MCA-10

December - Examination 2016

MCA IInd Year Examination

Object Oriented Programming Through C++

Paper - MCA-10

Time : 3 Hours]   **[Max. Marks :- 80**

Note: The question paper is divided into three sections A, B and C with marks.

Section - A $8 \times 2 = 16$

(Very Short Answer Questions)

Note: Attempt **all** questions. Limit to 30 words.

1) (i) Write the size of memory occupied by given data types:

     a) float

     b) bool

     c) int

     d) double

  (ii) What is the scope of variable?

  (iii) Difference between class and object.

  (iv) What is Scope Resolution Operator. Explain.

  (v) Define public, private and protected access specifiers in C++.

(vi) Explain Enumerated data types in C++.

(vii) Array is user define or derived data types. How?

(viii) Difference between constructor and destructor.

Section - B $\quad\quad 4 \times 8 = 32$
(Short Answer Questions)

Note: Answer **any four** questions. Limit to answer questions in 200 words.

2) What is object oriented concept of programming? Discuss with all features.

3) What is function overloading? Explain with the help of suitable example.

4) Write short note on:

   (i) Virtual Base class

   (ii) Multiple inheritance

5) Define any four types of operators in C++ with examples.

6) What is difference between structured programming and object oriented programming?

7) What is type conversion in C++? Explain.

8) Explain file handling in C++.

9) Describe pointers to classes and class members in details.

Section - C $2 \times 16 = 32$

(Long Answer Questions)

Note: Answer **any two**. Limit to answer a question in 500 words.

10) What is inheritance? Explain different kind of inheritance with suitable example.

11) Explain various types of operators in C++ with suitable example.

12) What is polymorphism? Explain operator overloading with suitable example.

13) What is abstract classes? Explain the role of abstract class while building the class hierarchy.

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