

**KADI SARVA VISHWAVIDYALAYA**

**BE SEMESTER-VI (Computer Engineering/ Information Technology/ Computer Science and Engineering) Examination April/May - 2025**

**Subject Name: Advance Java Programming**

**Subject Code: CT506A-N**

**Date: 21/04/2025**

**Time: 10:30am to 01:30pm**

**Total Marks: 70**

**Instructions:**

1. Answer each section in separate answer sheet.
2. Use of scientific calculator is permitted.
3. All questions are Compulsory.
4. Indicate clearly, the option you attempt along with its respective question number.
5. Use the last page of main supplementary of rough work.

**Section-I**

- Q-1** (A) What is the function of a Session Factory object? How will you obtain Such an object? [5]
- (B) Discuss in brief types of JDBC Drivers with proper diagrams. [5]
- (C) What do you mean by session tracking? What are the session tracking Techniques? Demonstrate any 1 of them. [5]

**OR**

- (C) What is connection URL? How do you make a database connection? Explain various ways to make the database connection using JDBC code snippets. [5]
- Q-2** (A) What are the implicit objects of JSP? Write a JSP script to demonstrate the use of them. [5]
- (B) Explain JSP Life Cycle in detail. [5]

**OR**

- Q-2** (A) Explain the difference between TCP and UDP in detail. [5]
- (B) Explain Servlet Life Cycle in detail. [5]

- Q-3** (A) What are the different Hibernate interfaces? Explain their role in brief. [5]
- (B) Explain JSP basic tags with proper codes. [5]

**OR**

- Q-3** (A) What are the advantages of Spring MVC? Explain the flow of Spring Web MVC. [5]
- (B) Differentiate between Servlet Config and Servlet Context. [5]

## Section-II

- Q-4 (A) Explain the use of Prepared Statement with appropriate example. [5]  
(B) Explain the purpose of Request Dispatcher using the methods forward () and Include (). [5]  
(C) What is JSTL? Explain the core tags of the SQL tag library. [5]

**OR**

- (C) Discuss JSF life cycle phases. [5]  
Q-5 (A) What is Spring Bean? How can you create bean in Spring boot? [5]  
(B) Explain Hibernate Mapping File and configuration file. [5]

**OR**

- Q-5 (A) Explain in detail What is OR mapping? [5]  
(B) Explain Spring Framework Architecture with a diagram. [5]

- Q-6 (A) What is HQL? Differentiate between HQL and SQL. [5]  
(B) Discuss Session Tracking in Servlet. [5]

**OR**

- Q-6 (A) Write a java program where client sends a string as a message and sever counts the characters in the received message from client. Server sends this value back to the client: Server should be able to serve multiple clients simultaneously. [5]  
(B) What is Expression Language EL in JSP explain with suitable example program? [5]