

University of Information Technology & Sciences (UITS)  
 Faculty of Science and Engineering  
 Department of Computer Science & Engineering  
 Program: B.Sc. in CSE

Mid Term Examination, Spring 2024  
 Course Title: Object Oriented Programming  
 Course Code: CSE 151/CSE 203/IT 203

Time: 1(One)Hour

Marks: 20

(Answer All Questions)

1. a) Explain why is java interpreted as robust language? Differentiate between the application of Structured Programming Language and Object-Oriented Programming Language. [03]
- b) Implement the scenario in *figure 1* using the basic OOP concepts in java language. [Use Constructor] [04]

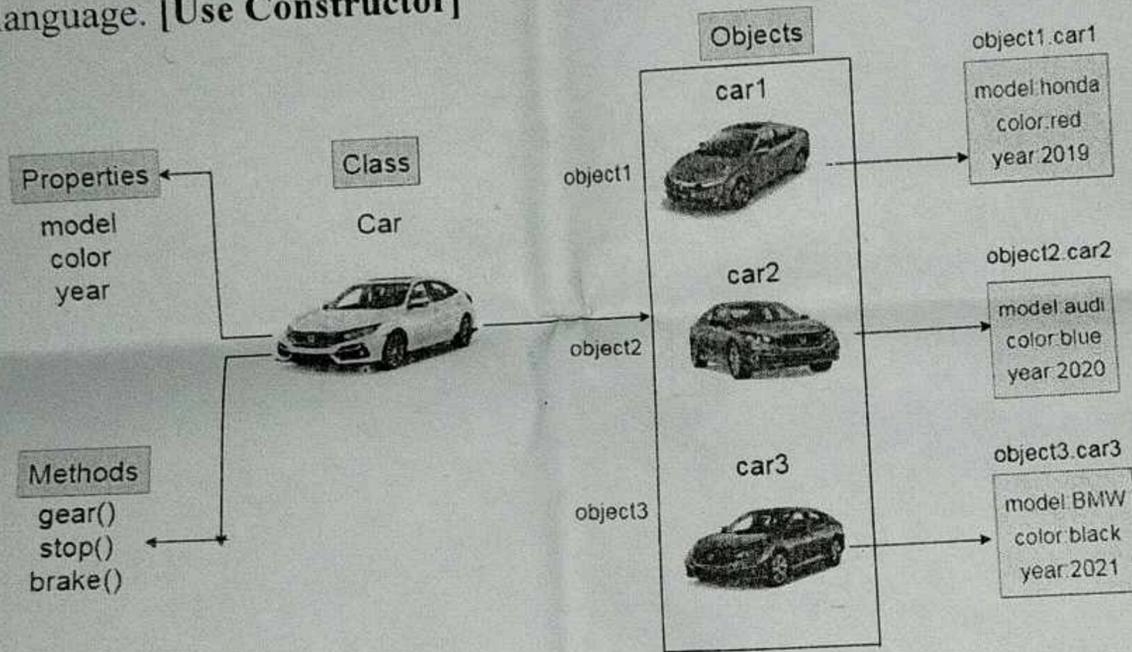


Figure 1: Class, Object and Method Visualization of a Car.

- c) Write the output of the given code snippet. [03]

```
class trickOfMath {
    public static void main (String [] args )
    {
        int a = 5, b = 9;
        System.out.println(a++);
        System.out.println(--b);
        System.out.println(a==b);
        System.out.println(a*=3);
        System.out.println(a|b);
        System.out.println(a^b);
    }
}
```

- 2
- a) Construct a java program to calculate the factorial of a number by creating a class named 'Factorial' having two methods. First method named as 'setNum' takes the number as parameter and the second method named as 'getfact' returns the factorial of the number. [04]
  - b) Explain the method overloading with proper example. [03]
  - c) Convert the followings: [03]
    - i) Integer 123456 to Short
    - ii) Integer 999 to Byte