Session: 2023-24   **Semester: 4th**   **Section: A, B, C**

Course Code: BCS 403   **Course Name: <u>Object Oriented Programming with Java</u>**

<u>Assignment 4</u>

Date of Assignment: 22/06/2024   **Date of submission: 28/06/2024**

S. No.	Question	KL, CO
1.	What is a Collection in Java? What is the Java Collections Framework? Explain the hierarchy of the Java Collections Framework. What are the advantages of using the Java Collections Framework?	K2, CO4
2.	Write a program to demonstrate the use of various collection types (List, Set, and Map).	K2, CO4
3.	What is an Iterator in Java? How does the Iterator interface work? Write a program to iterate over an ArrayList using an Iterator. Explain the advantages of using an Iterator over traditional for-loop or enhanced for-loop.	K2, CO4
4.	What are the sorting algorithms used in Java Collections Framework? Explain the Comparable and Comparator interfaces in Java.	K2, CO4
5.	Write a program to demonstrate the use of the Properties class for loading and storing properties.	K2, CO4