

Satyug Darshan Institute of Engineering and Technology

Lesson Plan / Teaching Plan / Lecture Plan with Progress : BCA-DS -5th Semester : 2025-26

Course Name (Code) : Java Programming(BCG-103-V)

Faculty: Sangeeta Dipankar

Topics / lectures are arranged in sequence - same - as to be taught in the class. Maintain data related to "Date" in its hard copy.

S. No.	Lecture No	Topic Description	Teaching Pedagogy	Reference Material	Remarks, if any
1	1	Introduction to Java: history, features, platform independence	Board	R1	
2	2	Java Virtual Machine (JVM) architecture & execution process	Board	R1,R2	
3	3	Primitive data types, variables & type casting	Board	R1	
4	4	Java operators: arithmetic, relational, logical, bitwise	Board	R1	
5	5	Expressions, statements, and blocks	Board	R1	
6	6	Control structures: if, if-else, switch	PPT	R1,R2	
7	7	Loops: for, while, do-while, enhanced for loop	PPT	R1,R2	
8	8	Arrays: 1D arrays – declaration, initialization, traversal	Board	R1	
9	9	Arrays: 2D and multidimensional arrays	Board	R1	
10	10	Command-line arguments in Java	Board	R1,R2	
11	11	Unit I Revision & Practice	Board	R1,R2	
12	12	Classes and objects in Java	Board	R2	
13	13	Constructors – default, parameterized, copy	Board	R1	
14	14	Overloading constructors and methods	Board	R1	
15	15	Static data members and methods	Board	R1,R2	
16	16	Array of objects	Board	R2	
17	17	Objects as function arguments	Board	R2	
18	18	Inheritance – concept & types (single, multilevel)	Board	R1	
19	19	Multiple inheritance via interfaces	Board	R1	
20	20	Containership (composition)	Board	R1,R2	
21	21	Method overriding & runtime polymorphism	Board	R1	
22	22	Abstract classes & methods	Board	R1,R2	
23	23	Interfaces – declaration, implementation, multiple interfaces	Board	R2	
24	24	Packages – creating and importing	Board	R1	
25	25	Unit II Revision & Practice	Board	R1,R2	
26	26	Introduction to exception handling	Board	R1,R2	
27	27	Try & catch blocks	Board	R1,R2	
28	28	Throw keyword, multiple catch blocks	Board	R1,R2	
29	29	Throws keyword and finally block	Board	R1,R2	
30	30	Creating user-defined exceptions	Board	R1,R2	
31	31	Introduction to multithreading, process vs thread	Board	R1,R2	
32	32	Thread life cycle	Board	R1,R2	
33	33	Creating threads using Thread class	Board	R1,R2	
34	34	Creating threads using Runnable interface	Board	R1,R2	
35	35	Thread priorities	Board	R1,R2	
36	36	Thread synchronization	Board	R1,R2	
37	37	Producer-consumer problem	Board	R1,R2	
38	38	Unit III Revision & Practice	Board	R1,R2	
39	39	Introduction to Java I/O & streams	Board	R1,R2	
40	40	Types of streams & stream classes	Board	R1,R2	

41	41	Predefined streams: System.in, System.out, System.err	Board	R1,R2	
42	42	Reading from and writing to console	Board	R1,R2	
43	43	File handling: reading text files	Board	R1,R2	
44	44	File handling: writing to text files	Board	R1,R2	
45	45	Object serialization	Board	R1,R2	
46	46	Deserialization	Board	R1,R2	
47	47	Unit IV Revision & Practice	Board	R1,R2	

Study Material / Books / Web-resources / Online Courses Links	
S. No.	Description
1	E Balagurusamy, "Programming in Java", McGraw Hill.
2	Patrick Naughton and Herbertz Schildt, "Java-2 The Complete Reference", 1999, TMH.