Roll No ..............................

# CS - 403

## B.E. IV Semester

Examination, June 2014

## Object Oriented Technology

*Time : Three Hours*

*Maximum Marks : 70*

**Note:**  i)  Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii)  All parts of each question are to be attempted at one place.

iii)  All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.

iv)  Except numericals, Derivation, Design and Drawing etc.

### Unit - I

1.  a)  Define abstract data types.    2
    b)  What is the difference between the class and the object.    2
    c)  Compare static and dynamic object.    3
    d)  Explain the inline functions and situations where inline function may not work and why?    7

OR

What is constructor? List the properties of constructor function.    7

### Unit - II

2.  a)  What is meant by association of objects?    2
    b)  Explain about aggregation.    2
    c)  Explain named association with example.    3
    d)  Write comparison between associative aggregation and inheritance relationship.    7

OR

Draw class diagram for online course reservation system.    7

### Unit - III

3.  a)  Discuss the role of inheritance in object oriented programming.    2
    b)  Explain the disadvantages of multiple inheritance.    2
    c)  Explain overloading with example.    3
    d)  Explain the meaning of polymorphism. How is the polymorphism achieved at run time? Explain with coding.    7

OR

What are the different types of inheritance? Explain with example.    7

### Unit - IV

4.  a)  What are container classes?    2
    b)  Write short note on persistent objects.    2
    c)  Briefly explain different types of container.    3
    d)  Describe how files can be opened and closed explicitly in a program.    7

OR

Write in brief about stream and types of streams. Give name and description of various stream method.    7

### Unit - V

5.  a)  Explain about JVM.    2
    b)  What is the purpose of package? Name some packages.    2
    c)  Compare features of C++ with JAVA.    3
    d)  Write a program to find the number of and sum of all integers greater than 100 and less than 200 that are divisible by 7.    7

OR

Explain the interface concept in JAVA with examples.    7

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