



BB-1881

Third Year B. C. A. (Sem. V) Examination

October / November – 2010

501 - Java Programming Language

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दृष्टवित्त निशानीवाणी विगतं उत्तरवडी पर अवश्य लपवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination : **T. Y. B. C. A. (SEM. 5)**

Name of the Subject : **501 - JAVA PROGRAMMING LANGUAGE**

Subject Code No. : **1 8 8 1** Section No. (1, 2,.....) : **NIL**

Seat No. : **0 0 0 8 7**

Pradeep
Student's Signature

(2) Numbers to the right side of every questions indicate marks.

1 Answer following :

10

(a) What will be the output when the following code is compiled and run ?

```
public class xyz {  
    public static void main (String args[ ] )  
    {  
        for (int i=0; i < 2; i++) {  
            for (int j=2; j>=0; j--) {  
                if (i= = j) break;  
                System.out.println("i=" + i + " j="+j);  
            }  
        }  
    }  
}
```

(b) What is the number of bytes used by Java primitive long, float, double and int ?

c.) Which of the following is correct?

- A. The native keyword indicates that the method is implemented in another language like C/C++.
- B. The only statements that can appear before an import statement in a Java file are comments.
- C. The method definitions inside interfaces are public and abstract. They cannot be private or protected.
- D. A class constructor may have public or protected keyword before them, nothing else.

d.) Which of the following are true.

- A. && operator is used for short-circuited logical AND.
- B. ~ operator is the bit-wise XOR operator.
- C. | operator is used to perform bitwise OR and also short-circuited logical OR.
- D. The unsigned right shift operator in Java is >>?

e.) Which of the following are legal array declarations. Select the three correct answers.

- a. int i[5][];
- b. int i[][];
- c. int []i[];
- d. int i[5][5];
- e. int[][] a;

Q.2

a) 'Java is platform independent language' – Justify sentence.

OR

[07]

a) Explain the class structure of Java.

b) Discuss Java Primitive variables. Explain wrapper classes of all primitive variables.

OR

[05]

b) Explain java Branching statements.

c) Discuss JVM and its working.

[03]

Q.3

a) Describe java class structure. What is inner class?

OR

[07]

a) Explain access modifiers and access controls at class and package level in java.

b) Describe concept of overloading and overriding methods in java.

OR

[05]

b) What is Inheritance? Explain the Inheritance and polymorphism concepts in java.

c) Explain the difference between static and non-static methods.

[03]

Q.4

a) Write concept of Interface. Explain the implementation of Interface and its advantages.

OR

[07]

a) What is difference between Interface and class? What is abstract class?

b) Discuss exceptions and how they are handled? What is difference between user defined exceptions and system exceptions?

OR

[05]

b) Discuss the concepts of Thread. How to change the priorities of Thread at runtime?

c) Explain the concepts of Synchronization of Thread and its advantages. [03]

Q.5

[A] Answer following: (Any two)

[10]

a) What is difference between Applet and Application? Explain the execution of Applet and its important methods.

b) What is difference between Package and Interface? How to control access of classes and methods using Package?

c) Discuss the hierarchy of APPLLET class structure . How to pass parameters to Applet?

[B] Write a code which accept names depending on user's choice. Store the names in an array and display those names having length greater than 10. [05]