Enrolment No. /Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA – SEMESTER I- EXAMINATION –SUMMER-2025

Subject Code: MC01094041   **Date: 06/06/2025**
Subject Name: Object Oriented Programming using JAVA
Time:10:30 AM TO 01:00 PM   **Total Marks: 70**
Instructions:

    1. Attempt all questions.
    2. Make Suitable assumptions wherever necessary.
    3. Figures to the right indicate full marks.
    4. Use of simple calculators and non-programmable scientific calculators are permitted

Q.1	**(a)**	What are the buzzwords of java? List and explain them.	**07**
	(b)	What are different types of loops available in java? List and explain them.	**07**
Q.2	**(a)**	i) What is variable length arguments? Explain.	**03**
		ii) What is use of this and super keywords?	**04**
	(b)	What is constructor? What is use of constructor? Discuss different types of constructors.	**07**
		OR	
	(b)	What is method overloading? Explain with a suitable example.	**07**
Q.3	**(a)**	(i) What do you mean by static and non-static members of a class?	**04**
		(ii) What is auto boxing and auto-unboxing? Explain.	**03**
	(b)	What is inheritance? How it can be useful? Explain with a suitable example.	**07**
		OR	
Q.3	**(a)**	(i) What is use of static block? Explain with code.	**04**
		(ii) Explain different uses of final keyword.	**03**
	(b)	What is abstract class and abstract methods? Explain with suitable example.	**07**
Q.4	**(a)**	What is package? How it is useful? How can we create and use a package?	**07**
	(b)	How can we achieve multiple inheritance in java? Explain with a suitable example.	**07**
		OR	
Q.4	**(a)**	What is exception? How can we handle a runtime error in java? Explain with a suitable example.	**07**
	(b)	i) Differentiate : String and StringBuffer.	**03**
		ii) Discuss Set and List interface.	**04**
Q.5	**(a)**	What is thread? What are different ways to create a thread in java? Explain any one with example.	**07**
	(b)	Write a java program to copy contents of one file to another. Input name of files from command line.	**07**
		OR	
Q.5	**(a)**	What is Byte stream? What is use of InputSteam and OutputStream classes? Also discuss its methods.	**07**
	(b)	What is Generic class? How can we define Generic class in java? Explain with an example.	**07**

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