

Enrolment No. /Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA – SEMESTER I- EXAMINATION –WINTER-2024

Subject Code: 619402

Date: 09/01/2025

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.

- Q.1 (a)** Do as directed. **07**
- i) Define bytecodes.
 - ii) What is use of super keyword?
 - iii) Java supports multilevel inheritance.(True/False)
 - iv) We can have more than one public class in a single java file.(True/False)
 - v) _____ keyword is used to define a constant in java.
 - vi) We can't instantiate _____ class.
 - vii) _____ is a ternary operator in java.
- (b)** What do you mean by platform independent? Is java platform independent? **07**
Justify your answer.
- Q.2 (a)** What are conditional statements available in java? List and explain. **07**
- (b)** List and explain different operators available in java. **07**
- OR**
- (b)** What is method overloading? Explain with a suitable example. **07**
- Q.3 (a)** What is inheritance? What is its use? What are the different types of inheritance in java? **07**
- (b)** What is use of a package? How can we create package in java? **07**
- OR**
- Q.3 (a)** What is method overriding? Explain with a suitable example. **07**
- (b)** What is constructor? What is use of constructor? Explain with a suitable example. **07**
- Q.4 (a)** What is exception? How can we handle exceptions in java? **07**
- (b)** What is collection framework? Explain any 2 classes of collection framework. **07**
- OR**
- Q.4 (a)** What is custom exception? How can we create and use custom exception? **07**
- (b)** What is thread? How can we create thread in java? **07**
- Q.5 (a)** What is thread synchronization? How can we synchronize thread in java? **07**
- (b)** What is use of FileInputStream and FileOutputStream classes? Explain with code snippet. **07**
- OR**
- Q.5 (a)** What is use of InputStream and OutputStream classes? Also discuss its methods. **07**
- (b)** What is wrapper class? What is autoboxing and autounboxing in java? When it happens? Explain with code snippet. **07**
