

Course Code : CST 403 – 3

JSRK/MW – 17 / 2101

**Seventh Semester B. E. (Computer Science and Engineering)
Examination**

Elective – I

ADVANCED OBJECT ORIENTED TECHNOLOGIES

Time : 3 Hours]

[Max. Marks : 60

Instructions to Candidates :—

- (1) Assume suitable data wherever necessary and clearly state the assumption made.
- (2) Q. Six has internal choice as indicated.

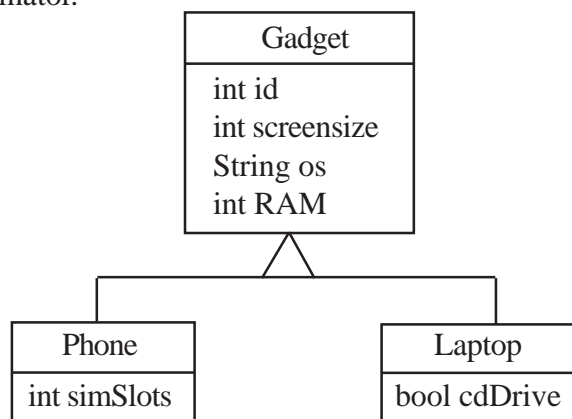
1. (a) Discuss all views of a client accessing Enterprise Java Beans. 4(CO 1)
(b) Write a class User with attributes id and name.
Develop a stateful session bean without an interface for a Bank having functionality to add users, remove users and fetch a user by id.
6(CO 1)
2. (a) Describe CallableStatement with its methods. 5(CO 1)
(b) Two tables exist in the database.
 - PROFIT_TABLE (Company_Name, Profit)
 - COMPANY_DETAILS (Owner_name, Company_name)Write a stored procedure to obtain owner name of the company with maximum profit. Call this stored procedure using JDBC. 5(CO 1)
3. (a) Create a Servlet Client for the session bean created in Q. 1 (b). Invoke all methods of the bean and display the output. 5(CO 2)
(b) Describe the basic structure of a servlet with an example. 5(CO 2)

4. (a) Design a JSP application for a college having :—
- (i) Login page for the student
 - (ii) Profile page to view attendance of the student. Also display warning message if attendance is less than 75.
 - (iii) Add logout button to the profile page.

[Assume session attributes named username, password and attendance already exist and contain a non – null value] 10(CO 2)

5. (a) Explain Bean life cycle in Spring framework. 5(CO 3)
- (b) Name any two Bean Post Processor methods and explain with example. 5(CO 3)

6. (a) Implement the given hierarchy in Hibernate, using table per subclass using a discriminator.



10(CO 3)

OR

- (b) Compare the working of eager and lazy fetch in hibernate ? What are the situations when eager fetch is better than lazy fetch and vice – versa ? 5(CO 3)
- (c) What is Configuration and Session Factory object in Hibernate ? Explain its use. 5 (CO 3)