

**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) What is JNDI lookup and its use in EJBs ? Also explain different JNDI Naming Syntaxes. 5(CO 1)

- (b) Given table PHONE as follows :

Column	SerialID	Company_name	Screensize	Manu_Dt
Type	NUMBER	VARCHAR2	FLOAT	DATE
and	Primary	Blank not	Blank not	May be
Metadata	Key	allowed	allowed	null.

Write an entity class for table Phone.

5(CO 1)

2. (a) Explain Type–1 and Type–4 Driver in brief. 4(CO 1)

- (b) Describe Updateable and Scrollable Resultset. How are they used ? 6(CO 1)

3. (a) What is the objective of creating multiple servlet instances in a server? How is a request from the client serviced by a servlet container ? 6(CO 2)

- (b) Write servlet which checks and displays whether a given number is prime. Also provide the HTML code for requesting the input. 4(CO 2)

4. (a) Design an Online Shopping Web Application using JSP, where user can view all Products information, add items to his shopping cart and view the shopping cart.

Manage state using HttpSession.

Assume TABLE PRODUCT_INFO already exists having the below structure.

PROD_ID	P_NAME	SELLER	COST	DESCRIPTION
11	Nokia 1100	EZStore	1000
22	Nokia 1100	WSRetail	899
33	Sandisk 8GB	Softek	450
44	HP 32GB	EZStore	749
....

10(CO 2)

5. (a) Explain advantages of using Spring framework. 5(CO 3)
- (b) How Spring supports beans with collection of primitive types and collection of references ? 5(CO 3)
6. (a) How to implement a parent child hierarchy in Hibernate, using Table per Hierarchy. Explain with an example and its output. 7(CO 3)
- (b) What is a proxy object in Hibernate ? 3(CO 3)

OR

- (c) Differentiate between Named Query and Named Native Query. 3(CO 3)