

**Bachelor of Science (B.Sc.) Semester-IV (C.B.S.) Examination**  
**COMPUTER SCIENCE (Java Programming)**  
**Paper-I**

Time : Three Hours]

[Maximum Marks : 50

**N.B. :—** (1) All questions are compulsory and carry equal marks.

(2) Draw neat and labelled diagrams wherever necessary.

**EITHER**

1. (a) Explain various data types in Java. Give example of each. 5
- (b) Explain data type conversion and casting features of Java with example. 5

**OR**

- (c) Explain various types of operators used in Java Programming. 5
- (d) Explain order of precedence of operators in Java. 5

**EITHER**

2. (a) Write a program in Java to demonstrate constructor overloading. 5
- (b) Write a program in Java to arrange the elements of array in ascending order. 5

**OR**

- (c) Write a program in Java to find the reverse of given number. 5
- (d) Explain the different types of loops in Java with suitable example. 5

**EITHER**

3. (a) Explain applet life cycle in detail. 5
- (b) What is exception ? Explain how a user handles exception in Java with suitable example. 5

**OR**

- (c) What is thread ? Explain life cycle of a thread in detail. 5
- (d) Differentiate between applet and applications. Write an applet in Java to display the message “Hello World”. 5

**EITHER**

4. (a) Explain event handling in Java. 5  
(b) What is stream ? How is the concept of streams used in Java ? 5

**OR**

(c) Write a program in Java using frame object, displaying menu 'file' with menu items 'new', 'open', 'close' and 'exit'. 5  
(d) What is FONT class ? Explain any two functions of it with syntax. 5

5. (a) What are Java token ? Explain. 2½  
(b) Explain single inheritance in Java with a suitable example. 2½  
(c) Explain the ADI package. 2½  
(d) Explain AWT package. 2½