

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATIONS- 2026

B.Tech-II Semester (CSE/IT/BT/ECE/CE)

COURSE CODE (CREDITS): 18B11CI511

MAX MARKS: 35

COURSE NAME: ADVANCED JAVA

COURSE INSTRUCTOR: Ruchi Verma

MAX. TIME: 2 Hours

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

(c) Use of calculator is not allowed

Q.No	Question	CO	Marks
Q1	Assessment-Based Questions 6*1 marks=6 marks a. What is the role of RMI Registry in Java RMI? b. Define Serialization in Java. c. What is meant by Internationalization in Java applications? d. Name any two types of Enterprise Java Beans (EJB). e. What is the purpose of the Struts Action class? f. Differentiate between Container-Managed Persistence (CMP) and Bean-Managed Persistence (BMP) in EJB.	CO2	6
Q2	3* 3 marks=9 marks a. Discuss the life-cycle of an Entity Bean with suitable steps. b. Explain the role of Struts Validator Framework in web application development. c. What is Hibernate? Explain the advantages of using Hibernate over JDBC. Differentiate between Container-Managed Persistence (CMP) and Bean-Managed Persistence (BMP) in EJB.	CO3	9
Q4	5*2= 10marks a. Develop the logic of a simple Java RMI application where a client sends two numbers to the server and the server returns their sum. Explain the working process. b. Explain the complete request processing flow in Struts Framework from client request to response generation.	CO2	10
Q5	5*2= 10marks a. Explain Object Serialization in Java. Discuss its advantages and applications.	CO4	10

	b. Discuss Session Beans and Entity Beans in EJB. Mention their important features. c. Explain the life-cycle of a Stateful Session Bean with suitable diagram. d. Describe Container-Managed Transactions and Bean-Managed Transactions in EJB. e. Explain MVC Architecture in Struts Framework. How does Struts implement MVC? Discuss the working of Struts ActionForm class and Struts HTML tags with examples.		
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UNIT TEST-3 EXAMINATIONS- MAY-2020