USN ☐☐☐☐☐☐☐☐☐☐

10CS/IS753

Seventh Semester B.E. Degree Examination, June/July 2014
JAVA and J2EE

Time: 3 hrs.

Max. Marks:100

Note: *Answer FIVE full questions, selecting*
atleast TWO question from each part.

PART – A

1   a. How 'compile once and run anywhere' is implemented in Java, explain.   **(04 Marks)**
    b. List and explain the Java buzzwords.   **(06 Marks)**
    c. Explain :   i) >>>   ii) short circuit logical operators   iii) for each.   **(06 Marks)**
    d. Describe the process of building and running Java program.   **(04 Marks)**

2   a. Describe the significance of final and super, with examples.   **(06 Marks)**
    b. What is an exception? Explain the different exception handling mechanisms, with an example,   **(08 Marks)**
    c. Write an applet program to display the message "VTU BELGAUM". Set the background color to cyan and foreground color to red.   **(06 Marks)**

3   a. What is synchronization? Explain with an example, how synchronization is implemented in Java.   **(06 Marks)**
    b. What is producer – consumer problem? Explain the solution for producer – consumer problem with a program.   **(08 Marks)**
    c. What is delegation event model? Describe the significance of adapter class, with an example.   **(06 Marks)**

4   a. What is swing? List the main swing features. Explain the different types of panes of swing containers.   **(06 Marks)**
    b. Create a swing application having two buttons named alpha and beta. When either of the buttons pressed, it should display "alpha pressed" and "beta pressed" respectively.   **(06 Marks)**
    c. List the different types of swing buttons. Write a program to create four types of buttons on JApplet. Use suitable events to show actions on the buttons and use JLabel to display the action invoked.   **(08 Marks)**

PART – B

5   a. Explain the four types of JDBC drivers.   **(06 Marks)**
    b. Describe the various steps of JDBC with code snippets.   **(08 Marks)**
    c. Explain :   i) callable statement   ii) prepared statement.   **(06 Marks)**

6   a. Explain the different stages in the life cycle of a servlet.   **(06 Marks)**
    b. What is a cookie? List out the methods defined by cookie. Write a program to add a cookie.   **(08 Marks)**
    c. Write a program to describe parameter reading using servlets.   **(06 Marks)**

7   a. Define JSP. Explain the different types of JSP tags by taking suitable examples.   **(10 Marks)**
    b. What is RMI? Describe with code snippet RMI at server side.   **(10 Marks)**

8   a. What is deployment descriptor? List the deployment descriptor for EJB1·1.   **(06 Marks)**
    b. With a skeleton, explain entity Java bean.   **(06 Marks)**
    c. Explain :   i) JAR file   ii) Stateless bean versus stateful bean.   **(08 Marks)**

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