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.Com.(CA) END SEMESTER EXAMINATIONS APRIL-2023 SEMESTER - IV 21UCCCT4010 - Java Programming

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

- 1. Show the general structure of java program with an example.
- 2. Interpret the procedure using while loop to reverse the digits of the number.
- 3. Compute a Java program to calculate the average value of array elements.
- 4. Is it allowed to override an overloaded method? Predict the difference between method overloading and method overriding in Java.
- 5. Identify the procedure using java program to check the condition where the given number is less than 10 and greater than 50 afterwards you have to generate the exception out of range or else you have to calculate the square of the number and display output.
- 6. Apply the file concept, write a Java program to find the longest word in a text file.
- 7. Explain the syntax of exception handling code in java.
- 8. Develop an Interest interface which contains simple Interest method, calculate the simple interest using principal, year and rate.

Section C

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

- 9. Solve the Rock, Paper & Scissors problem using if - -else statement in java.
- 10. Construct a java program to print the area of a rectangle by creating a class named 'Area' having two methods. First method named as 'setvalues' takes length and breadth of rectangle as parameters and the second method named as 'displayArea' returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

- 11. Examine the applet concept to compute the factorial value using java.
- 12. Develop an abstract Reservation class which has Reserve abstract method. Implement the sub-classes like ReserveTrain and ReserveBus classes and implement the same.
- 13. Determine the procedure in Java program to write and read a plain text file.
