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P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belgaum)
Seventh Semester, B. E. - Computer Science and Engineering
Semester End Examination; Dec. - 2014
Java and J2EE

Time: 3 hrs   *Max. Marks: 100*

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

PART - A

1. a.	Differentiate between Java and C++.	5
b.	Discuss characteristic features of Java.	8
c.	Explain the concept of inner classes in Java with an example.	7
2 a.	Explain with example, exception handling in Java.	5
b.	Discuss the concept of inter-thread communication Java with an illustration.	7
c.	Explain the following with an illustration: i) interface ii) package iii) super iv) final.	8
3 a.	Explain the procedure of passing parameters to an applet.	6
b.	Explain delegation event model.	6
c.	Write a program in Java to demonstrate virtual key codes for handling keyboard events.	8
4 a.	What are the key features of swing components?	4
b.	Write a Java Program using swings to design simple calculator with add, subtract, multiply and divide buttons.	8
c.	Discuss the usage of J scroll pane and J tabbed pane components in Java.	8

PART - B

5 a.	Discuss the process of JDBC with an illustration using student database show the fields assumed.	10
b.	List the methods used to access the metadata of database.	5
c.	Explain how to delete a row in the result set with an example.	5
6 a.	Explain basic steps involved for building and testing simple servlets.	10
b.	Develop a servlet to change the background color of a page based on color selected by the user.	10
7 a.	Discuss the concept of RMI in Java.	10
b.	Write a JSP script to display grades using switch case statement.	5
c.	Write a note on java mail API.	5
8 a.	With a neat diagram explain the relationships in EJB environment.	10
b.	Explain session and entity Java bean.	10

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