

2	Decision Making, Branching and Looping: Selection Statement: if – else, nested if-else, else if ladder, switch Statements, Iteration statements: while, do...while, for Statements, Jump Statements: break, continue.	4
3	Introduction to Class, Method and Object: Creating class and Methods: Defining Classes, Creating Objects, Defining Methods, Calling Methods, Method Parameters, Method overloading. Constructors: Introduction, Default & Parameterized Constructors, Constructor Overloading. Inheritance: Introduction, Single, Multilevel, Hierarchical Inheritance. Method Overriding, final Variable, final Methods & final Class, abstract Methods and Abstract Class. Access Modifiers (Visibility Controls) : public, private, default, protected.	10
4	Array, String, Vectors, Interfaces: Array: Creating and initializing array, Two-dimensional array, String: Java. lang Package classes (Math, String), Vectors: Vector methods, Interfaces: Defining an Interfaces, Implementing Interfaces, multiple inheritance.	6
Text Books:		
1	Programming with Java by E. Balagurusamy, Tata McGraw Hill Publication.	
Reference Books:		
1	Programming java by Sachin Malhotra & Saurabh Chaudhary, Oxford Publication.	
2	Head first java by Kathy Sierra & Bert Bates, O'Reilly.	
3	Effective Java by Joshua Bloch, Devs needing a perspective shift., Pearson Education	
Web References / MOOC / Certification Course:		
1	https://onlinecourses.swayam2.ac.in/aic20_sp13/preview	
2	https://www.coursera.org/learn/fundamentals-of-java-programming	
3	https://onlinecourses.nptel.ac.in/noc24_cs105/preview	
4	https://www.shiksha.com/online-courses/java-course-swayl24	
Question Paper Scheme:		
	University Examination Duration:2Hours Note for Examiner: Q-1 Must be common from any topics from the syllabus. Q-2 And onwards must be from specific topics and internal choice or option can be given. Paper Structure: Q-1 Must be from all Unit Any Five out of seven (25 Marks) (CO1, CO2, CO3, CO4) Q-2 Must be from Unit 1: Any Two out of Three (06 Marks) CO1 Q-3 Must be from Unit 2: Only one question without any option (05 Marks) CO2 Q-4 Must be from Unit 3: Any Two out of Three (08 Marks) CO3 Q-5 Must be from Unit 4: Any Two out of Three (06 Marks) CO4	