

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

1. Attempt the following (any **two**) 12
(a) Write a short note on features of JFC.
(b) Explain any 3 types of panes used in swing?
(c) How to create a JMenu and add it to the JMenuBar inside a JFrame.
(d) Write a swing program containing three text fields. The first text field accepts first name, second accepts last name and the third displays full name on click of a button.
2. Attempt the following (any **two**) 12
(a) Write a short note on JToolBar.
(b) Explain with an example how a thread can be create using Runnable.
(c) What are thread safe variables? Explain.
(d) Write a Java program which displays even numbers between 30 and 50 (both inclusive) after every 10 seconds.
3. Attempt the following (any **two**) 12
(a) Write short note on JDBC drivers.
(b) Explain with an example how to create and use prepared statement.
(c) Describe the way a Stored Procedure is called in JDBC.
(d) Write a JDBC program that accepts a table name and displays all records present in it.
4. Attempt the following (any **two**) 12
(a) Write a short note on RMI architecture.
(b) Explain the class URLConnection.
(c) Why do we use Inet Address class? State and explain any four methods of this class.
(d) Write a TCP server program which accepts a number from client and the server returns the square root of number.

5. Attempt the following (any two)

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- (a) List and explain any three Text-Entry Components.
 - (b) Write a short note on Life cycle of a Thread.
 - (c) Explain the following methods & state the class / interface to which they belong to :-
 - (i) executeUpdate()
 - (ii) getColumnCount()
 - (iii) getString()
 - (d) Explain the Steps to execute a RMI program.
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