

GANPAT UNIVERSITY

				FA(CULTY	OFC	COMPUT	ER APPL	ICATIO	NS						
Progra	nmme		IT (Inf ices) (He		cture M	Ianage	ment	Branch/Spec.			Computer Applications					
Semest	ter	IV	IV							1.0.0	1.0.0.0					
Effective from Academic Year 2025-26							Effective for the batch Admitted in Jun					June 2024				
Subject Code U44B3IJP Subject					ect Na	me	Introduction to Java Programming									
		Tea	aching s	schem	ie				Exami	nation sc	heme (M	arks)				
(Per week)			Lecture Pra		ctical (Lab.)		Total			CE	S	EE	Total			
		L	TU	P		TW										
Credit	Credit			2		- 4		Theory		50		50	100			
Hours			_	4		- 6										
Object	ive:	2														
Students	can und	erstand	the cond	cepts o	of Obje	ct-Orie	ented Prog	gramming (OOP) and	effective	ely apply	them in	Java.			
Pre-re	quisites:								<u> </u>							
	_	of C pro	ogramm	ing co	oncepts	such a	ıs variable	es, data type	es, operato	ors, and c	ontrol str	uctures.				
~	0. /															
Name o	e Outcon		anintia													
CO1	or CO		erstand (-Orient	ed Proc	rammino	Concents								
CO2			Understand Object-Oriented Programming Concepts. Understand and Apply Selection Statements and Iteration Statements.													
CO3			Learn to define and call methods, Implement constructor overloading and various access modifiers.													
CO4			Develop the ability to manipulate and access array elements, String class, Vector class and Interface													
Mappi	ng of CO															
COs	PO1	PO2	PC	03	PO4	PO5	5 PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	1	2	3		0	3	1	1	3	3	2	2	1			
CO2	2	2	3		1	3	1	2	2	2	2	2	1			
CO3	1	2	3		2	3	1	2	3	3	3	2	1			
CO4	1	1	3		2	3	1	2	2	2	0	2	1			
	y Syllabı	IS														
Unit							Con						Hrs.			
1	Introd Progra Basic o Dynan Data t	uction (m Struct of JAVA nic Bind ypes an	to JAVA ture. A: Objecting. d Varia	A: His et and ables:	tory of Class, Tokens	Java, S Data A	Abstraction	ures, JDK, l n and Encap entifier, Lite	osulation,	Inheritan	ice, Polyn	_	10 m			

2	Decision Making, Branching and Looping: Selection Statement: if – else, nested if-else, else if ladder, switch Statements, Iteration statements: while, dowhile, for Statements, Jump Statements: break, continue.	4					
3	Introduction to Class, Method and Object: Creating class and Methods: Defining Classes, Creating Objects, Defining Methods, Calling Methods, Method Parameters, Method overloading. Constructors: Introduction, Default & Parameterized Constructors, Constructor Overloading. Inheritance: Introduction, Single, Multilevel, Hierarchical Inheritance. Method Overriding, final Variable, final Methods & final Class, abstract Methods and Abstract Class. Access Modifiers (Visibility Controls): public, private, default, protected. Array, String, Vectors, Interfaces: Array: Creating and initializing array, Two-dimensional array, String: Java. lang Package classes (Math, String), Vectors: Vector methods, Interfaces: Defining an Interfaces, Implementing Interfaces, multiple inheritance.						
4							
Text	Books:						
1	Programming with Java by E. Balagurusamy, Tata McGraw Hill Publication.						
Refer	rence Books:						
1	Programming java by Sachin Malhotra & Saurabh Chaudhary, Oxford Publication.						
2	Head first java by Kathy Sierra & Bert Bates, O'Reilly.						
3	Effective Java by Joshua Bloch, Devs needing a perspective shift., Pearson Education						
Web	References / MOOC / Certification Course:						
1	https://onlinecourses.swayam2.ac.in/aic20_sp13/preview						
2	https://www.coursera.org/learn/fundamentals-of-java-programming						
3	https://onlinecourses.nptel.ac.in/noc24_cs105/preview						
4	https://www.shiksha.com/online-courses/java-course-swayl24						
Ques	tion Paper Scheme:						
	University Examination Duration:2Hours Note for Examiner: Q-1 Must be common from any topics from the syllabus.						
	Q-2 And onwards must be from specific topics and internal choice or option can be given.						
	Paper Structure: Q-1 Must be from all Unit Any Five out of seven (25 Marks) (CO1, CO2, CO3, CO4) Q-2 Must be from Unit 1: Any Two out of Three (06 Marks) CO1 Q-3 Must be from Unit 2: Only one question without any option (05 Marks) CO2 Q-4 Must be from Unit 3: Any Two out of Three (08 Marks) CO3 Q-5 Must be from Unit 4: Any Two out of Three (06 Marks) CO4						