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**Programm : SE section (B)**

## **Question 1:**

### **Class:**

*Collection of objects* is called class. It is a logical entity.

A class can also be defined as a blueprint from which you can create an individual object. Class doesn't consume any space.

### **Object:**

Any entity that has state and behavior is known as an object. For example, a chair, pen, table, keyboard, bike, etc. It can be physical or logical.

An Object can be defined as an instance of a class. An object contains an address and takes up some space in memory. Objects can communicate without knowing the details of each other's data or code. The only necessary thing is the type of message accepted and the type of response returned by the objects.

## Question 2:

```
3 public class multi {
4
5     public static void main(String[] args) {
6         int list;
7
8         Scanner py=new Scanner(System.in);
9
10        System.out.println("Enter your value");
11        list=py.nextInt();
12
13        chart tab=new chart(list); //constructor
14
15        tab.tableformula(); //Method
16
17    }
18 }
19
20 class chart
21 {
22     int table;
23
24     chart(int z) //constructor used parameter
25     {
26         table=z;
27     }
28
29     void tableformula()
30     {
31         int r=0;
32
33         for(int i=1; i<=10;i++)
34         {
35             r=table*i;
36             System.out.println(table+"x"+i+"="+table*i);
37         }
38     }
39 }
40 }
```

### Question 3:

```
1 public class vehicle {
2
3     public static void main(String[] args) {
4         car toyota=new car();
5         car honda=new car();
6
7         toyota.car= "Grande";
8         toyota.tyre=4;
9         toyota.doors=4;
10        toyota.engine=1.8;
11        toyota.fuelcapacity=44.7;
12        toyota.fuelconsumption=2.3;
13
14        honda.car= "civic";
15        honda.tyre=4;
16        honda.doors=4;
17        honda.engine=1.8;
18        honda.fuelcapacity=38.7;
19        honda.fuelconsumption=1.9;
20
21        System.out.println("Name = "+toyota.car);
22        System.out.println("Tyre = "+toyota.tyre);
23        System.out.println("door = "+toyota.doors);
24        System.out.println("engine = "+toyota.engine);
25        System.out.println("fuelcapacity = "+toyota.fuelconsumption);
26        System.out.println("fuelconsumption = "+toyota.fuelcapacity);
27
28        System.out.println("Name = "+honda.car);
29        System.out.println("Tyre = "+honda.tyre);
30        System.out.println("door = "+honda.doors);
31        System.out.println("engine = "+honda.engine);
32        System.out.println("fuelcapacity = "+honda.fuelconsumption);
33        System.out.println("fuelconsumption = "+honda.fuelcapacity);
34
35        System.out.println("performance of toyota");
36        toyota.performance();
37        System.out.println("performance of honda");
38        honda.performance();
39    }
40 }
```

```
}  
}  
  
class car  
{  
    String car;  
    int tyre;  
    int doors;  
    double engine;  
    double fuelcapacity;  
    double fuelconsumption;  
  
    void performance()  
    {  
        double z;  
        z=fuelcapacity/fuelconsumption;  
        System.out.println("performance = "+z);  
    }  
}
```