Q.P CODE:USCS305                (TIME :2 ½ Hrs.)                TOTAL MARKS :75M

N.B:-
  1. All questions are compulsory.
  2. Answers to the same question must be written together.
  3. Numbers to the right indicate full marks.
  4. Draw neat labeled diagrams wherever necessary.
  5. Use of Non-programmable calculators are allowed.

**Q1)        Attempt the following (ANY FOUR) (Each of 5 marks)**            [20M]

  A)     Write a short note on Java Program Structure.

  B)     What do you mean by "Inner Classes" in Java? Explain with the help of example.

  C)     Write a short note on "Method Overriding".

  D)     Differentiate between Abstract Class and Interface.

  E)     Explain various access specifiers that can be used in Java?

  F)     Explain Thread Life Cycle.


**Q2)  Attempt the following (ANY FOUR) (Each of 5 marks)**            [20M]

  A)     Write a short note on "JDBC Type-3 Driver".

  B)     Write a Java program to demonstrate the use of "Statement".

  C)     Write a short note on Collection Framework.

  D)     Write a short note on Vector Class.

  E)     Explain various methods of Connection interface.

  F)     Explain set interface.

**Q3)  Attempt the following (ANY FOUR) (Each of 5 marks)**            [20M]

  A)     Explain init(), service() and destroy methods () of Servlet.

  B)     Explain elements of web.xml file in detail.

  C)     Explain any two methods of Filter.

D) What are JSP directives? Explain any two with the help of example.

E) Explain the scriptlets in JSP with the help of an example.

F) Explain page scope and request scope implicit objects.

**Q4) Attempt the following (ANY THREE) (Each of 5 marks)** [15M]

A) Explain Java Servlet Technology.

B) What is PreparedStatement? Explain use of it.

C) Explain how to use ButtonGroup class.

D) Explain JComponent class with its methods.

E) Write a short note on TreeSet class.

F) What is use of finally keyword? Explain with the help of an example.