

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
**SEVENTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018**

**Course Code: IT409**

**Course Name: WEB APPLICATION DEVELOPMENT**

Max. Marks: 100

Duration: 3 Hours

**PART A**

*Answer any two full questions, each carries 15 marks.*

Marks

- 1 a) With a neat diagram explain the life cycle of a web application (10)  
b) Differentiate between 2-tier and 3-tier JDBC architecture. (5)
- 2 a) Design and Develop a Servlet based web application to update the basic salary of all employees belonging to the department of sales by 5%, assuming there exists an employee table with field(e\_id,e\_dept,e\_name,b\_sal,n\_sal) (10)  
b) List out the benefits of Servlets. (5)
- 3 a) Give any three methods to overcome the stateless nature of HTTP protocol. (9)  
b) Explain the methods used to implement the life cycle of Servlets. (6)

**PART B**

*Answer any two full questions, each carries 15 marks.*

- 4 a) How to pass control from one JSP page to another? (5)  
b) Create a java bean 'User' having attributes fname, lname, rollno and address. (10)  
Write a JSP page viewuser.jsp that displays the bean values
- 5 a) What is session tracking? What is its purpose? (9)  
b) Write a JSP program to demonstrate the use of taglib directive (4)  
c) What is the use of 'include' attribute of page directive? (2)
- 6 a) Explain the importance of data sharing among JSP Pages. Design and Develop a JSP based web application to display the values which is being entered by the user in a registration form (9)  
b) How does Error handling is done in JSP (6)

**PART C**

*Answer any two full questions, each carries 20 marks.*

- 7 a) Explain the Container Managed Persistence of an EJB (5)  
b) With a neat diagram show how can we perform distributed programming (5)

- c) Illustrate the steps involved in the building of a session bean (10)
- 8 a) Explain the services provided by the EJB Container (7)
- b) What are the characteristics of Stateless and Stateful session bean (3)
- c) With a neat sketch explain CORBA Architecture (10)
- 9 a) List out the benefits of Enterprise Java Beans (6)
- b) Explain the roles of persistence manager (4)
- c) With a neat sketch explain the processes involved in the life cycle of an EJB (10)

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