

**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. END SEMESTER EXAMINATIONS NOVEMBER-2022

SEMESTER - V

20UACT5009 - Programming in Java

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

1. A cloth shop during festival seasons offers a discount of 12% on all purchases made in that shop. The bill amount for a customer is given as Rs.750.5. Write a program to calculate the discount, amount after discount and print it out.
2. Illustrate the representation of 2 dimensional array
3. Elucidate the different forms of inheritance? Explain.
4. Differentiate Method Overloading and Method Overriding.
5. Explain the concept of exceptions and how they are handled with suitable example.
6. What is multithreading and what are the methods for inter-thread communication?
7. What is the difference between byte streams and character streams? How are they used to capture input from the user?
8. Describe the different types of JDBC drivers.

Section B

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

9. Discuss various object oriented concepts in detail.
10. Demonstrate a Java program for Employee class with the following Data members, Employee ID, Employee name, Basic, DA, PF, and NetSalary and two methods to accept and display all the members.
(Note: Netsalary=Basic+DA-PF)
11. Formulate the concept of Interface. Explain the implementation of interface and its advantages.
12. Classify the different AWT controls.
13. Demonstrate a Java program to connect java application with student database.
