

COURSE TITLE: ADVANCED JAVA LAB**COURSE OBJECTIVES:**

- To prepare students to excel and succeed in industry / technical profession through global, rigorous education.
- Excellence through application development.
- To provide students with a solid foundation on Tools, Technology and Framework

LEARNING OUTCOMES:

- Students will demonstrate a high degree of proficiency in programming enabling them for careers in software engineering with competencies to design, develop, implement and integrate software applications and computer systems.
- Students will develop confidence for self-education and ability for life-long learning

Code	Course	Teaching Period / Week		Credit			Duration of Theory Exam (in Hrs.)
		L	Pr./Tu	Int.	Ext.	Total	
MCSL207	Advanced Java Lab	-	2	1	1	2	1

Module No.	Objective	Content	Evaluation
1	To implement database connectivity in Java Application	JDBC All data base operation using Access /oracle/MySQL as backend	Lab manual for 05 marks
2	To demonstrate the use of Servlets	Servlets A Simple Servlet Generating Plain text/ HTML, program based on cross page posting and post back posting (client request and server response)	Online test of 15 marks
3	To demonstrate the use of Java Server Pages	JSP Sample program to demonstrate JSP syntax and semantics, program based on directive and error object, program based on cookies and Sessions	Practical test of 15 marks
4	To implement MVC architecture	Introduction to Framework: Struts Basic Configuration for struts, Program based on Action validation and control in struts, Program based on integration of JSP and Servlets with struts	Practical test of 15 marks

EVALUATION:

Evaluation	Details (* please give details of assessment in terms of Unit test/ Project/ quiz /or other assignments and marks allotted for it)	Marks
Internal	<ul style="list-style-type: none"> • Lab Manuals • Practical Test • Online Test 	25 Marks
External	Final Examination (Practical)	25 Marks
Total marks		50 Marks

TEXT BOOKS:

- 1) Herbert schildt, *The complete reference JAVA2*, (2014)Tata McGraw Hill
- 2) Sharanam Shah and vaishali shah, *Core Java for beginners*, (2010) SPD

REFERENCE BOOKS:

- 1) Sharanam Shah and vaishali shah, *Struts 2 for beginners*, (2016)SPD
 - 2) Dreamtech, *Advance Java-Savalia,Core, Java 6 Programming Black Book*, Wiley (2005)
 - 3) Marty Hall and Larry Brown, *Core Servlets and Java Server Pages: Vol I: Core Technologies 2/e* , Pearson (2010)
 - 4) Sharnam Shah and Vaishali Shah, *Java EE 6 for Server Programming for professionals*, (20180) SPD
-