

Q1 Answer any FIVE from the following: [10]

- a. List any two class names and two package names available with javax.swing package.
- b. Explain in brief: addTab() method of JTabbedPane.
- c. Explain in brief: any one constructor of JTextField.
- d. Explain the following statement with reference to servlet programming:  
`String str1 = objReq.getParameter("player_Name");`  
Where, objReq is object of type ServletRequest.
- e. Differentiate: JDBC and ODBC (Do not write full-form of the terms).
- f. Where PreparedStatement is useful in database programming?
- g. What do you mean by RMI registry?

Q2 Answer any FIVE from the following: [15]

- a. What do you mean by component, sub-level container, and top-level container? Give two examples of each.
- b. Differentiate: Swing and AWT.
- c. Write code to generate a tree having a root node and three child nodes.
- d. Write code for method "service()" that produces the following response to client:  
"Service method of Servlet invoked ..."
- e. What is "Servlet"? Write brief note on "Servlet Engine".
- f. Write code to load database driver, create connection object and statement object in database programming.
- g. State the purpose of getData() and putData() in Socket programming for UDP.

Q3 Answer any FIVE from the following: [25]

- a. Write short note on event handling in swing.
- b. Write short note on "look-and-feel" facility provided by swing.
- c. Write code of applet illustrating use of JComboBox.
- d. Write note on life cycle of servlet.

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Paper Title: Advanced Java

Time: 2:30 HoursMarks: 70

- e. Write program to calculate area of rectangle in servlet. Also write HTML code that posts parameters to servlet through form.
- f. Write short note on database drivers. What type of driver is used for native JavaDB?
- g. Write TCP based socket program for client side, which requests server for socket, sends array index, and receives array element from server, then terminates the communication with server.  
Assume that the server has an array of string, where names of countries are stored.

Q4 Answer any TWO from the following: [20]

- a. Write a note on all types of buttons derived from AbstractButton, i.e. JButton, JToggleButton, JCheckBox, and JRadioButton.
- c. Assume the two tables – StudCurrent and StudPast – having same structure:

sName (Student's name), yJoin (year of joining the institute), sAddr (address of the student).

Write a program that transfers all the students from StudCurr to StudPast, who have joined the institute in year 2013.

- b. Write complete note on DatagramSocket, and various methods involved in UDP based socket programming.