PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA (AUTONOMOUS)
DEPARTMENT OF INFORMATION TECHNOLOGY

ADVANCED JAVA LAB

Course Code	23IT3551	Year	III	Semester	I
Course Category	PC	Branch	IT	Course Type	Lab
Credits	1.5	L-T-P	0-0-3	Prerequisites	JAVA
Continuous Internal Evaluation :	30	Semester End Evaluation:	70	Total Marks:	100

Course Objectives: the main objectives of the course are
- To make use of Servlet and JSP API in the process of enterprise application deployment.
- Implement components such as JSTL
- Distinguish Application Server, Web Container, JDBC
- Design and Development of web application having collaboration of Servlets, JSPs, Spring

Course Outcomes:		Blooms Level
Upon successful completion of the course, the student will be able to:		
CO1	Develop applications using JDBC to interact with relational databases for performing CRUD operations and managing data connectivity.	L3
CO2	Design and Develop web applications using Servlets, JSP, and the Spring Framework.	L3
CO3	Conduct experiments independently or as part of a team by utilizing appropriate tools.	L3
CO4	Apply knowledge to solve a given problem and express with an effective oral communication.	L3

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:Substantial,2:Moderate,1:Slight)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3		3		3								3	3
CO2	3		3		3								3	3
CO3									3					
CO4										3				
Avg.	3		3		3				3	3			3	3

	Syllabus	
Unit No.	**CONTENTS**	**Mapped CO**
1	Develop a JDBC application which will interact with Database and perform the following tasks. a. Create Student Table with Roll No, Name, and Address field and insert few records. b. Using Statement Object display the content of Records. c. Using Statement Object Insert Two Records. d. Using Statement Object Update One Record. e. Using Statement Object Delete One Record. f. Using Statement Object display the content of Records.	CO1,CO3,CO4
2	Develop a JDBC application which will interact with Database and perform the following task. a. Create Student Table with Roll No, Name, and Address field and insert few records. b. Using PreparedStatement Object display the content of Record. c. Using PreparedStatement Object insert two records. d. Using PreparedStatement Object Update One Record. e. Using PreparedStatement Object Delete One Record. f. Using PreparedStatement Object display the content of Record	CO1,CO3,CO4
3	Develop a JDBC application which will interact with Database and perform the following task. a. Create a stored procedure which will insert one record into employee table. b. Create a stored procedure which will retrieve salary for given employee id. c. Write a Java application which will call the above procedure and display appropriate information on screen	CO1,CO3,CO4
4	Design a JDBC application which will demonstrate Scrollable ResultSet functionality.	CO1,CO3,CO4
5	Design a JDBC application which will demonstrate Updatable ResultSet functionality.	CO1,CO3,CO4
6	Write down the program for testing the Servlet and study deployment descriptor.	CO2,CO3,CO4
7	Write down the program for testing the include action for Servlet collaboration.	CO2,CO3,CO4

8	Create login form and perform state management using Cookies, Http Session and URL Rewriting.	CO2,CO3,CO4
9	Develop a Program which displays the simple JSP file	CO2,CO3,CO4
10	Write down the program in which input the two numbers in an html file and then display the addition in JSP file.	CO2,CO3,CO4
11	Perform Database Access through JSP.	CO2,CO3,CO4
12	Write down a program which demonstrates the core tag of JSTL.	CO2,CO3,CO4
13	Study and Implement MVC using Spring Framework	CO2,CO3,CO4

Learning Resources
Text Books
1. Black Book "Java server programming" J2EE-1.6, Dream Tech Publishers, 2010.
Reference Books
1. Complete Reference J2EE, James Keogh, McGraw Hill publication 2. Professional Java Server Programming, SubrahmanyamAllamaraju, Cedric Buest, Wiley Publication 3. Spring in Action, 3rd edition , Craig walls, Manning Publication 4. Core Java, Volume II: Advanced Features, Cay Horstmann, Gary Cornell Pearson Publication 5. JDBC™ API Tutorial and Reference, Third Edition, Maydene Fisher, Jon Ellis, Jonathan Bruce, Addison Wesley 6. Beginning JSP, JSF and Tomcat, GiulioZambon, Apress
E-Resources & other digital material
1. https://www.geeksforgeeks.org/ 2. https://www.codingshuttle.com/spring-boot-handbook/spring-beans/