

Branch Name:	IMCA
Program Code:	CS301
Course Name:	Fundamental of Java Programming Practical
Course Code:	1CS3010401P
Pre-requisite Course:	Basic Knowledge of Object Oriented Programming

Course Objective:

The objectives of the course are to:

1. Get a better understanding of the concepts of Object-Oriented Programming Language and use of Java.
2. Aare of Core Java concepts. Students are expected to learn various terminologies related to Java Programming such as JVM, JDK, constructor, inheritance, interfaces, package, exception handling, etc.
3. Gets a good understanding of developing multithreaded applications using Java Programming Language.

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture	Tutorial	Practical	Credit	Theory		Practical		Total
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
-	-	3	3	-	-	25	25	50

Inductive Practical List:

1. Write a Java Program find the area of circle.
2. Write a Java Program that will display factorial of the given number.
3. Write a Java Program that will find the largest no from the given two nos.
4. Write a Java Program that shows the use of switch Statement.
5. Write a Java Program to find the sum of the digits of given number.
6. Write a Java Program that check whether the given no is prime or not.
7. Write a Java Program that implements the use of break statement.
8. Write a Java Program that implements the use of continue statement.
9. Write a Java Program that will accept Command -line Arguments and display the same.
10. Write a Java Program to sort the elements of an array in Ascending Order.
11. Write a Java Program to create a Student class and generate result of student (Total, Per, Grade).
12. Write a Java Program to create an Employee class and generate Salary Slip for the employee.
13. Write a java program which shows the use of Methods Overloading.
14. Write a java program which implements the all Constructors.
15. Write a java program which explains the concept of Single, Multilevel & Hierarchical Inheritance.
16. Write a Java Program to implement final class and final method.
17. Write a Java Program to implement abstract class and abstract method.
18. Write a java program which shows importing of classes from other packages.
19. Write a Java Program to implement the methods of all Class.
20. Write a Java Program which will read a text and count all occurrences of a particular word.
21. Write a Java Program which will read a string and rewrite it in the alphabetical Order. The word "STRING" should be written a "GINRST".
22. Write a java program which creates threads using the Thread Class.
23. Write a java program which shows the use of yield(), stop() and sleep() Methods.
24. Write a java program which shows the Priority in Threads.
25. Write a java program which uses try and catch for Exception Handling.
26. Write a java program which uses finally Statement.
27. Write a java program which uses Nested try Statements.

Text Books:

1. Programming with JAVA By E Balagurusamy, Tata McGraw Hill.
2. Head First Java: A Brain-Friendly Guide (2nd Edition)
3. The Complete Reference JAVA 2, 4th Edition, TMH Publication
4. Beginning JAVA 2 (JDK1.3 Edition), Ivor Horton, WROX Public.

References Books:

1. Teach Yourself JAVA, Josheph O'Neil & Herb Schildt, Tata McGraw Hill.
2. JAVA 2 UNLEASHED, Tech Media Publications.
3. AVA 2(1.3) API Documentations.
4. Programming with JAVA: A printer, Balagurusamy, 2nd Edition, Tata McGraw Hill.

List of Open-Source Software/learning website:

1. <http://williamstallings.com/ComputerOrganization>
2. <https://www.pearsonhighered.com/cs-resources/products/product.html#product,isbn=0132916525>
3. <https://www.codecademy.com>
4. <https://www.geeksforgeeks.org>
5. <https://www.programiz.com/java-programming>

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	To solve a problem in Core Java using object oriented programming.	1 Remembering 2. Understanding 6 Creating
CLO2	To have fundamental knowledge of the Java programming language.	1 Remembering 2. Understanding 6. Creating
CLO3	To understand the basic syntax/terminology used in the Java programming language.	1 Remembering 2. Understanding 6. Creati
CLO4	To write, compile and interpret Java programs.	3. Applying, 6. Creating
CLO5	Apply the concepts of Multithreading and Exception handling to develop efficient and error free code	6. Creating, 5. Evaluate 3. Applying 4. Analyze
CLO6	Develop reusable programs using the concepts of inheritance, Polymorphism, interfaces and packages.	6. Creating, 5. Evaluate 3. Applying 4. Analyze

Mapping of CLOs with Pos & PSOs

Course Learning Outcomes	Program Outcomes(POs)												Program Specific Outcomes(PSOs)	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CLO1	L	L		M		L		L	M		L		M	
CLO2		M	H		M		M		M	L				M
CLO3	M		M	M		L		L		M		M	H	
CLO4	M		H		M				M		L		L	
CLO5		M		H	H	H		M		M		L		L
CLO6	M		H		H	H		H			M		M	

H:High, M:Medium, L:Low