#### Methods

```
class Main {
  public static void main(String args[]) {
       System.out.println(fun());
  int fun()
   return 20;
```

- **(A)** 20
- (B) compiler error
- **(C)** 0
- (D) garbage balue

Answer: (B)

**Explanation:** main() is a static method and fun() is a non-static method in class Main.

```
public class Test {
public static void main(String[] args) {
    String x = null;
    giveMeAString(x);
    System.out.println(x);
  static void giveMeAString(String x)
   x = "raju";
```

- (A) raju
- (B) null
- (C) Compiler Error
- (D) Exception

Answer: (B)

**Explanation:** Parameters in Java is passed by value. So the changes made to x do not reflect in main().

```
class Test {
public static void swap(Integer i, Integer j) {
   Integer temp = new Integer(i);
   i = j;
   j = temp;
 public static void main(String[] args) {
   Integer i = new Integer(10);
   Integer j = new Integer(20);
   swap(i, j);
   System.out.println("i = " + i + ", j = " + j);
```

#### Answer: (A)

**Explanation:** Parameters are passed by value in Java

```
class intWrap {
 int x;
public class Main {
  public static void main(String[] args) {
    intWrap i = new intWrap();
    i.x = 10;
    intWrap j = new intWrap();
    j.x = 20;
    swap(i, j);
    System.out.println("i.x = " + i.x + ", j.x = " + j.x);
  public static void swap(intWrap i, intWrap j) {
    int temp = i.x;
    i.x = j.x;
    j.x = temp;
```

#### Answer: (A)

**Explanation:** Objects are never passed at all. Only references are passed. The values of variables are always primitives or references, never objects

```
class Main {
  public static void main(String args[]) {
       System.out.println(fun());
  static int fun(int x = 0)
   return x;
```

- (A) 0
- (B) Garbage Value
- (C) Compiler Error
- (D) Runtime Error

#### Answer: (C)

**Explanation:** Java doesn't support default arguments. In Java, we must write two different functions.

```
public class Test {
public static void main(String[] args) {
    String str = "java";
    str.toUpperCase();
    str += "concepts";
    String string = str.substring(2,8);
    string = string + str.charAt(4);;
    System.out.println(string);
```

- Options:
- a) vaconcc
- b) VAconcc
- c) javaconcepts
- d) Vaconco

Ans: a

What is the process of defining more than one method in a class differentiated by method signature?

- a) method overriding
- b) method overloading
- c) method doubling
- d) None of the mentioned

• Ans: b

```
public class Test {
public static void sum(int ...x)
     int sum=0;
    for(int n:x)
         sum=sum+n;
     System.out.print(sum+" ");
public static void main(String[] args) {
    sum(10,20,30);
    sum(10,20,30,40);
```

- Options:
- a) 60 100
- b) 160
- c) Compilation error
- d) 10 10

Ans) a

```
class Area
    int width, length, volume, height;
    Area()
      width=5;
      length=6;
    void volume()
       volume = width*length*height;
public class Test {
public static void main(String[] args) {
    Area obj = new Area();
    obj.volume();
    System.out.println(obj.volume);
```

- a) 0
- b) 1
- c) 30
- d) Compilation error

Ans: a

```
class Equality
    int x;
    int y;
    boolean isequal()
       return(x == y);
public class Test {
public static void main(String[] args) {
    Equality obj = new Equality();
    obj.x = 5;
    obj.y = 5;
    System.out.println(obj.isequal());
```

- a) false
- b) true
- c) 0
- d) 1

• Answer: b