GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING FOR WOMEN
(Autonomous)
(Affiliated to Andhra University, Visakhapatnam)
II B.Tech. - I Semester Regular Examinations, Nov – 2025
Object Oriented Programming through Java
[Common to CSE, CSE (AI&ML), IT]
1. All questions carry equal marks
2. Must answer all parts of the question at one place

Time: 3Hrs.   **Max Marks: 70**

UNIT-I

1. a. Describe the Key Java Buzzwords and Explain Their Significance.
   b. Write a Java Program that Demonstrates the Use of Arrays and Loops
   OR
2. a. Explain the Concept of Method Overloading and Method Overriding with Code Examples.
   b. What is the Role of Constructors in Java? Explain with an Example.

UNIT-II

3. a. Define String Handling in Java? Explain with examples
   b. Explain Inheritance in Java. How does the super keyword work
   OR
4. a. Discuss Abstract Classes and the Use of final Keyword in Inheritance. Give examples.
   b. Explain Packages and Interfaces in Java. How are they used and imported? Give examples

UNIT-III

5. a. Explain the fundamentals of Exception Handling in Java. What are the types of exceptions
   b. What is Synchronization in Java? Explain inter-thread communication using wait()&notify().
   OR
6. a. Describe the use of try, catch, throw, throws, and finally keywords with suitable examples
   b. Explain Thread States and Thread Priorities in Java with an example

UNIT-IV

7. a. Explain how to handle Mouse and Keyboard events in Java with examples
   b. Describe the <applet> tag and its attributes with an example
   OR
8. a. Explain the lifecycle of an Applet with a neat diagram and example.
   b. Explain AWT Controls and Layout Managers in Java.

UNIT-V

9. a. Describe the steps to connect a Java program with a MySQL database using JDBC.
   b. What are the main classes in the java.io package? Explain their uses.
   OR
10. a. What is Serialization in Java? Explain its process with an example program
    b. What are CRUD operations in JDBC? Explain each with SQL and Java code examples