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 diagram wherever necessary.

EITHER

1. (A) Explain the following features of Java :

(i) Platform independent and portable.

(ii) Robust and Secure.   5

(B) Write an application program to convert the given Fahrenheit temperatures to the corresponding Centigrade temperature $(C = F–32)/1.8)$.   5

OR

(C) Explain the different types of operators in Java.   5

(D) Explain the structure of a Java Program.   5

EITHER

2. (A) Write a program in Java to demonstrate Constructor Overloading.   5

(B) Differentiate between method overloading and method overriding.   5

OR

(C) Write a program in Java to demonstrate single inheritance.   5

(D) Write a program in Java to find the reverse of digits of given integer number.   5

EITHER

3. (A) Explain Multithreading. How Java implements its thread model ?   5

(B) Write the syntax of applet tag. Briefly explain its constituent.   5

OR

(C) Write an applet that receives three numeric values as input from the user and then displays the largest of the three on the screen. 5

(D) What is a Package ? How will you create user defined package in Java ? 5

EITHER

4. (A) What is Event Delegation Model ? What are its basic components ? 5

(B) Explain Layout Managers. 5

OR

(C) List the different situations in which 'Action Event' is generated. 5

(D) Write a syntax and example of following graphics class methods :

   (i) drawOval ( )

   (ii) drawPolygon ( ). 5

5. Attempt **ALL** :

(a) What is JVM ? 2½

(b) What is Interface ? Give its syntax. 2½

(c) What is local applet and remote applet ? 2½

(d) Write any two methods of File Reader Class. 2½