

**Question 1**

(10)

**Answer the following questions:-**

1. Differentiate between *Formal* and *Actual Parameters*.
2. Explain the concept of *constructor overloading* with an example.
3. What is *Function Prototype*?
4. What is the method of activating *parameterized constructor*? Write a statement to invoke a parameterized constructor which has three arguments (int, char, float) whose class name is *Sample*.
5. What is the use of the following keywords:
  - i. *static*
  - ii. *return*

**Question 2**

(5)

**Write Java statements for the following operations on Strings:-***String a = "James";**String b = "Bond";*

1. *System.out.println(a.length( ));*
2. *System.out.println(b.indexOf( "n" ));*
3. *System.out.println(a.concat(b));*
4. *System.out.println(b.replace( 'o', 'a' ));*
5. *System.out.println(a.startsWith( "a" ));*

**Question 3**

(5)

Write a program in Java having the class name *getArea* with overloaded functions:

- i. *double arrea (double pi, double r)* – to find and return area of circle ( $\pi r^2$ )  
where  $\pi = 3.141$
- ii. *double arrea (double l, double b)* – to find and return the area of rectangle( $l*b$ )
- iii. *double arrea (double s)*- to find and return area of square ( $s*s$ )

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