

Enrollment No./Seat No.:

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA INTEGRATED - SEMESTER - III EXAMINATION - WINTER 2025**

**Subject Code: 2638601**

**Date: 28-11-2025**

**Subject Name: Object Oriented Programming in 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.**

	<b>Marks</b>
<b>Q.1 (a)</b> 1.Method Overriding is the example of -----polymorphism. 2.the keyword -----is used to create class from interface. 3.String is an immutable object in java. (T/F) 4.What is the use of printStackTrace() method 5.sub class of abstracr class is called-----. 6.-----method is used to convert an ArrayList to an array. 7. what is the use of intValue() method.	<b>07</b>
<b>(b)</b> Explain Initialize block and static initialize block with example.	<b>07</b>
<b>Q.2 (a)</b> Difference between static and instance variable with example.	<b>07</b>
<b>(b)</b> What is Exception? explain runtime exception with example.	<b>07</b>
<b>OR</b>	
<b>(b)</b> What is Polymorphism? Explain Method overloading with example..	<b>07</b>
<b>Q.3 (a)</b> Explain String, StringBuffer? Also explain its method.	<b>07</b>
<b>(b)</b> What is an interface? How it is important in Java? Explain with example.	<b>07</b>
<b>OR</b>	
<b>(a)</b> What is Package? Explain the uses of the keywords "package" and "import".	<b>07</b>
<b>(b)</b> What is framework? Explain List and set interface with example.	<b>07</b>
<b>Q.4 (a)</b> Explain character stream classes in java.io.	<b>07</b>
<b>(b)</b> What are Wrapper classes? Explain boxing and unboxing.	<b>07</b>
<b>OR</b>	
<b>(a)</b> Explain method overriding with appropriate example.	<b>07</b>
<b>(b)</b> Write a java program to implement multiple inheritance. Also explain the concept implemented.	<b>07</b>
<b>Q.5 (a)</b> What is Thread? Write example to create multiple thread in Java.	<b>07</b>
<b>(b)</b> What is Generic class? How to create generic class and generic method.	<b>07</b>

**OR**

- (a) Write a java program that will write 10 numbers in text file and also read from that file to print that 10 numbers on the screen using byte stream based classes. **07**
- (b) What is inner class? How can outer class reference be accessed inside inner class? Write the use of inner class using suitable example. **07**

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