



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)



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WEEKLY LESSON PLAN

Department: Computer Science and Engineering

Year / Semester: 2025-26 / Winter

Course Code / Course Name: 10211CS225 / Problem Solving and Testing using Java

UNIT I – Functional Programming

Course Outcome: Apply functional programming features of Java, including lambda expressions, streams, and method references, to solve programming problems efficiently.

Week	Session	Topics to be Covered	Problems to Practice (Hands-On)	Platform
Week 2	Session 1	Introduction to Java Streams API: https://www.geeksforgeeks.org/java/stream-in-java/ Intermediate Operations: map(),filter(),sorted(),flatMap(),distinct(), peek()	Task 1: Part-A:Task1 given in syllabus Task 2:Part A: Task2 given in syllabus https://www.hackerrank.com/challenges/java-lambda-expressions/problem	Task(1,4,9-Eclipse /VSCODE) Hackerrank: Task (2,3,7) Mettl: Task(5,6,8,10)
	Session 2	Stream API-Terminal operations: collect(),forEach(),reduce(),count(),findFirst(),allMatch(),anyMatch()	Task 3: https://www.hackerrank.com/challenges/mini-max-sum/problem Task 4. Part A: Task 3 given in syllabus	
	Session 3	Java Date and Time API (java.time): https://www.tutorialspoint.com/java/java_datetime_api.htm	Task 5. Is Palindrome (string) : https://tests.mettl.com/authenticateKey/ffe8042 Task 6. All Digits Count: https://tests.mettl.com/authenticateKey/ed6b4da	
	Session 4	Local API: LocalDate, LocalTime, LocalDateTime (when timezone is not required)	Task 7: https://www.hackerrank.com/challenges/java-date-and-time/problem Task 8:Weight of a hill pattern: https://tests.mettl.com/authenticateKey/d612c0e6	
	Session 5	Zoned API: ZonedDateTime, ZoneId (when working with timezones).	Task 9: Task 4 given in syllabus Task 10:Sum of Sums of Digits in Cyclic order : https://tests.mettl.com/authenticateKey/1ddbe65e	