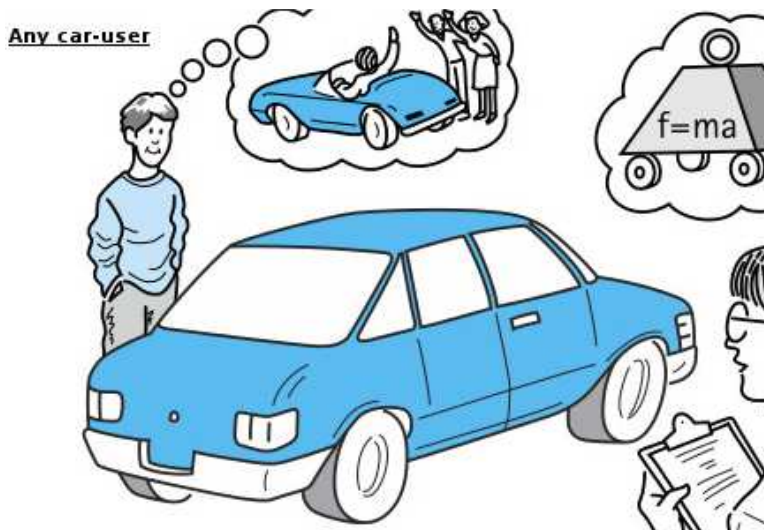


REVISION IX, USER DEFINED METHOD, USER DEFINED METHOD, LIBRARY CLASS, CONSTRUCTOR AND CLASS OBJECT

1. Chose the correct option:- [10]
- a. Which of the following operator is using logical operator to work?
i. += ii. ++ iii. % iv. ?:
 - b. The extension of Java source code? i. .java ii. .class iii. .exe iv. .byte
 - c. Which among the following is invalid class name-i. MyClass ii. My class iii. Myclass\$ iv. My_class
 - d. In which package , Character wrapper class is present:
i. Java.lang ii. Java.io iii. Java.util iv. Java.awt
 - e. What is the return type of Math.min(1,2.0f)?
i. double ii. int iii. Long iv. Float
 - f. Which among the following class does not belong to the java.lang package?
i. System ii. Scanner iii. String iv. Math
 - g. Assertion(A): Java is platform Independent language.
Reason(R): Java uses Unicode character set
i. A and R are true and R is a correct explanation to A. ii. A and R are true and R is not a correct explanation to A.
iii. A is false and R is true. iv. A is true and R is false.
 - h. When an object of a class is converted to its corresponding data type is called?
i. Boxing ii. Unboxing iii. Explicit type conversion iv. Implicit type conversion
 - i. Evaluate the following:- if x=3, y=5, z=10
++z + y - y + z + x++
i. 24 ii. 23 iii. 20 iv. 25
 - j.



Name the following feature indicate by the above image

- i. abstraction ii. polymorphism iii. Encapsulation iv. Inheritance.

2. Find the output of the following:- [2]

```
System.out.println("four:"+4+2);
```

```
System.out.println("four:"+ (4+2));
```

3. Find the output: [2]

```
String gr=(m>=90)?"A": (m>=60)?"B" : "C"; where m=65
```

4. Write the value of the given expression :- [2]

```
R=10 + 3 *8 / 2 *(++a + 1) where a=7
```

5. Write the java expression: $|Va^3 + b^5|$ [2]

6. find the output:- [2]

```

int a=5,s=0;
for(int i=1;i<= 3;i++)
{
    s=a* 2+(int)Math.pow(i,3)+ ++a- -a;
    System.out.println(s);
}

```

7. Write the program of the followings:-[do any 2] 15 x 2 = [30]

Must write Variable Description table

i. Design a class to overload a function series () as follows :

(i) double series (double n) with one double argument and returns the sum of the series,

1 , 2 , 5 , 12 , 29 , ...upto nth terms

(ii) double series (double a, double n) with two double arguments and returns the sum of the series. [15]

$$sum = \frac{1}{a^2} + \frac{4}{a^5} + \frac{7}{a^8} + \frac{10}{a^{11}} + \dots + \text{to } n \text{ terms}$$

ii. Using the switch statement, write a menu driven program :

(i) To check and display whether a number input by the user is a composite number or not (A number is said to be a composite, if it has one or more than one factor excluding 1 and the number itself).

Example : 4, 6, 8, 9

(ii) To find the smallest digit of an integer that is input.

Sample inputs: 6524

Sample output: Smallest digit is 2

For an incorrect choice, an appropriate error message should be displayed.

iii. Define a class named ParkingLot with the following description :

Instance variables/data members:

int vno — To store the vehicle number

int hours — To store the number of hours the vehicle is parked in the parking lot

double bill — To store the bill amount

Member methods:

void input() — To input and store the vno and hours.

void calculate() — To compute the parking charge at the rate of Rs.3 for the first hours or part thereof, and Rs. 1.50 for each additional hour or part thereof.

void display () — To display the detail

Write a main method to create an object of the class and call the above methods.
