

SWARNANDHRA

COLLEGE OF ENGINEERING & TECHNOLOGY

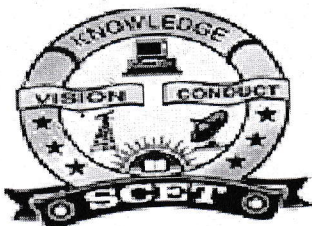
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DEPARTMENT OF INFORMATION TECHNOLOGY

TEACHING PLAN

Course Code	Course Title	Semester/Regulation	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
	Java Programming	III (R20)	IT	6	2021-2022	25-10-2021
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
I	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	1	
		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	
		1.10	Overloading methods and constructors	T1,R1	1	



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		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	
		1.16	Unicode System, Java Naming Convention	R2	1	
Content beyond syllabus				Total	16	
II	CO – 2	2.1	Inheritance: Extending a class, types of inheritance	T1,R2	1	Chalk & Board Power point presentations Assignment Test
		2.2	super keyword, final keyword	T1,R2	1	
		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	
		2.8	Packages: Java API packages	T1,R2	1	
		2.9	Creating and importing packages	T1,R2	1	
		2.10	Importance of CLASSPATH	T1,R2	1	
	Content beyond syllabus	2.11	Wrapper classes in Java	R1	1	
				Total	11	
III	CO – 3	3.1	Exception handling: Exception handling fundamentals	T1,R2	1	Chalk & Board Power point presentations Assignment
		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: Introduction	T1,R2	1	
		3.7	Differences between multi-threading and	T1,R2	1	



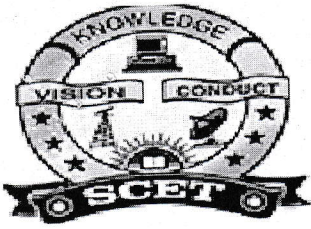
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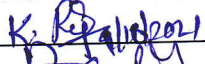

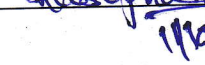
			multitasking			
		3.8	Creating Threads	T1,R2	1	Test
		3.9	thread life cycle	T1,T2	1	
		3.10	thread methods, thread priorities	T1,T2	1	
		3.11	thread exceptions, thread synchronization	T1,R2	1	
		3.12	Inter thread communication	T1,T2	1	
		3.13	Daemon threads	T1,T2	1	
Content beyond syllabus		3.14	Exception 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
		4.2	Streams	T1,R2	1	
		4.3	Buffered Streams	T1,R2	1	Power point presentations
		4.4	Readers	T1,R2	1	
		4.5	Reading data from files	T1,R2	1	
		4.6	Writing data to files	T1,R2	1	Assignment
		4.7	Http Client	T1,R2	1	
		4.8	Pipelines	T1,R2	1	Test
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
		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	Power point presentations
		5.6	Stack	T1,T2	1	
		5.7	Iterator – List Iterator	T1,T2	1	
		5.8	Lambda Expressions	T1,T2	1	Assignment
		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	Test
Total					12	




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CUMULATIVE PROPOSED PERIODS		62
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	Programming in Java by Saurabh Chaudhary and Sachin Malhotra, revised 2nd edition, Oxford, 2018.	
2	Java: How to Program, 8/e, Dietal, Dietal, PHI, 2018.	
3	Core JAVA: An integrated approach, Dr. R. Nageswara Rao, Wiley, 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	Mr. K.Raja	
ii. Module Coordinator	Mr. CH. R K Raju	
iii. Programme Coordinator	Dr. RVVSV Prasad	

11/12/21

Principal