

Roll No.

Total No. of Pages : 02

Total No. of Questions : 15

MBA (2012 & Onwards) (Sem.-4)

PROGRAMMING IN C++

Subject Code : MBA-986

Paper ID : [A2546]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.
2. SECTIONS-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY carrying EIGHT marks.

SECTION-A

1. Explain the various types of constants.
2. What is data encapsulation? How is it useful in a class?
3. Differentiate between variable and array using an example.
4. What is a nested class?
5. Describe the various types of inheritance.
6. What is function overloading? Explain using an example.

SECTION-B

UNIT-I

7.
 - a) Explain the purpose of scope resolution operator. (1.5)
 - b) What is Object Oriented Programming? Describe the paradigm for OOP. (1.5+5)
8.
 - a) Using syntax and flow chart, explain the functioning of iterative and selective statements. (6)
 - b) Differentiate between insertion operator and extraction operator. (2)

UNIT-II

9. a) Write a program in C++ to merge two array of integers using a function merge(). (6)
b) Explain the syntax to declare and use a pointer variable. (2)
10. a) What is an array? Explain the different types of arrays used in C++. (1+4)
b) What is a function? Why is it used? (3)

UNIT-III

11. What is inheritance? Explain the different types of inheritance using an example. (2+6)
12. What is a friend function? Write a program in C++ to swap private data members of two classes using friend function. (3+5)

UNIT IV

13. What is operator overloading? Write a program in C++ to create a class MATRIX of size $m \times n$ and two objects A and B of class MATRIX. Overload arithmetic operator + to add the two matrices A and B and * to multiply two matrices A and B. (2+6)
14. What is polymorphism? Using example explain the purpose of virtual function and pure virtual function. (2+6)

SECTION-C

15. Use inheritance and function overloading to discuss the Supply Chain Management System of a manufacturing organization. (8)