S.K.M's J. M. Patel College of Commerce, Goregaon(W), Mumbai – 90
Test Series Core Java

Time : 2.30 hrs   **Marks: 75**

Program : SYBScIT   **Sem : II**

Course : Core JAVA

N. B.: (1) **All** questions are **compulsory**.
 (2) Answers to the **same question** must be **written together**.
(3) Numbers to the **right** indicate **marks**.

Q.1. Attempt any three of following: 15

    a.   Write a short note on Java Virtual Machine (JVM).
    b.   Explain the java buzzwords.
    c.   Explain public static void main(String args[]) statement.
    d.   What are primitive data types in Java? Briefly explain their size, range and other details.
    e.   Write a short note on : setting the PATH environment variable.
    f.   Write a program to input a number and print its multiplication table upto 10.

Q.2. Attempt any three of following: 15
    a. Differentiate between method overloading and method overriding in java.
    b. Write a short note on access specifiers in Java.
    c. Explain the semantics and functionality of the given statements :
       (i) Rectangle rec = new Rectangle(a,b);
       (ii) break;
       (iii) this.rec;
    d. Explain the use of super keyword.
    e. Explain the garbage collection process in java.
    f. Write a program to demonstrate constructor.

Q.3. Attempt any three of following: 15
    a. What is an abstract class? Give example.
    b. What is an inheritance? Explain different types of it.
    c. Explain the terms/ keywords : final , finally , finalize().
    d. Explain the below given code and the concept(s) it represents :
         Shape gen = new Shape();
         Rect r = new Rect(); Circ c = new Circ();
         int k = Integer.parseInt(args[0]) ;
         if (k==1) gen = r; else gen=c;
         gen.showdata();
    e. How is an interface different from abstract class?
    f. Explain the exceptional handling mechanism in java.

Q.4. Attempt any three of following: 15
    a. Write a short note on vector.
    b. Explain the life cycle of thread.
    c. Write a program to create multiple threads.
    d. Write a program to sort array in ascending order.
    e. Differentiate between throw and throws, give example.
    f.   Explain the semantics and functionality of the given statements :

       (i) FileReader ins = new FileReader(inf);
       (ii) dos.writeDouble(27.36);
                                       a.

Q.5. Attempt any three of following: 15
    a. Briefly explain: delegation model, event, event listeners, and event sources.
    b. What is a layout manager? Explain any two layouts.
    c. Write about: Button, Textfield, and Label controls.
    d.   Explain the semantics and functionality of the given statements :
       (i) public void paint(Graphics g) |{ … }
       (ii) b.addActionListener(this);
       (iii) repaint();
    e. Demonstrate the use of Scrollbars.
    f. Write a short note on : Component , container.