

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
Bachelor of Vocation - SEMESTER - II EXAMINATION - WINTER 2025

Subject Code: 1120503

Date: 01-12-2025

Subject Name: OOPs with Java

Time: 02:30 PM to 04:30 PM

Total Marks: 50

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.**

| | Marks |
|--|--------------|
| Q.1 (a) What is OOP? Explain concepts of OOP. | 05 |
| (b) Write and explain features of Java. | 05 |
| Q.2 (a) What is Package? Explain with example. | 05 |
| (b) Explain Wrapper class with example. | 05 |
| OR | |
| (b) Explain Vector class in Java. | 05 |
| Q.3 (a) Explain life cycle of an applet. | 05 |
| (b) What is inheritance? List out types of Inheritance and explain any one in detail. | 05 |
| OR | |
| (a) Explain abstract class and abstract method in java with example. | 05 |
| (b) Explain hiding a class in java package with example. | 05 |
| Q.4 (a) Explain thread life cycle in Java. | 05 |
| (b) Explain Method overloading in java with example. | 05 |
| OR | |
| (a) How do you define and implement constructors in a Java class? | 05 |
| (b) What are the techniques to stop or block a thread in Java, and how do they work? | 05 |
| Q.5 (a) Explain local and remote applets in java with example. | 05 |
| (b) Write a program that executes two threads. One thread displays "Thread1" every 2000 milliseconds, and the other displays "Thread2" every 4000 milliseconds. Create the threads by extending the Thread class. | 05 |
| OR | |
| (a) Explain Nesting of Methods in Java with example. | 05 |
| (b) Write a program in Java to demonstrate use of this keyword. Check whether this can access the private members of the class or not. | 05 |
