

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

MCA (Sem.-1st)

OBJECT ORIENTED PROGRAMMING IN C++

Subject Code : MCA-102 (2012 Batch)

Paper ID : [B0129]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students has to attempt any ONE question from each SECTION.
2. SECTION-E is COMPULSORY carrying TWENTY marks in all.
3. Use of non-programmable scientific calculator is allowed.

SECTION-A

1. What is OOP? Discuss its evolution. Explain how functional programming is different from object oriented programming?
2. Explain the following :
 - (a) Type Conversion in C++
 - (b) Manipulators in C++

SECTION-B

3. What is call by value? How it is different from call by reference? Explain both call by value and call by reference by taking suitable examples in C++.
4. Write notes on the following :
 - (a) Enumeration
 - (b) Role of Pre-processor

SECTION-C

5. What is Constructor? What are its properties? Explain different types of constructor with suitable examples.
6. What is Inheritance? Write and explain C++ program to demonstrate the concept of multilevel inheritance and multiple inheritance.

SECTION-D

7. What is polymorphism? What are its advantages? Explain how polymorphism is implemented in C++.
8. Explain the following :
 - (a) Exception handling
 - (b) Pure virtual function

SECTION-E

9.
 - (i) List various characteristics feature of OOP.
 - (ii) What is operator precedence?
 - (iii) What are access specifiers?
 - (iv) List various properties of a destructor.
 - (v) How while loop is different from do-while loop?
 - (vi) What is use of inline functions?
 - (vii) What is operator overloading?
 - (viii) List various features of pointers.
 - (ix) What are static class members?
 - (x) What is an abstract class? Explain.