22412

21819

3 Hours / 70 Marks   Seat No. ▢▢▢▢▢▢▢▢

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

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

(3) Figures to the right indicate full marks.

(4) Assume suitable data, if necessary.

(5) Use of Non-programmable Electronic Pocket Calculator is permissible.

(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)   List any eight features of Java.

b)   State use of finalize( ) method with its syntax.

c)   Name the wrapper class methods for the following:

(i)   To convert string objects to primitive int.

(ii)   To convert primitive int to string objects.

d)   List the types of inheritances in Java.

e)   Write the syntax of try-catch-finally blocks.

f)   Give the syntax of < param > tag to pass parameters to an applet.

g)   Define stream class. List its types.

Marks

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

a) Explain the concept of platform independence and portability with respect to Java language.

b) Explain the types of constructors in Java with suitable example.

c) Explain the two ways of creating threads in Java.

d) Distinguish between Input stream class and output stream class.

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

a) Define a class student with int id and string name as data members and a method void SetData ( ). Accept and display the data for five students.

b) Explain dynamic method dispatch in Java with suitable example.

c) Describe the use of following methods:

(i) Drawoval ( )

(ii) getFont ( )

(iii) drawRect ( )

(iv) getFamily ( )

d) Write a program to count number of words from a text file using stream classes.

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

a) Describe instance Of and dot (·) operators in Java with suitable example.

b) Explain the four access specifiers in Java.

c) Differentiate between method overloading and method overriding.

d) Differentiate between Java Applet and Java Application (any four points)

e) Write a program to copy content of one file to another file.

Marks

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

   a) Describe the use of any methods of vector class with their syntax.

   b) Explain the concept of Dynamic method dispatch with suitable example.

   c) Write a program to create two threads. One thread will display the numbers from 1 to 50 (ascending order) and other thread will display numbers from 50 to 1 (descending order).

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

   a) Explain the command line arguments with suitable example.

   b) Write a program to input name and salary of employee and throw user defined exception if entered salary is negative.

   c) Describe the applet life cycle in detail.

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