

PROGRAMMING IN JAVA

Semester	Subject Code	Category	Lecture Hrs		Theory Hrs		Practical		Credits
			Per week	Per Sem	Per week	Per Sem	Per week	Per Sem	
VI		Core Theory-16	6	90	6	90	0	0	4

COURSE OBJECTIVE

- This paper helps us to understand the basic features of java programming, creating the packages of their own.
- This paper also helps to understand applet, graphics concepts in Java and code on their own.

COURSE OUTCOME

On successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level (K1-K4)
CO1	Able to understand the basics of OOP and Object oriented approach with programming primitives	K1,K2
CO2	Able to design and Implement programs using classes and objects, operator overloading and Inheritance	K1, K2, K3
CO3	Able to understand and design Package with Inter-Thread communication	K1, K2, K3
CO4	Able to Learn the Applet and AWT Concepts	K1, K2, K3
CO5	Able to create 2 dimensional Object and files.	K1, K2, K3

Knowledge Level – K1-Remember, K2- Understand, K3-Apply, K4-Analyze

MAPPING WITH PROGRAMME OUTCOME

COS	PO1	PO2	PO3	PO4	PO5	PO6
C01	M	M	M	M	L	L
C02	M	M	S	M	M	M
C03	S	S	S	S	M	S
C04	S	S	S	S	S	S
C05	S	S	S	S	S	S
<i>S-Strong</i>	<i>M-Medium</i>			<i>L-Low</i>		

SYLLABUS

UNIT I – Basics of OOP'S & JAVA

17 hrs

Object Oriented Concepts - Introduction to Java - Data Types - Variables - Arrays - Operators - Control Statements – Console I/O – Scanner – Class and Methods – Print () – Println () & Printf () methods.

UNIT II – Classes & Objects

19 hrs

Classes - Objects - Constructors - Overloading - Method - Access Control - Static data members fixed and methods - String Class - Inheritance - Overriding methods - Using super - Abstract class – Introduction to Java API Packages (Java. Lang, Java.util, Java. Math.

UNIT III – Packages And Thread

18 hrs

Packages - Access Protection - Importing Packages - Interfaces - Exception Handling - Throw and Throws - Thread -

Synchronization - Messaging - Runnable Interface - Interface -
Inter thread Communication -Multithreading.

UNIT IV – Applet & Awt Controls

19hrs

GUI Components – Simple GUI based I/O using J option
Panel – Overview of Swing Components – Introduction to Event
Handling with nested classes – GUI event types and Listener
Interfaces – JButton – JCheckBox, JRadioButton, JComboBox,
JList, MouseEvent handling, Adapter classes, JPanel - Key Event
handling – Layout Marques – Flow layout, Border Layout, Grid
Layout-JTextArea – Introduction to Applets.

UNIT V – Graphics and JAVA 2.1

17 hrs

Graphics and JAVA 2.1- Graphics Contexts and Graphic
Objects- Color and Font Control – Drawing Lines , Rectangles –
Using menus with Frames – File and Streams.

Distribution of Marks: Theory 80% and

Applications: 20% TEXT BOOKS:

S.N O	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1	Herbert Schildt	TheComplete reference JAVA 2	Tata MCGraw Hill	Second Edition - 1996
2	Deitel & Deitel	Java How to program	PHI	Second Edition – 2006

REFERENCE BOOK:

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1	C. Muthu	Programming in Java	TMH	Second Edition 2008

2	Cay S. Horstmann	Core java volume 1- Fundamentals	Prentice Hall	Eleventh Edition 2018
3	Herbert Schildt	Java: A Beginner's Guide	McGraw-Hill Education	Eighth Edition 2018
4	Kathy Sierra & Bert Bates	Head First Java 2e (A Brain Friendly Guide)	Shroff/O'Reilly	Second Edition 2005
5	Barry Burd	Beginning Programming with Java For Dummies	John Welly and son's	2012
6	Joshua Bloch	Effective Java	O'Reilly publishing	2017
7	Nathan Clark	Java: Programming Basicsfor Absolute Beginners	Kindle Edition	2018
8	Allen Downey and Chris Mayfield	Think Java: How to Think Like a Computer Scientist	Orally publishing	2016

WEB RESOURCES

1. <https://beginnersbook.com/java-tutorial-for-beginners-with-examples/>
2. <https://www.edureka.co/blog/java-tutorial/>
3. <https://www.javatpoint.com/java-programs>

TEACHING METHODOLOGY

- Class room teaching.
- Group discussions
- Simulation Model

- Smart Class room

SYLLABUS DESIGNER

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