

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

B.Sc.DS - END SEMESTER EXAMINATIONS - NOV'2024

SEMESTER - II

22UDSCT2002 - Java and Data Structures

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Sketch the control statements in Java.
2. Explain Arithmetic operator with example program.
3. Predict the benefits of packages.
4. Write a java program using multi thread concept.
5. Classify the Exception Handling Techniques.
6. Discriminate Abstract Data Types in data structure.
7. Compute the postfix expression for the following:
 - (i) $(A + B) * (C + D)$
 - (ii) $A * B + C * D$
 - (iii) $(p+q) / (p - q) - (r - s)$
8. Distinguish between Depth First Search and Breadth First Search Traversal in Graph.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Illustrate the Object Oriented Concept.
10. Apply method overloading technique to create a Java program to multiplying numbers in the following type
 - (i) int, int,
 - (ii) int, int, int,
 - (iii) float, float, float,
 - (iv) double, double
11. Examine the Applet Life cycle with example program.
12. Judge the insertion, deletion, peek, full and empty operations performance in Stack and Queue data structure.
13. Design preorder, inorder, postorder traversal in binary tree with example.
