describe the use of constructors.

3. What are the advantages of Inheritance?

4. What is the use of Header files in C++?

5. What are the different types of Arrays in C++?

6. What is the use of Scope Resolution operator?

7. What is the significance of Operator overloading?

8. How are structures initialized? Explain with an example.

9. How can a protected member be made available for inheritance?

10. Describe the concept of objects and classes.

SECTION-B

11. a) How is C++ different from C language? What are the object oriented features of C++?

    b) What is the difference between Structure and Union? Give suitable examples to justify your answer.

12. a) How are objects passed as function arguments? What is the difference between Pass by value and Pass by reference?

    b) Give suitable program to describe the idea behind Friend functions.

13. a) Explain the concept of Inheritance. What are the uses of Inheritance? What are its different types?

    b) What do you mean by Constructor Overloading? Give suitable program to explain the concept.

14. Explain the concept of Polymorphism with the help of an example. What are the advantages of polymorphism?

15. Write brief notes on :

    a) Data hiding and Encapsulation

    b) Use of Pure Virtual Functions

16. a) List the visibility modes used in defining derived classes in Inheritance.

    b) Write a program to illustrate Function overloading concept.

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.