

## 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 {
    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)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

**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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**Seventh Semester B.E. Degree Examination, December 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. List and explain the features of Java. (10 Marks)  
b. Explain the process of building and running a java application program. (05 Marks)  
c. Explain the following :  
i) JVM ii) Type casting. (05 Marks)
- 2 a. Define exception. Demonstrate the working of nested try blocks, with suitable examples. (08 Marks)  
b. What are applets? Explain the different stages in the life cycle of an applet. (08 Marks)  
c. Write short notes on:  
i) Final class ii) Abstract class. (04 Marks)
- 3 a. What is multithreading? Explain any two advantages of multithreaded programs. (04 Marks)  
b. Write a java program to implement a producer-consumer problem, using threads. (06 Marks)  
c. Explain the mechanism of event delegation model. Give an example for using keyboard event. (10 Marks)
- 4 a. What is a swing? Explain the components and containers in the swings. (08 Marks)  
b. Explain the following, with an example for each:  
i) JTextField class ii) JButton class iii) JComboBox class. (12 Marks)

**PART - B**

- 5 a. Explain the J2EE architecture. (06 Marks)  
b. Describe the various steps of JDBC, with code snippets. (10 Marks)  
c. What are the transactions? Explain. (04 Marks)
- 6 a. What is a servlet? What are the phases of servlet life cycle? Give an example. (10 Marks)  
b. Write short notes on:  
i) Session tracking ii) Cookies (10 Marks)
- 7 a. What are the different types of JSP tags? Demonstrate with a simple JSP program. (10 Marks)  
b. What is RMI? Describe the code snippet RMI at client side. (10 Marks)
- 8 a. What are the different kinds of enterprise beans? Explain. (10 Marks)  
b. What is a deployment descriptor? List the deployment descriptor for EJB 1.1. (06 Marks)  
c. Write a note on JAR file. (04 Marks)

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