[This question paper contains 4 printed pages.]

Your Roll No.....

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Sr. No. of Question Paper : 3689

Unique Paper Code : 6202451202

Name of the Paper : PROGRAMMING IN JAVA

Name of the Course : **B. Voc.**

Semester : II

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt total 4 questions. **Q. 1 is compulsory to attend.** Rest, Attempt any 3 questions more. (15×4=60)

1. (a) Create a java program to display "Hello! Java" using Class, Object and Method. (3)

   (b) What is type casting? Explain with an example. (3)
   child class take refrence from parent class.

   (c) Explain the life cycle of an applet. (3)

   (d) What is the significance of Java's byte code? (2)

   (e) List use of different access specifiers in java. (3)

   (f) Which statement is true about the switch statement? (1)

   (i) It must contain the default section.

   (ii) The break statement at the end of each case block is optional.

   (iii) Its case label literals can be changed at runtime

   (iv) Its expression must evaluate to a collection of values

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(a) List out any 5 AWT classes and their syntax. Write an Applet to draw a smiley picture accept user name as a parameter and display welcome message. (10)

(b) Explain the following layout managers. (5)

(i) Border layout.

(ii) Grid layout.

(iii) Flow layout.

3 What will be the output of following codes: (15)

(a) CODE 1: (3)

```
class Product {
    double price;
}

public class Test {
    public void updatePrice(Product product, double price) {
        price = price * 2;
        product.price = product.price + price;
    }
    public static void main(String[] args) {
        Product prt = new Product();
        prt.price = 200;
        double newPrice = 100;

        Test t = new Test();
        t.updatePrice(prt, newPrice);
        System.out.println(prt.price + " : " + newPrice);
    }
}
```

What is the result?

400:100

(b) CODE 2: (3)

```
public static void main(String[] args) {
    StringBuilder sb = new StringBuilder("Java");
    String s = "Java";

    if (sb.toString().equals(s.toString())) {
        System.out.println("Match 1");
    } else if (sb.equals(s)) {
        System.out.println("Match 2");
```

Match 1

```
        } else {
            System.out.println("No Match");
        }
    }
```

What is the result?

(c) **CODE 3:** (4)

```
interface MyInterface
{
  public void method1();
  public void method2();
}
class XYZ implements MyInterface
{
  public void method1()
  {
    System.out.println("implementation of method1");
  }
  public void method2()
  {
    System.out.println("implementation of method2");
  }
  public static void main(String arg[])
  {
    MyInterface obj = new XYZ();
    obj. method1();
  }
}
```

(d) **CODE 4:** (5)

```
public class If2
{
   static boolean b1, b2;
   public static void main(String [] args)
   {
      int x =
      0; if (
      !b1 )
   {
         if ( !b2 )
         {
            b1 =
            true;
            x++;
            if ( 5 > 6 )
```

```
    {
      x++;
    }
    if ( !b1 )
      x = x + 10;
    else if ( b2 = true
      ) x = x + 100;
    else if ( b1 | b2
      ) x = x +
      1000;
  }
}
System.out.println(x);
```

4. (a) What is an Operator? Explain type of operators in Java with example programs. (10)

(b) Write a java program to create own exception for Negative Value Exception if the user enter negative value. (5)

5. (a) What is a Constructor? Explain types of Constructors in Java? Write a java program to find the Area of Circle using Constructor. (10)

(b) Discuss the use of following keywords in java **(ANY TWO):** (5)

(i) This

(ii) Jump Statements — Break , Continue

(iii) Final

(iv) Static

(v) Super

6. (a) Design an interface called Shape with methods draw() and getArea(). Further design two classes called Circle and Rectangle that implements Shape to compute area of respective shapes. Use appropriate getter and setter methods. Write a java program for the same. (10)

(b) How to define a package? How to access, import a package? Explain with examples. 5)

(500)