GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED – SEMESTER III- EXAMINATION –SUMMER-2025

Subject Code: 2638601   **Date: 13/06/2025**
Subject Name: Object Oriented Programming in JAVA
Time:02:30 PM TO 05:00 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)**	Answer the following questions.	**07**
		1. What is Bytecode?	
		2. Why Java is called portable?	
		3. What is static import in Java?	
		4. List out all Java data types.	
		5. What is Literals in Java?	
		6. What is automatic type conversion?	
		7. How to declare two dimensional array variable in Java?	
	(b)	Discuss all selection statements of Java in detail.	**07**
Q.2	**(a)**	Explain different Arithmetic Operators of Java? Also discuss the operator precedence.	**07**
	(b)	Write a Java program that takes the integer number from command line argument and give the output whether given number is prime or composite.	**07**
		OR	
	(b)	What is method overloading? Explain with example.	**07**
Q.3	**(a)**	What is constructor? Explain the importance of constructor in Java.	**07**
	(b)	How to define Package? What is the use CLASSPATH environmental variable?	**07**
		OR	
Q.3	**(a)**	Explain the concept of Inner Classes in Java.	**07**
	(b)	Discuss abstract class in detail. Also discuss the use of 'final' keyword in Java.	**07**
Q.4	**(a)**	What is an Exception? Give the difference between Checked and Unchecked exceptions using example.	**07**
	(b)	Explain all important methods of String class? How the String Buffer is different than String class.	**07**
		OR	
Q.4	**(a)**	Explain any seven methods of the List interface.	**07**
	(b)	What is an Interface? How to define Interface? Explain with example.	**07**
Q.5	**(a)**	Give the constructors of Hashtable. Explain working of Hashtable using example.	**07**
	(b)	How can you create the thread? Explain the important methods of thread class in detail.	**07**
		OR	
Q.5	**(a)**	What is Byte Streams? Write a program for reading any file using FileInputStream.	**07**
	(b)	Discuss how to override methods in a Generic Class with example.	**07**

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