MCA - 10

December - Examination 2015

MCA IInd Year Examination

Object Oriented Programming Through C++

Paper - MCA - 10

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

Note: The Question paper has been divided into three sections A, B and C. Write answer as per the given instructions.

Section - A $8 \times 2 = 16$

(Very Short Answer Questions)

Note: Attempt all questions. Limit to 30 words.

1) Attempt all questions.

   (i)   Discuss PIE concept in OOP.

   (ii) Define Abstraction features in OOP.

   (iii) Name the datatypes:

        (a) which use to represent logical values

        (b) used to represent absence of parameters

        (c) can be a user-defined type

        (d) use to represent 132.54 value

   (iv) What is difference between declaration and definition?

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

(vi) What is difference between a copy constructor and an overloaded assignment operator.

(vii) Difference between class and object.

(viii) Describe type conversions.

Section - B 4 x 8 = 32
(Short Answer Questions)

Note: Attempt any four questions. Limit to answer questions is 200 words.

2) What is function overloading and operator overloading?

3) What do you mean by inline function?

4) Explain polymorphism and its categories.

5) Describe constructor and destructors.

6) Define any four types of operators in C++ and their precedence.

7) What is meant by reference variable in C++. How a reference variable is created?

8) Explain concept of union and structures in C++.

9) Define various jump statements in C++.

Section - C

2 x 16 = 32

(Long Answer Questions)

Note: Attempt any two. Limit to answer a question is 500 words.

10) Explain concept of virtual function. Write a program to show virtual and pure virtual function in C++.

11) Explain file handling concept in C++.

12) Define friend function and friend class with an example in C++.

13) Describe derived and base class with difference between them. Explain various types of inheritance in OOP.

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