PVP20

PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY

(Autonomous)

KANURU, VIJAYAWADA-520007

II B. Tech – I Sem CSE (AI&ML)

Object Oriented Programming through JAVA Lab

Course Code	20AM3351	**Year**	II	**Semester:**	I
Course Category	PCC Lab	**Branch**	CSE (AI&ML)	**Course Type**	Practical
Credits	1.5	**L-T-P**	0-0-3	**Prerequisites**	Programming for Problem Solving using C
Continuous Internal Evaluation	15	**Semester End Examination**	35	**Total Marks**	50

Course Outcomes		
Upon successful completion of the course, the student will be able to:		
CO1	Apply object-oriented principles/ Java constructs for solving problems.	**L3**
CO2	Implement programs as an individual on different IDEs/ online platforms.	**L3**
CO3	Develop an effective report based on various programs implemented.	**L3**
CO4	Apply technical knowledge for a given problem and express it with effective oral communication.	**L3**
CO5	Analyze outputs using given constraints/test cases.	**L4**

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations(3: Substantial, 2: Moderate, 1:Slight)

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**
CO1													3	
CO2					2				2					
CO3										3				
CO4										2				
CO5		1												

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Syllabus		
Expt. No.	**Contents**	**Mapped CO**
1	Implement the concept of classes and objects.	**CO1,CO2,CO3,CO4,CO5**
2	Use String and String Tokenizer classes to develop Java programs.	**CO1,CO2,CO3,CO4,CO5**
3	Implement the reusability concept through inheritance.	**CO1,CO2,CO3,CO4,CO5**
4	Implement the concept of Polymorphism.	**CO1,CO2,CO3,CO4,CO5**
5	Develop Java programs using Abstract Class.	**CO1,CO2,CO3,CO4,CO5**
6	Use interfaces to develop Java programs.	**CO1,CO2,CO3,CO4,CO5**
7	Create a package and access members from a package.	**CO1,CO2,CO3,CO4,CO5**
8	Apply Exception handling to build robust programs.	**CO1,CO2,CO3,CO4,CO5**
9	Apply Multithreading to run the task parallel	**CO1,CO2,CO3,CO4,CO5**
10	Apply Collection Framework to implement various data structures	**CO1,CO2,CO3,CO4,CO5**
11	Use Case -1	**CO1,CO2,CO3,CO4,CO5**
12	Use Case -2	**CO1,CO2,CO3,CO4,CO5**
13	Use Case-3	**CO1,CO2,CO3,CO4,CO5**
14	Use Case-4	**CO1,CO2,CO3,CO4,CO5**

Learning Resources
Text Books
1. Java - The Complete Reference, Herbert Schildt, Ninth Edition, 2014, McGraw -Hill.
References
1. Programming in Java, Sachin Malhotra, Saurabh Choudhary, Second Edition, 2018, Oxford. 2. Head First Java, Bert Bates, Kathy Sierra, Second Edition, 2005, O'Reilly. 3. Core Java an Integrated Approach, Dr. R. Nageswara Rao, 2017, Dreamtech. 4. Object Oriented Programming through Java, P. Radha Krishna, 2007, Universities Press.
e- Resources and other Digital Material
1. https://nptel.ac.in/courses/106/105/106105191/ 2. https://www.udemy.com/course/java-tutorial/ 3. https://www.decodejava.com/ 4. https://www.codecademy.com/learn/learn-java 5. https://www.w3schools.com/java/