Q.P. Code :20290

[Time: 2:30 Hours]   [Marks:75]

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory.
        2. Figures to the right indicate marks.
        3. Illustrations, in-depth answers and diagrams will be appreciated.
        4. Mixing of sub-questions is not allowed.

Q.1 Attempt the following (any THREE):   (15)

A) Explain any five features of Swing components.

B) Explain JMenu with code snippet

C) State the role of JPanel class and explain how to add components in JPanel.

D) Write a Java program containing a text field, a combo box and a button. By clicking on the button the content of the text field is added to the combo box.

E) Write a swing program containing two text-fields to accept values of a and b Pythagorean triplet. Also include a button which when clicked, shows the value of c in a label [c2 =a2 +b2].

F) Write a program containing three text fields, out of which third is disabled. It also contains 4 buttons representing +, - , * and / operations. First two text fields should accept two numbers. When any button is clicked, the appropriate result should be displayed in the third text field.

Q.2 Attempt the following (any THREE):   (15)

A) Explain JTable class with constructors and any two methods.

B) Explain how a thread can be created using Runnable interface.

C) Explain life cycle of a Thread.

D) Explain event delegation model in detail.

E) Write a program to create a tree having 'TYBSc-CS Syllabus' as its root node with sem V and sem VI as its child nodes. Each child node contains any one subject as its sub node.

F) Write a program to create a table having Roll No, Name and Marks as it field with atleast 3 records in it.

Q.3 Attempt the following (any THREE):   (15)

A) Write the steps to access a database using JDBC.

B) Write a short note on JDBC-ODBC Bridge plus ODBC driver.

C) Explain the role of the following two interfaces along with any two methods of them:

    i)   ResultSetMetaData,   ii) DataBaseMetaData

D) Explain with an example how to create and use Prepared Statement.

E) Write a JDBC program that accepts a table name and displays total number of records present in it.

F) Write a JDBC program that will create a Emp table. The Emp table will have Emp No, Emp Name, Salary and Location.

Q.4 Attempt the following (any THREE): (15)

A) Explain role of Inet Address class with its any three static methods.

B) Explain Socket class with two constructors and three methods.

C) Explain the steps for implementing RMI/ creating RMI application. (Including steps to compile and run RMI application).

D) State and explain any two exception classes generated while developing an RMI application.

E) Write a TCP server program that returns factorial of a given integer number to a TCP client.

F) Write a Java program that accepts URL from user and downloads and displays its content on screen.

Q.5 Attempt the following (any THREE): (15)

A) Explain different types of Text Entry components.

B) Explain JToolBar class along with code snippet.

C) Write a short note on Connection interface.

D) Write short notes on Network interface

E) Write note on JFileChooser class.

F) Write a short note on RMI Security Manager.

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