

**Girls' High School and College, Prayagraj**  
**WorkSheetNo.-2**  
**Session:2020-2021**  
**Class : 9th Section : C,D,E**  
**Subject:Computer Applications**  
**TOPICS : Working with Methods and Operators in Java**

**Instruction** : Parents are expected to ensure that the student spends two days to read and understand the chapter according to the book and thereafter answer the given questions.

**Reference book**:

**Logix Class 9th (Kips Publications)**

**WORKING WITH METHODS**

**Q1. ANSWER THE FOLLOWING QUESTIONS IN SHORT:**

1. Write any two advantages of using functions in a program.
2. Write the prototype of a function check which takes an integer as an argument and returns a character.
3. Give the prototype of a function search which receives a sentence sentnc and a word wrd and returns 1 or 0.
4. Give the prototype of a function check which receives a character ch and an integer n and returns true.
5. What is the role of keyword void before the method name?
6. Differentiate between formal and actual parameters.
7. What is the return type of main() method?
8. Distinguish between non static and static methods.

**PROGRAM:**

Execute the given program on Bluej to calculate the area of a circle using static and non-static variables.

```
public class Circle
```

```

{
static double PI=3.1415;
int radius;
public void setRadius(int r)
{
radius=r;
}
public double calculateArea()
{
double area=PI*(radius *radius);
return area;
}
public static void main (String args[])
{
int red =4;
double result;
Circle myCircle=new Circle();
myCircle.setRadius(rad);
result=myCircle.calculateArea();
System.out.println("value of PI is"+Circle.PI);
System.out.println("radius of circle is:"+myCircle.radius);
System.out.println("area of circle is "+result);
}
}

```

## OPERATORS IN JAVA

### Q1. ANSWER THE FOLLOWING QUESTIONS IN SHORT:

1. Give one point of difference between unary and binary operators.

2. Name the operators listed below:

i) <

ii) ++

iii) &&

iv) ?:

3. Write one difference between / and % operators.

4. What is the value of x1 if x=5?

x1= ++x - x++ + --x;

5. What is meant by precedence of operators?

6. Write Java statement to create an object MP4 of class digital.

7. Write a Java expression for  $ax^5 + bx^3 + c$

8. Rewrite the following using ternary operator:

```
if(x%2==0)
```

```
System.out.print("Even");
```

```
else
```

```
System.out.print("Not even") ;
```

9. What is the result stored in x, after evaluating the following expression?

```
int x=5;
```

```
x= x++ * 2 + 3 * --x;
```

10. What will be the output of the following if x=5?

I)  $5 * ++x$

II)  $5 * x++$

###END###