Q1.Java method overloading implements the OOPS concept

Ans : C

Q2.Data members and member functions of a class are private by default.

Ans : A

Q3.Which of the following functions can be inherited from the base class?

Ans : D

Q4. Identify the feature, which is used to reduce the use of nested classes.

Ans : C

Q5. Which concept of Java is achieved by combining methods and attributes into a class?

Ans : A

Q6.Which of the following declarations does not compile?

Ans: A

Q7.Which of these interface must contain a unique element?

Ans : A

Q8.
```
package main;
class T {
int t = 20;
}
class Main {
public static void main(String args[]) {
T t1 = new T();
System.out.println(t1.t);
}
}
```

Ans: 20

Explaination : In Java, member variables can assigned a value with declaration.

Q9 //bingo.java file

```
public class Hello
{
public static void main(String[] args)
{
System.out.println("BINGO");
}
}
```

ANS: D

EXPLANATION: **The class name and the java file name should be the same. So, change either file name or class name to match.**

Q10.What will be the output of the following Java program?

```
class variable_scope
{
public static void main(String args[])
{
int x;
x = 5;
{
int y = 6;
System.out.print(x + " " + y);
}
System.out.println(x + " " + y);
}
}
```

ANS: A

EXPLAINATION: Second print statement doesn't have access to y , scope y was limited to the block defined after initialisation of x

Q11.What will be the output of the following Java code?

```
class String_demo
{
public static void main(String args[])
{
char chars[] = {'a', 'b', 'c'};
String s = new String(chars);
System.out.println(s);
}
}
```

ANS: A

EXPLAINATION: String(chars) is a constructor of class string, it initializes string s with the values stored in character array chars, therefore s contains abc

Q; 12What will be the output of the following Java program?

```
final class A
{
int i;
}
class B extends A
{
int j;
System.out.println(j + " " + i);
}
class inheritance
{
public static void main(String args[])
{
B obj = new B();
obj.display();
}
}
```

ANS:D

EXPLAINATION:

Q13. Q13.What is output of following program

```
public class Test
```

```
{
public int getData() //getdata() 1
{
return 0;
}
public long getData() //getdata 2
{
return 1;
}
public static void main(String[] args)
{
Test obj = new Test();
System.out.println(obj.getData());
}
}
```

ANS; D

EXPLAINATION: For method overloading, **methods must have different signatures**. Return type of methods does not contribute towards different method signature, so the code above give compilation error. Both getdata 1 and getdata 2 only differ in return types and NOT signatures**.**

Q14What is the output of the following program?

```
public class Test{

static int start = 2;
final int end;
public Test(int x) {
x = 4;
end = x;
}
public void fly(int distance) {
System.out.println(end-start+" ");
System.out.println(distance);
}
public static void main(String []args){
new Test(10).fly(5);
}
}
```

ANS: A

Q15Q15.What is the output of the following program?

String john = "john";

String jon = new String(john);

System.out.println((john==jon) + " "+ (john.equals(jon)));

ANS ;C

Explaination:

Q16Given that Student is a class, how many reference variables and objects are created by the following code?

Student studentName, studentId;

studentName = new Student();

Student stud_class = new Student();

ANS:B

Q17. Write a java program to check even or odd number

ANS:import java.util.Scanner;

```
public class EvenOdd {
  public static void main(String[] args) {
  Scanner reader = new Scanner(System.in);
 System.out.print("Enter a number: ");
        int num = reader.nextInt();
 if(num % 2 == 0)
System.out.println(num + " is even");
        else
            System.out.println(num + " is odd");
    }
}
```

Q18. Write a java program to find average of two numbers

ANS:

```
public class Average {
  public static void main(String[] args) {

    // take two numbers
```

```
    double num1 = 12;
    double num2 = 28;

    // declare sum variable
    // and initialize with 0
    double sum = 0.0;
    // declare average variable
    double avg = 0.0;

    // calculate the sum value
    sum = num1 + num2;
    // calculate the average value
    avg = sum/2;

    // display result
    System.out.println("Average: " + avg );
  }
}
```

Q19. Write a java program to swap two numbers

ANS.

```
public class SwapNumbers {

    public static void main(String[] args) {

        float first = 1.20f, second = 2.45f;

        System.out.println("--Before swap--");
        System.out.println("First number = " + first);
        System.out.println("Second number = " + second);

        // Value of first is assigned to temporary
        float temporary = first;

        // Value of second is assigned to first
        first = second;

        // Value of temporary (which contains the initial value of first) is assigned to second
```

```
        second = temporary;

        System.out.println("--After swap--");
        System.out.println("First number = " + first);
        System.out.println("Second number = " + second);
    }
}
```

Q20: Write a java program to check whether a number is prime or not

ANS:

```
public class PrimeExample2{
static void checkPrime(int n){
  int i,m=0,flag=0;
  m=n/2;
  if(n==0||n==1){
   System.out.println(n+" is not prime number");
  }else{
   for(i=2;i<=m;i++){
    if(n%i==0){
     System.out.println(n+" is not prime number");
     flag=1;
     break;
    }
   }
   if(flag==0)  { System.out.println(n+" is prime number"); }
  }//end of else
}
 public static void main(String args[]){
  checkPrime(1);
  checkPrime(3);
  checkPrime(17);
  checkPrime(20);
}
}
```

Q21: Write a java program to find table of n

ANS:

```
import java.util.Scanner;
public class Multiplication_Table
{
    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
             System.out.print("Enter number:");
             int n=s.nextInt();
        for(int i=1; i <= 10; i++)
        {
            System.out.println(n+" * "+i+" = "+n*i);
        }
    }
}
```

Q22. Write a java program to find the largest of three numbers.

ANS

```
import java.util.Scanner;
public class LargestNumberExample2
{
public static void main(String[] args)
{
int a, b, c, largest;
//object of the Scanner class
Scanner sc = new Scanner(System.in);
//reading input from the user
System.out.println("Enter the first number:");
a = sc.nextInt();
System.out.println("Enter the second number:");
b = sc.nextInt();
System.out.println("Enter the third number:");
c = sc.nextInt();
largest = c > (a > b ? a : b) ? c : ((a > b) ? a : b);
System.out.println("The largest number is: "+largest);
}
```

}

Q23. Write a java program to calculate Simple Interest

ANS

```
public class Main.
{
public static void main (String args[])
{ float p, r, t, si; // principal amount, rate, time and simple interest respectively.
p = 28000; r = 12; t = 24;
si = (p*r*t)/100;
System.out.println("Simple Interest is: " +si);
}}
```

Q24. Write a java program to calculate Area and perimeter of Rectangle

ANS

```
import java.util.Scanner;
public class Area_Perimeter
{
   public static void main(String[] args)
   {
      int l, b, perimeter, area;
      Scanner s = new Scanner(System.in);
      System.out.print("Enter length of rectangle:");
      l = s.nextInt();
      System.out.print("Enter breadth of rectangle:");
      b = s.nextInt();
      perimeter = 2 * (l + b);
      System.out.println("Perimeter of rectangle:"+perimeter);
      area = l * b;
      System.out.println("Area of rectangle:"+area);
   }
}
```

Q25. Write a java program to check whether character is vowel or consonant

ANS:

```
import java.io.*;

public class geek {

   // Function to find whether an input
   // character is vowel or not
   static void Vowel_Or_Consonant(char y)
   {
      if (y == 'a' || y == 'e' || y == 'i' || y == 'o'
         || y == 'u')
         System.out.println("It is a Vowel.");
```

```
        else
            System.out.println("It is a Consonant.");
    }

    // The Driver code
    static public void main(String[] args)
    {
        Vowel_Or_Consonant('b');
        Vowel_Or_Consonant('u');
    }
}
```