

Course Code	Course Title	L	T	P	C
PMCA502P	Java Programming Lab	0	0	2	1
Pre-requisite	NIL	Syllabus version			
		1.0			
Course Objectives:					
1. To comprehend basic and object-oriented concepts in java.					
2. To apply learned concepts and develop various approaches for problem-solving					
3. To design and build real-time applications with event-driven graphical user interfaces, accessing files or databases.					
Course Outcomes:					
1. Develop a working knowledge of java core concepts and understand how to apply them					
2. Design and develop GUI applications that involve real-world problems using JavaFX and JDBC					
3. Implement web applications using servlets, java server pages, struts, spring framework and hibernate					
4. Use networking concepts to create client server applications.					
Indicative Experiments					Hours
1.	Basic programs				2 hours
2	Implementation of package, interface and abstract class				4 hours
3.	Test any five of standard exception and user defined custom exceptions in java				2 hours
4.	Threads creation and design applications by extending the thread class / Implementing the runnable interface. Application of multithreading in java				2 hours
5.	Design GUI based java application using JavaFX controls and JDBC.				4 hours
6.	Implementation of servlet programs - session management				4 hours
7.	Designing web applications using JSP tags.				2 hours
8.	Simple application using struts				4 hours
9.	Simple applications using spring and hibernate				4 hours
10.	Design and implement networking applications.				2 hours
Total Laboratory Hours					30 hours
Text Book(s)					
1	Herbert Schildt, "Java: The Complete Reference", 2021, 12 th Edition, McGraw				
2	Hill Education.				
	Jim Keogh, "J2EE: The Complete Reference", 2017, McGraw Hill Education.				
Mode of assessment: CAT, Exercises, FAT					
Recommended by Board of Studies				04-05-2023	
Approved by Academic Council				No. 70	Date 24-06-2023