1058

B.E. (Computer Science and Engineering)
Eighth Semester
Elective – II
CSE-815: Java Technology

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt _five_ questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-
    a) What is Java virtual machine?
    b) What is inheritance? Give one example of method overriding.
    c) What is a program thread? Give example.
    d) What JDBC? Discuss its need and significance.
    e) Explain: EJB, Java Server Pages.

    (5x2)

UNIT – I

II. a) What is a constructor? Write a program in Java to illustrate the concept of classes, methods and constructors.

     b) What is an applet? Discuss the initialization, execution and termination of an applet class.
     (5,5)

III. a) How is event-driven programming different from procedure oriented programming? Illustrate with suitable example the event-handling procedure for keyboard.

     b) Explain: panel, canvas, frames? Write a program to create a window frame and illustrate its application using suitable example.   (5,5)

IV. a) What is exception handling? Illustrate with example, the try and catch statements used for creating and throwing exceptions.

     b) Give an example of a multi-threaded application? Discuss the thread synchronization in detail.   (5,5)

UNIT – II

V.   a) Write the key steps involved in connecting a Java application to a database. Can we connect the program with different kinds of databases? If yes, then justify your answer?
     b) Explain the component based architecture of J2EE.   (5,5)

P.T.O.

(2)

VI. What are Java Servelets? Write a program to illustrate the same. Discuss its deployment and testing. (10)

VII. Differentiate between Session bean and. Entity bean? Also explain with example the stateless session and statefull session bean? (10)

x-x-x