

Unit / Item No.	Topic				Book Reference	No. of periods
Course Code	Course Title	Semester/ Regulation	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
20IT3T03	Java Programming	III (R20)	IT	6	2023-2024	07-08-2023

COURSE OUTCOMES

1	Know the concepts of OOP and orientation towards Java programming.
2	Apply the inheritance and packages in Java.
3	Implement the concepts of Exception handling and Multithreading.
4	Getting knowledge of I/O concepts and should be able to read and write data from and to File and Http Client.
5	Know the concepts and usage of Collection framework.

UNIT	Out Comes / Bloom's Level	Topics No.	Topics/ Activity	Text Book/ Reference	Contact Hour	Delivery Method
1	CO - 1	1.1	Introduction to Java: History, java features	T1,T2	1	Chalk & Board Power point presentations Assignment Test
		1.2	JDK, JRE, and JVM	T1,T2	1	
		1.3	Program structure, Creating and Executing a Java program	T1,T2	1	
		1.4	Java tokens, Variables, Arrays	T1,T2	1	
		1.5	Data types, Operators, Expressions	T1,R1	2	
		1.6	Control statements: Selection , Iterative and Jump Statements	T1,R1	1	
		1.7	Type conversion and casting	T1,R1	1	
		1.8	Classes and objects: Class declaration, creating objects, methods	T1,R1	1	
		1.9	Constructors: Types of constructors: Default and Parameterized constructors	T1,R1	1	

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Date of commencement of Semester			1.10	Overloading methods and constructors	T1,R1	1
7-08-2023			1.11	Garbage collection	T1,T2	1
			1.12	Access control	T1,T2	1
			1.13	static and this keywords	T1,T2	1
			1.14	Command line arguments,	T1,T2	1
			1.15	Nested classes	T1,T2	1
		Content beyond syllabus	1.16	Unicode System, Java Naming Convention	R2	1
from and to	Total				17	
	II	CO – 2	2.1	Inheritance: Extending a class, types of inheritance	T1,R2	2
			2.2	super keyword, final keyword	T1,R2	1
Delivery Method			2.3	overriding methods	T1,R2	1
			2.4	Abstract methods and classes	T1,R2	1
			2.5	Interfaces: Defining an interface, implementing interface	T1,R2	1
			2.6	Differences between classes and interfaces	T1,R2	1
			2.7	Variables in interface and extending interfaces	T1,R2	1
Chalk & Board			2.8	Packages: Java API packages	T1,R2	1
Power point presentations			2.9	Creating and importing packages	T1,R2	1
Assignment			2.10	Importance of CLASSPATH	T1,R2	1
Test	Content beyond syllabus	2.11	Wrapper classes in Java	R1	1	
	Total				12	
	III	CO – 3	3.1	Exception handling: Exception handling fundamentals	T1,R2	1
			3.2	exception hierarchy	T1,R2	1
			3.3	usage of try, catch, throw	T1,R2	1
			3.4	throws and finally keywords	T1,R2	1
			3.5	built-in and user defined exceptions	T1,R2	1
			3.6	Multithreading:	T1,R2	1
					Chalk & Board	

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			Introduction			Power point presentations Assignment Test
		3.7	Differences between multi-threading and multitasking	T1,R2	1	
		3.8	Creating Threads	T1,R2	1	
		3.9	thread life cycle	T1,T2	1	
		3.10	thread methods, thread priorities	T1,T2	1	
		3.11	thread exceptions, thread synchronization	T1,R2	1	
		3.12	Inter thread communication	T1,T2	1	
		3.13	Daemon threads	T1,T2	1	
Content beyond syllabus		3.14	Exception Handling with Method Overriding in Java	R2	1	
Total				14		
IV	CO – 4	4.1	Input / Output Streams: Introduction to java I/O	T1,R2	1	Chalk & Board Power point presentations Assignment Test
		4.2	Streams	T1,R2	1	
		4.3	Buffered Streams	T1,R2	1	
		4.4	Readers	T1,R2	1	
		4.5	Reading data from files	T1,R2	1	
		4.6	Writing data to files	T1,R2	1	
		4.7	Http Client	T1,R2	1	
		4.8	Pipelines	T1,R2	1	
Content beyond syllabus		4.9	Java Push back Input Stream Class	R3	1	
Total				9		
CO-5		5.1	Collection Framework: Lists	T1,T2	1	Chalk & Board Power point presentations Assignment Test
		5.2	Array List & Linked List	T1,T2	1	
		5.3	Sets – Hash Set & Tree Set	T1,T2	1	
		5.4	Maps – Hash Map & Tree Map	T1,T2	1	
		5.5	Queue	T1,T2	1	
		5.6	Stack	T1,T2	1	
		5.7	Iterator – List Iterator	T1,T2	1	
		5.8	Lambda Expressions	T1,T2	1	
		5.9	Strings: Strings in java	T1,T2	1	
		5.10	Creation of a String and String handling methods	T1,T2	1	
		5.11	String Builder	T1,T2	1	
		5.12	String Buffer	T1,T2	1	
Total				12		
CUMULATIVE PROPOSED PERIODS				64		

TEACHING PLAN

Name of Staff Member : R. Uma Aruna Devi

Department : IT Course & Branch B.Tech & CSE-BS

Semester : III Section - Subject Java Programming Code 20IT3T03

With effect from 7/8/23 Last working day 20/11/23

No. of Weeks 10 No. of Classes 72

Text Books:

S.No	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION
1	Herbert Schildt: "Java The complete reference", 11th Edition, Tata McGraw Hill, 2019.
2	E.Balaguruswamy: "Programming with Java A Primer", 5th Edition, Tata McGraw Hill, 2017.

Reference Books:

S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION
1	Saurabh Chaudhary and Sachin Malhotra, Programming in Java by, revised 2nd edition, Oxford, 2018.
2	Dietal, Java: How to Program, 8/e, PHI, 2018.
3	Dr. R. Nageswara Rao, Wiley, Core JAVA: An integrated approach, Dream Tech, 2016

Web Details:

1	https://java.meritcampus.com/core-java-topics
2	https://www.geeksforgeeks.org/java/
3	https://www.javatpoint.com/java-tutorial
4	https://beginnersbook.com/java-tutorial-for-beginners-with-examples/

	Name	Signature with Date
i. Faculty	Mrs. R. Uma Aruna Devi	<u>R. Uma Aruna Devi</u> 7/8/23
ii. Module Coordinator	Mr. K.Raja	<u>K. Raja</u>
iii. Programme Coordinator	Dr. RVVSV Prasad	<u>Dr. RVVSV Prasad</u>

Principal