22412

11920

3 Hours / 70 Marks   Seat No.

Instructions – (1) All Questions are *Compulsory.*

(2) Answer each next main Question on a new page.

(3) Illustrate your answers with neat sketches wherever necessary.

(4) Figures to the right indicate full marks.

(5) Assume suitable data, if necessary.

(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1.   Attempt any FIVE of the following: **10**

a) Define constructor. List its types.

b) Define class and object.

c) List the methods of File Input Stream Class.

d) Define error. List types of error.

e) List any four Java API packages.

f) Define array. List its types.

g) List access specifiers in Java.

Marks

2. **Attempt any THREE of the following:** 12

   a) Differentiate between String and String Buffer.

   b) Define a class circle having data members Pi and radius. Initialize and display values of data members also calculate area of circle and display it.

   c) Define exception. State built-in exceptions.

   d) Write a syntax and example of

   (i) drawRect( )

   (ii) drawoval( )

3. **Attempt any THREE of the following:** 12

   a) Explain the following classes.

   (i) Byte Stream Class

   (ii) Character Stream Class

   b) Explain life cycle of Applet.

   c) Differentiate between class and interfaces.

   d) Define type casting. Explain its types with syntax and example.

4. **Attempt any THREE of the following:** 12

   a) Explain life cycle of thread.

   b) Describe final variable and final method.

   c) Explain any two logical operators in Java with example.

   d) Differentiate between array and vector.

   e) List any four methods of string class and state the use of each.

Marks

5. Attempt any TWO of the following: **12**

a) Write a program to create vector with five elements as (5, 15, 25, 35, 45). Insert new element at 2nd position. Remove 1st and 4th element from vector.

b) Define packages. How to create user defined package? Explain with example.

c) Write a program to create two threads one thread will print even no. between 1 to 50 and other will print odd number between 1 to 50.

6. Attempt any TWO of the following: **12**

a) Explain how to pass parameter to an applet? Write an applet to accept username in the form of parameter and print "Hello <username>".

b) Write a program to perform following task.

    (i) Create a text file and store data in it.

    (ii) Count number of lines and words in that file.

c) Implement the following inheritance.

Interface : Salary	Class : Employee
Basic_Salary Basic_Sal( )	Name, age Display( )

Class: Gross_Salary
TA, DA, HRA Total_Sal( )