



# VALUE-ADDED COURSE

Departments of Computer Science ,IT &  
Computer Applications

## Core Java Programming



Starts from July 2021 – December 2021

Duration 60 Hrs



- Live Projects
- Extended lab support
- Hands-on-training



- I Year B.Sc CS, BCA, B.Sc IT
- I Year M.Sc CS, M.Sc IT , M.Sc Mathematics



InLustro Learning Pvt . Ltd  
Website: [www.inlustro.net/](http://www.inlustro.net/)  
Mail : [support@inlustro.co](mailto:support@inlustro.co)



Shrimati Indira Gandhi College  
Website: <https://www.sigc.edu/>  
Mail : [contact@sigc.edu](mailto:contact@sigc.edu)



**InLustro**

*Your Learning Comrade*

**Curriculum**

**Core JAVA**

**First Semester**

**Academic Year  
2021 - 2022**

**InLustro**

# CORE JAVA

## SYLLABUS

### OBJECTIVES OF THE COURSE

- Students will understand the basic syntax of the Java programming language.
- Students will understand the principles of object-oriented programming and how they are applied in Java.
- Students will understand the concepts of Exception Handling and Threads
- Students will gain experience with basic Input/Output operations and GUI programming

### Unit 1: Introduction to Java Programming

- Subunit 1.1: Introduction to the Java Programming Language
- Subunit 1.2: Setting up the development environment (Eclipse IDE)
- Subunit 1.3: Basic syntax (comments, data types, variables, operators, control flow)

### Unit 2: Object-Oriented Programming

- Subunit 2.1: Classes, objects, and methods
- Subunit 2.2: Encapsulation, inheritance, and polymorphism
- Subunit 2.3: Abstract classes and interfaces
- Subunit 2.4: Interfaces and polymorphism

### Unit 3: Exception Handling and Collections

- Subunit 3.1: Try-catch-finally
- Subunit 3.2: Built-in exceptions and custom exceptions
- Subunit 3.3: Arrays, ArrayList, HashMap, and other collections
- Subunit 3.4: Sets, Maps, Queues, and comparison
- Subunit 3.5: Generics and type-safe collections

### Unit 4: Input and Output

- Subunit 4.1: Reading and writing to the console
- Subunit 4.2: Reading and writing to files
- Subunit 4.3: Input/Output Streams
- Subunit 4.4: File I/O
- Subunit 4.5: Serialization and Deserialization

---

## Unit 5: Threads and Concurrency

- Subunit 5.1: Introduction to Threads and Concurrency
- Subunit 5.2: Threads, Runnable and Executor Framework
- Subunit 5.3: Synchronization

### Learning Outcome

- Students will be able to write and run Java programs using the Eclipse IDE, including basic constructs such as variables, data types, operators, control flow, and loops.
- Students will be able to create Java programs using classes, objects, inheritance, polymorphism, and encapsulation, and explain the concepts of encapsulation, inheritance, and polymorphism.
- Students will be able to design, use and implement Exception Handling in their code and able to understand the concepts of thread and write concurrent programs
- Students will be able to read and write data to files and console and create simple graphical user interfaces using AWT and Swing, as well as an introduction to JavaFX

**Teacher:** Pavani Scinde



\*\*\*\*\*



**InLustro**

*Your Learning Comrade*

**Mark Sheet**

**Core Java**

**First Semester**

**Academic Year  
2021 - 2022**

**InLustro**

# INDEX

<b>S.no</b>	<b>Year and Department</b>	<b>Page number</b>
1	I BCA	1
2	I BSc(CS)	3
3	I BSc(IT)	6
4	I MSc(CS)	7
5	I MSc(IT)	8
6	I Msc Maths	9

\*\*\*\*\*

**Inlustro Learning Private Limited**

**I BCA**

S.No	STUDENTS NAME	Mid/50	Final/100			Attendance	Total	Grade	
1	R.Vishali	22	35	26.4	10.5	9	45.9	C	Pass
2	S.Tulasi	24	24	28.8	7.2	10	46	C	Pass
3	B. Thailammai	34	28	40.8	8.4	10	59.2	B-	Pass
4	S.Sree Lakshmi Kiruthika	23	25	27.6	7.5	9	44.1	C	Pass
5	V.Shalini	24	30	28.8	9	10	47.8	C	Pass
6	A.Saraswathi	27	13	32.4	3.9	10	46.3	C	Pass
7	P.Jeevitha	33	20	39.6	6	6	51.6	B-	Pass
8	K.Nandhini	46	25	55.2	7.5	6	68.7	B	Honours
9	A.Nandhini	20	40	24	12	8	44	C	Pass
10	R. Madhusri	44	14	52.8	4.2	8	65	B	Honours
11	S.Karthika	30	33	36	9.9	10	55.9	B-	Pass
12	S.Jyothika	18	50	21.6	15	9	45.6	C	Pass
13	S.Joshi Evangeline	40	29	48	8.7	7	63.7	B-	Pass
14	S.Arivunithi	20	50	24	15	7	46	C	Pass
15	S.Sarika	20	40	24	12	7	43	C	Pass
16	N.Rajasree	29	20	34.8	6	7	47.8	C	Pass
17	S.Abinaya	40	33	48	9.9	6	63.9	B-	Pass
18	A.Subhanu	18	55	21.6	16.5	10	48.1	C	Pass
19	R.Navya	24	46	28.8	13.8	8	50.6	B-	Pass
20	B.V.Akshaya	20	44	24	13.2	6	43.2	C	Pass
21	R.Kamatchi	27	26	32.4	7.8	7	47.2	C	Pass
22	R.Indhuvarshini	30	16	36	4.8	8	48.8	C	Pass
23	G.Keerthika	35	19	42	5.7	9	56.7	B-	Pass
24	M.Dharanya	26	18	31.2	5.4	8	44.6	C	Pass
25	S.Bhavadharani	24	43	28.8	12.9	6	47.7	C	Pass
26	J.Sheela Devi	21	46	25.2	13.8	6	45	C	Pass
27	P.Reebika	15	45	18	13.5	10	41.5	C	Pass
28	R.Divya	14	44	16.8	13.2	10	40	C	Pass
29	N.Dheena	45	25	54	7.5	10	71.5	B	Honours
30	E.Arockia Jasmine Abinaya	22	27	26.4	8.1	10	44.5	C	Pass
31	J.Caroline Chrysolite	28	34	33.6	10.2	9	52.8	B-	Pass
32	G.Lavanya	40	18	48	5.4	7	60.4	B-	Pass
33	S.Deepika	23	33	27.6	9.9	6	43.5	C	Pass
34	R.Sneeka	22	25	26.4	7.5	10	43.9	C	Pass
35	S.Arthi	23	29	27.6	8.7	9	45.3	C	Pass
36	S.Saranya	25	30	30	9	6	45	C	Pass
37	S.Ramya	20	27	24	8.1	10	42.1	C	Pass
38	V. Abinaya	15	42	18	12.6	10	40.6	C	Pass
39	S.Priyadarshini	22	18	26.4	5.4	10	41.8	C	Pass
40	S.Kavitha	25	22	30	6.6	6	42.6	C	Pass

41	A.Sindhuja	20	43	24	12.9	10	46.9	C	Pass
42	D.Arockiya Ligifemina	15	40	18	12	10	40	C	Pass
43	A.Abirami	20	24	24	7.2	10	41.2	C	Pass
44	S.Harini	20	25	24	7.5	10	41.5	C	Pass
45	J.Kabisiya	18	35	21.6	10.5	10	42.1	C	Pass
46	M.Kanishka	22	20	26.4	6	10	42.4	C	Pass
47	K.Keerthana	25	5	30	1.5	10	41.5	C	Pass
48	V.Yogashri	16	46	19.2	13.8	10	43	C	Pass
49	S.Uma Maheswari	18	30	21.6	9	10	40.6	C	Pass
50	K.Udhaya	20	28	24	8.4	10	42.4	C	Pass
51	S.Swetha	21	19	25.2	5.7	10	40.9	C	Pass
52	M.Subitza	20	20	24	6	10	40	C	Pass
53	T.Subalakshmi	37	25	44.4	7.5	6	57.9	B-	Pass
54	M.Malar Vizhy	23	13	27.6	3.9	10	41.5	C	Pass
55	S.Preethi	24	24	28.8	7.2	8	44	C	Pass
56	R.Ramya	18	35	21.6	10.5	10	42.1	C	Pass
57	B.Sindhuja	21	23	25.2	6.9	10	42.1	C	Pass
58	S.Sowmiya	22	16	26.4	4.8	10	41.2	C	Pass
59	R.Siva Sangari	21	18	25.2	5.4	10	40.6	C	Pass
60	T.Kaviya	21	16	25.2	4.8	10	40	C	Pass
Scores indicated in pink have been absent for the midterm/Final exam.									
Remedial exam was conducted for these candidates - the marks secured in which have been indicated in pink									



**Inlustro Learning Private Limited**

**I BSc(CS)**

S.No	STUDENTS NAME	Mid/50	Final/100			Attendance	Total	Grade	
1	N.Jagadeshwari	25	30	30	9	6	45	C	Pass
2	A. Dharanya	20	30	24	9	8	41	C	Pass
3	G.Ilakkiya	22	31	26.4	9.3	9	44.7	C	Pass
4	J.Farhath Jabeen	26	20	31.2	6	6	43.2	C	Pass
5	M.Durga Devi	26	21	31.2	6.3	7	44.5	C	Pass
6	K.Bhuvana	20	30	24	9	8	41	C	Pass
7	D.Gomathi	25	25	30	7.5	6	43.5	C	Pass
8	S.Agila	22	20	26.4	6	9	41.4	C	Pass
9	S.S.Dharani	21	18	25.2	5.4	10	40.6	C	Pass
10	R.Gayathri	20	20	24	6	10	40	C	Pass
11	S.Deepthi	20	35	24	10.5	8	42.5	C	Pass
12	K.Deepadharshini	22	21	26.4	6.3	9	41.7	C	Pass
13	P.Abinaya	21	30	25.2	9	6	40.2	C	Pass
14	S.Ashifa Begam	21	30	25.2	9	8	42.2	C	Pass
15	M.Karthika	17	36	20.4	10.8	9	40.2	C	Pass
16	M.Deva Dharshini	22	19	26.4	5.7	8	40.1	C	Pass
17	S.Kavitha	22	25	26.4	7.5	9	42.9	C	Pass
18	N.Jerin Florida	20	28	24	8.4	9	41.4	C	Pass
19	M.Anulega	26	12	31.2	3.6	9	43.8	C	Pass
20	S.Iswarya Lakshmi	21	23	25.2	6.9	10	42.1	C	Pass
21	N.Indumathi	23	11	27.6	3.3	10	40.9	C	Pass
22	S.Harini	23	14	27.6	4.2	10	41.8	C	Pass
23	S.Gopika	20	28	24	8.4	10	42.4	C	Pass
24	A.Jenifer	24	11	28.8	3.3	8	40.1	C	Pass
25	V.Gayathri	24	10	28.8	3	9	40.8	C	Pass
26	A.Deepika	26	3	31.2	0.9	9	41.1	C	Pass
27	C.Kalpana	24	10	28.8	3	9	40.8	C	Pass
28	A.Abinaya	26	4	31.2	1.2	9	41.4	C	Pass
29	B.Aarthi	20	32	24	9.6	9	42.6	C	Pass
30	S.Harshitha	23	12	27.6	3.6	9	40.2	C	Pass
31	R.Deva Dharshini	17	37	20.4	11.1	10	41.5	C	Pass
32	B.Juvitha	21	19	25.2	5.7	10	40.9	C	Pass
33	C.Deepika	22	21	26.4	6.3	8	40.7	C	Pass
34	T.Brundha	24	8	28.8	2.4	9	40.2	C	Pass
35	S.Bavatharini	19	30	22.8	9	9	40.8	C	Pass
36	P.Dharshini	24	15	28.8	4.5	8	41.3	C	Pass
37	N.Janani Priya	23	20	27.6	6	7	40.6	C	Pass
38	N.Anna Lakshmi	23	25	27.6	7.5	6	41.1	C	Pass
39	R.Jenifer Velankanni	23	35	27.6	10.5	9	47.1	C	Pass
40	K.Kayalvizhi	20	40	24	12	9	45	C	Pass

41	D.Gayathri	22	20	26.4	6	9	41.4	C	Pass
42	B.Kalanithi	24	18	28.8	5.4	9	43.2	C	Pass
43	S.Dharshini	22	18	26.4	5.4	9	40.8	C	Pass
44	R.Kamatchi	18	31	21.6	9.3	10	40.9	C	Pass
45	K. Jayalakshmi	20	20	24	6	10	40	C	Pass
46	K.Puranija	20	26	24	7.8	10	41.8	C	Pass
47	R.Subikshapriya	20	28	24	8.4	10	42.4	C	Pass
48	S.Savarmathi	26	27	31.2	8.1	10	49.3	B-	Pass
49	G.Sangavi	18	29	21.6	8.7	10	40.3	C	Pass
50	R.Sona	25	29	30	8.7	10	48.7	C	Pass
51	D.Priyadarshini	21	18	25.2	5.4	10	40.6	C	Pass
52	A.S.Padma	19	29	22.8	8.7	10	41.5	C	Pass
53	P.Shobana	18	31	21.6	9.3	10	40.9	C	Pass
54	P.Saraswathi	21	18	25.2	5.4	10	40.6	C	Pass
55	K.Poornima	21	35	25.2	10.5	9	44.7	C	Pass
56	P.Sangeetha	25	26	30	7.8	8	45.8	C	Pass
57	D.Narmadha	24	13	28.8	3.9	8	40.7	C	Pass
58	N.Ruthra	23	30	27.6	9	9	45.6	C	Pass
59	M.L.Mubeenunisa	30	38	36	11.4	9	56.4	B-	Pass
60	B.Maha Lakshmi	23	30	27.6	9	9	45.6	C	Pass
61	M.Swetha	22	19	26.4	5.7	9	41.1	C	Pass
62	K.Yashini	25	26	30	7.8	7	44.8	C	Pass
63	K.Saraswathi	28	14	33.6	4.2	7	44.8	C	Pass
64	K.Yamuna Devi	21	22	25.2	6.6	9	40.8	C	Pass
65	B.Keerthika	25	11	30	3.3	8	41.3	C	Pass
66	T.Swathy	21	21	25.2	6.3	9	40.5	C	Pass
67	S.Srinithi	23	28	27.6	8.4	9	45	C	Pass
68	C.Pavithra	21	21	25.2	6.3	9	40.5	C	Pass
69	S.Subhasini	24	21	28.8	6.3	6	41.1	C	Pass
70	G.Swetha	27	19	32.4	5.7	8	46.1	C	Pass
71	R.Madhumitha	28	14	33.6	4.2	8	45.8	C	Pass
72	G.Sadhana	18	36	21.6	10.8	8	40.4	C	Pass
73	S.Rishvini	21	24	25.2	7.2	8	40.4	C	Pass
74	R.Shalini	22	17	26.4	5.1	9	40.5	C	Pass
75	S.Mangalam	20	25	24	7.5	9	40.5	C	Pass
76	R.Vaishnavi	21	24	25.2	7.2	9	41.4	C	Pass
77	Mu.Nithyashree	21	29	25.2	8.7	9	42.9	C	Pass
78	M.Parkavi	22	19	26.4	5.7	9	41.1	C	Pass
79	S.Priyadarshini	18	34	21.6	10.2	10	41.8	C	Pass
80	S.Priyadarshini	18	28	21.6	8.4	10	40	C	Pass
81	S.Priyadarshini	28	31	33.6	9.3	10	52.9	B-	Pass
82	K.Priya Ishwarya	15	40	18	12	10	40	C	Pass
83	T.Priyanka	18	35	21.6	10.5	9	41.1	C	Pass

84	T.Priyadarshini	18	36	21.6	10.8	9	41.4	C	Pass
85	Vishnupriya Muthukumaran	18	34	21.6	10.2	9	40.8	C	Pass
86	R.Keerthana	29	35	34.8	10.5	8	53.3	B-	Pass
87	R.Rajarajeshwari	24	9	28.8	2.7	9	40.5	C	Pass
88	M.Vishnu Priya	26	20	31.2	6	8	45.2	C	Pass
89	M.Monika	23	26	27.6	7.8	9	44.4	C	Pass
90	V.Prathina	21	27	25.2	8.1	9	42.3	C	Pass

Inlustro Learning Private Limited									
I BSc(IT)									
S.No	STUDENTS NAME	Mid/50	Final/100			Attendance	Total	Grade	
1	P.Jaya Bharathy	22	31	26.4	9.3	8	43.7	C	Pass
2	M.Joshini	21	20	25.2	6	9	40.2	C	Pass
3	S.Nandhana	22	23	26.4	6.9	8	41.3	C	Pass
4	R.Reshmi	21	24	25.2	7.2	9	41.4	C	Pass
5	R.Sowmiya	22	27	26.4	8.1	9	43.5	C	Pass
6	A.Thirisha	21	25	25.2	7.5	9	41.7	C	Pass
7	M.V.Sona	21	42	25.2	12.6	9	46.8	C	Pass
8	K.Ilakkiya	21	20	25.2	6	10	41.2	C	Pass
9	N.Poojashree	22	36	26.4	10.8	10	47.2	C	Pass
10	V.Prathiksha	30	33	36	9.9	8	53.9	B-	Pass
11	A.Revathi	30	16	36	4.8	9	49.8	B-	Pass
12	M.Kiruthika	22	22	26.4	6.6	9	42	C	Pass
13	N.Loshini	20	32	24	9.6	9	42.6	C	Pass
15	A.Krithika	25	16	30	4.8	8	42.8	C	Pass
16	S.Vaishali	35	32	42	9.6	8	59.6	B-	Pass

Inlustro Learning Private Limited									
I MSc(CS)									
S.No	STUDENTS NAME	Mid/50	Final/100			Attendance	Total	Grade	
1	J.Priyadarshini	25	9	30	2.7	8	40.7	C	Pass
2	R.Prammasri	32	35	38.4	10.5	9	57.9	B-	Pass
3	T.Sushma	23	14	27.6	4.2	9	40.8	C	Pass
4	V.Dharini	18	32	21.6	9.6	9	40.2	C	Pass
5	M.Shalini	20	25	24	7.5	9	40.5	C	Pass
6	V.Mahalakshmi	20	20	24	6	10	40	C	Pass
7	N.Nivethapriya	21	19	25.2	5.7	10	40.9	C	Pass
8	S.Yogeswari	23	20	27.6	6	8	41.6	C	Pass
9	S.Priyadarsini	21	25	25.2	7.5	8	40.7	C	Pass
10	D.Sindhu	23	19	27.6	5.7	8	41.3	C	Pass
11	S.Archana	21	25	25.2	7.5	8	40.7	C	Pass
12	B.Subalakshmi	21	18	25.2	5.4	9	39.6	C	Pass
13	E.Brindha	26	8	31.2	2.4	8	41.6	C	Pass
14	D.Sowmiya Lakshmi	24	12	28.8	3.6	8	40.4	C	Pass
15	R.Akshiya	22	16	26.4	4.8	8	39.2	C	Pass
16	V.Kaviya	18	35	21.6	10.5	8	40.1	C	Pass
17	N.Kavya	21	35	25.2	10.5	7	42.7	C	Pass
18	B.Bavadharini	22	35	26.4	10.5	7	43.9	C	Pass
19	K.Madhumitha	22	31	26.4	9.3	8	43.7	C	Pass
20	G.Poornima	21	20	25.2	6	9	40.2	C	Pass
21	K.Abarna	19	30	22.8	9	9	40.8	C	Pass
22	K.Ishwarya	19	31	22.8	9.3	10	42.1	C	Pass
23	K.Kanishka	27	3	32.4	0.9	10	43.3	C	Pass
24	S.Jananisri	26	37	31.2	11.1	10	52.3	B-	Pass
25	R.Susmitha	20	30	24	9	8	41	C	Pass
26	N.Mani Bharathi	25	35	30	10.5	8	48.5	C	Pass
27	S.Logeswari	24	28	28.8	8.4	8	45.2	C	Pass
28	D.Sophiya	28	27	33.6	8.1	9	50.7	B-	Pass
29	R.K.Jayasree	22	18	26.4	5.4	9	40.8	C	Pass
30	D.Aparna	24	10	28.8	3	9	40.8	C	Pass
31	M.Gokila	26	15	31.2	4.5	7	42.7	C	Pass
32	R.Harini	26	15	31.2	4.5	8	43.7	C	Pass

Inlustro Learning Private Limited									
I MSc(IT)									
S.No	STUDENTS NAME	Mid/50	Final/100			Attendance	Total	Grade	
1	S.Vaishnavi	22	19	26.4	5.7	8	40.1	C	Pass
2	H.Sneka	22	28	26.4	8.4	8	42.8	C	Pass
3	R.Sharumathi	23	28	27.6	8.4	8	44	C	Pass
4	K.Madhumeetha	18	35	21.6	10.5	8	40.1	C	Pass
5	S.Indhupriya	20	25	24	7.5	9	40.5	C	Pass
6	P.Durga	18	35	21.6	10.5	9	41.1	C	Pass
7	M.Abirami	20	29	24	8.7	9	41.7	C	Pass
8	R.Anusuya	20	22	24	6.6	9	39.6	C	Pass
9	V.Sneha	19	30	22.8	9	9	40.8	C	Pass
10	R.Kiruthiga	22	20	26.4	6	9	41.4	C	Pass
11	G.Nandhini	30	17	36	5.1	10	51.1	B-	Pass
12	R.Rajeswari	38	5	45.6	1.5	10	57.1	B-	Pass
13	J.Santhiya	18	26	21.6	7.8	10	39.4	C	Pass
14	P.Maanisha	38	22	45.6	6.6	10	62.2	B-	Pass
15	N.Varsha	32	5	38.4	1.5	8	47.9	C	Pass
16	A.Aruljayapriya	22	20	26.4	6	8	40.4	C	Pass

Inlustro Learning Private Limited									
I Msc Maths									
S.No	STUDENTS NAME	Mid/50	Final/100			Attendance	Total	Grade	
1	D.PRAVITHA	22	21	26.4	6.3	8	40.7	C	Pass
2	E.SHALINI	28	18	33.6	5.4	8	47	C	Pass
3	R.ARTHI	28	18	33.6	5.4	8	47	C	Pass
4	S.NIVETHA	31	18	37.2	5.4	8	50.6	B-	Pass
5	AGALYA	20	25	24	7.5	9	40.5	C	Pass
6	P.SUKRIYA	31	10	37.2	3	9	49.2	B-	Pass
7	S.DURGA DEVI	25	10	30	3	9	42	C	Pass
8	K.KESAVA PRIYA	20	22	24	6.6	9	39.6	C	Pass
9	S.NANDHINI	20	25	24	7.5	9	40.5	C	Pass
10	B.INDHUMUKHI	22	20	26.4	6	9	41.4	C	Pass
11	S.HEMA	19	30	22.8	9	10	41.8	C	Pass
12	M.PREETHI	15	40	18	12	10	40	C	Pass
13	A.KEERTHIKA	15	40	18	12	10	40	C	Pass
14	S.MANJU PRIYA	25	22	30	6.6	10	46.6	C	Pass
15	R.SWETHA	32	10	38.4	3	8	49.4	B-	Pass



Shiva Pawani



# CERTIFICATE

## OF COMPLETION



This Certifies that

# J.Priyadarshini

**I M.Sc(CS)** at **Indira Gandhi College**, has successfully completed the **Core Java** course  
(**July 2021** to **December 2021**)

A handwritten signature in black ink, likely belonging to Aditya Sambamoorthy.

**Aditya Sambamoorthy**

Founder & CEO

**InLustro**