

Roll.No.

23UCSCT4005

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.Computer Science - END SEMESTER EXAMINATIONS - NOVEMBER 2025  
SEMESTER - IV

**23UCSCT4005 - Programming in Java**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

### Section B

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

1. Explicate the different data types and operators used in Java.
2. Interpret the concept of inheritance in Java with an example.
3. Envisage the concept of packages and interfaces in Java.
4. Illustrate the concepts of serialization and deserialization with an example program.
5. Classify the graphics programming in Java applets.
6. Interpret the exception handling mechanisms in Java with suitable examples.
7. Describe the concept of byte and character streams in Java.
8. Examine the methods of the Graphics class used to draw different shapes.

### Section C

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

9. Describe the structure and execution of a Java program with a suitable example.
10. Classify the concept of inheritance and method overriding in Java with programs.
11. Examine the life cycle of a thread and discuss thread synchronization with examples.
12. Deliberate the stream classes in Java with program for reading and writing data to a file.
13. Estimate the Applet life cycle with an applet program to draw geometric shapes and fill colors.

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