06CS/IS753

Seventh Semester B.E. Degree Examination, June/July 2011
Java and J2EE

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions selecting*
at least TWO questions from each part.

PART – A

1 a. class Example {
```
class Example {
    public static void main (String s[ ]) {
        int a;
        for (a = 0; a < 3; a++) {
            int b = -1;
            system.out.println(" " + b);
            b = 50;
            system.out.println(" " + b);
        }
    }
}
```
What is the output of the above code? If you insert another 'int b' outside the for loop, what is the output?   **(05 Marks)**

   b. With example, explain the working of >> and >>>.   **(06 Marks)**

   c. What is the default package and default class in Java?   **(02 Marks)**

   d. Write a program to calculate the average among the elements { 4, 5, 7, 8 }, using for each in Java. How for each is different from for loop?   **(07 Marks)**

2 a. With example, give two uses of super.   **(06 Marks)**

   b. Write a program which contains one method which will throw IllegalAccessException and use proper exception handlers so that exception should be printed.   **(04 Marks)**

   c. What are the two types of applet? Explain the skeleton of an applet. Enlist applet tags.
                                                                                                    (06 Marks)

   d. Give the different forms of repaint method.   **(04 Marks)**

3 a. With syntax, explain use of isAlive( ) and join( ) methods.   **(04 Marks)**

   b. How synchronization can be achieved for threads in Java? Explain with syntax.   **(06 Marks)**

   c. Enlist the different methods in WindowListener. What is the use of WindowAdaptor?
                                                                                                    (03 Marks)

   d. Write a program using an applet which will print "key pressed" on the status window when you press the key, "key released" on the status window when you release the key and when you type the characters it should print "Hello" at co-ordinates (50, 50) on Applet. **(07 Marks)**

4 a. How AWT is different from Swings? What are the two key features of it? Explain. **(08 Marks)**

   b. List four types of buttons in swings with their use. Write a program to create four different types of buttons on JApplet. Use suitable events to show actions on the buttons and use JLabel to display the action invoked.   **(12 Marks)**

PART – B

5 a. Give an overview of the JDBC process.   (08 Marks)

   b. With proper syntax, explain three types of getConnection method.   (06 Marks)

   c. Explain the scrollable resultset with an example.   (06 Marks)

6 a. How servlets are better in comparison with CGI? Explain init( ) and service( ).   (08 Marks)

   b. Enlist core classes and interfaces available in javax.servlet.http package.   (04 Marks)

   c. Write a program using servlet which contains HTML page with various color options. When user choose 8 the particular color, the background of that page should be changed accordingly.   (08 Marks)

7 a. Discuss different types of JSP tags.   (05 Marks)

   b. Department has set the grade for the subject Java as follows:
       Above 90 = A,   80 – 89 = B ,   70 – 79 = C
       Below 70 = fail.
       Sham enters his marks for the subject Java in the interface provided. Write a JSP program to accept the marks entered and display his grade to the browser.   (08 Marks)

   c. Briefly explain how Remote Method Invocation works in Java.   (07 Marks)

8 a. Explain the various EJB transaction attributes.   (08 Marks)

   b. Write a code skeleton of a session bean.   (06 Marks)

   c. Why message-driven bean is designed? Explain four methods of it.   (06 Marks)

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