

January 2015

Bachelor of Computer Applications (BCA) Examination
V Semester

Introduction to Java

Time : 3 Hours]

[Max. Marks : 50

Note : Solve any two parts from each question. All questions carry equal marks.

1. (a) What are default initial values for the variable of following data types :
(i) Byte (ii) Boolean (iii) Integer (iv) Double (v) Long.
(b) Explain following unary operator with suitable example :
(i) ++ (ii) -- (iii) !
(c) Write down the output of the given program :

```
Public class test {  
    Public static void man (String args >) {  
        int a, b;  
        a = 10;  
        b = (a == 1)? 20:30;  
        System. out. println(" Value of b is : " + b);  
  
        b = (a == 10) ? 20 : 30;  
        System. out. println ``Value of b is : " + b);  
    }  
}
```
2. (a) Write the Java program to calculate the factorial of a given numbers.
(b) Why break statement is used in the switch statement ? What will be happen if break will not be used in the switch statement ? Explain with the help of suitable example.
(c) Write a Java program to declare, initialize and display the contents of an array of 5 integer values. How the length of array can be found in Java.
3. (a) What is the difference between the instance field / variable and class variable ?

- (b) Write the Java program for reading and writing to a stack. Stack is of integer type and its length is 10 push() method is used for writing to stack and pop() method is used for reading from stack. Make use of constructor for initializing the different fields required for the operation.
- (c) With the help of suitable example explain constructor overloading.
4. (a) Explain method overloading and method overriding in Java.
(b) Explain try-catch-final blocks for handling exception with the help of suitable example.
(c) Explain multithreading with the help of suitable example.
5. (a) Explain the different software components for creating, compiling and running the Java program. Briefly explain about the different file extensions associated in this process.
(b) Write a Java program to print the reverse of a given string e.g. "Java" ⇒ "avaJ".
(c) Write a Java program to read a file and to display its contents.

□□□