

(Following Paper ID and Roll No. to be filled in your Answer Book)

**PAPER ID : 2166**

Roll No.

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**B. Tech.**

**(SEMESTER-V) THEORY EXAMINATION, 2012-13**

**OBJECT ORIENTED TECHNIQUES**

**Time : 3 Hours ]**

**[ Total Marks : 100**

**SECTION – A**

1. Attempt **all** questions :

**10 × 2 = 20**

- (a) Name the three basic access specifiers in Object Oriented Programming ?
- (b) The Techniques of binding data and functions together in a single unit is known as :
  - (i) Data Abstraction
  - (ii) Message passing
  - (iii) Encapsulation
  - (iv) Polymorphism
- (c) Is it true that compile time polymorphism is also known as dynamic binding ?
- (d) Explain the following terms :
  - (i) Applet
  - (ii) Servlet
- (e) Explain the mechanism of catching multiple exceptions.
- (f) Explain Operator overloading with suitable examples.
- (g) EJB is an abbreviation for what ?
- (h) Write the names if any 4 UML diagrams and explain their use.
- (i) What is an abstract class ?
- (j) What is interface in Java ?

## SECTION – B

2. Attempt any **three** questions. **3 × 10 = 30**
- (a) What is the difference between Swing and AWT ?
  - (b) What are the advantages of Object Oriented Programming over procedural programming ?
  - (c) Explain the principles of object oriented modeling with a suitable example.
  - (d) Strings are immutable. Explain the statement.
  - (e) What are the collections in Java. Where are they used ?

## SECTION – C

Attempt **all** questions. Each question carry equal marks. **5 × 10 = 50**

3. Define Polymorphism and explain how runtime polymorphism is implemented with an example. **10**

**OR**

Define polymorphism and explain compile time polymorphism with example.

4. Explain JDBC with an example code. **10**

**OR**

Explain utility of Java as internet programming language.

5. Draw Use case diagram for a Restaurant system. **10**

**OR**

Draw a State Chart diagram for a ticket booking system.

6. What are exceptions ? When are they used ? Explain with a code snippet ? **10**

**OR**

Explain multithreading in Java.

7. Explain the difference between pass by value and pass by reference in details with a code example. **10**

**OR**

Explain Structured Analysis and Structure Designs (SA/SD) and Jackson Structured Development.