

Paper Code: 3613

Paper Title: Advanced Java

Time: 2:00 Hours

Marks: 70

Q1 Answer any FOUR from the following: [16]

- a. Briefly explain the Constructors of JTextField and JTextArea.
- b. Explain the following code:

```
root1=new DefaultMutableTreeNode("Menu") ;
br1=new DefaultMutableTreeNode("Soup") ;
br2=new DefaultMutableTreeNode("Subji") ;
br3=new DefaultMutableTreeNode("Tandoor") ;
root1.add(br1) ; root1.add(br2) ; root1.add(br3) ;
objTree1=new JTree(root1) ;
this.add(objTree1) ;
```
- c. How JList is created using array of strings.
- d. Explain the concept of JDBC Library and JDBC Drivers.
- e. Explain the following code:

```
ResultSet objRS = objStat.executeQuery("SELECT * FROM tblItem");
while ( objRS.next() ) {
    i_no = objRS.getInt("Item_no");
    i_name = objRS.getString("Item_name");
    i_price = objRS.getInt("Item_price");
    System.out.println(i_no + "\t" + "i_name" + "\t" + i_price) ;
}
```
- f. Explain how connection is established in TCP based socket programming.

Q2 Answer any THREE from the following: [15]

- a. Explain JCheckbox with sample program.
- b. Write note on Class-Hierarchy of "javax.swing" package.
- c. What is purpose of init(), service(), and destroy() methods in Servlet?
- d. Explain with code segment: (i) inserting a row in database table (ii) deleting a row in database table.
- e. Write short note on Remote Method Invocation (RMI) in java.

Q3 Answer any THREE from the following: [18]

- a. Explain the following terms with reference to Java Swing : Light-weight components,

Pluggable Look-And-Feel (PLAF), Model-View-Controller(MVC)

- b. Write brief note on JLabel. Write program to display an image into label.
- c. Explain with coding : Creation of connection object, creation of statement object, and creation of prepared statement object.
- d. Discuss the concept of "Event", "Event Listener", and "Event Handler" in swing programming.
- e. Explain the steps of execution of Servlet.

Q4 Answer any THREE from the following:

[21]

- a. What is container? What is component? Explain the components : JButton and JToggleButton. Discuss : How these components are declared? How added to container? How events are handled?
- b. Explain with example and sample program : JComboBox.
- c. Write program to calculate area of circle in servlet. Also write code to design HTML form which ask for radius and to call servlet when submit button is pressed.
- d. Assume the table "tblBank" with following fields:  
ac\_no (integer), name (string) and balance (integer)  
Write java code to update the above table using following two methods:  
void deposit(int p\_acno, int p\_amt)  
void withdraw(int p\_acno,int p\_amt)
- e. Explain in detail the concept sending and receiving packet using UDP protocol. write code segments for (i) sending a string (ii) receiving a string. (No need to write complete program, write only the portion that send/receive the packet).