Seventh Semester B.E. Degree Examination, June/July 2016
JAVA and J2EE

Time: 3 hrs.   Max. Marks:100

Note: *Answer FIVE full questions, selecting*
at least TWO questions from each part.

PART – A

1   a.   Explain the process of compiling and running the JAVA application, with the help of "Hello world" program. **(08 Marks)**
    b.   Explain the syntax of for-each loop. Write a JAVA program to search a key element by using for-each loop. **(08 Marks)**
    c.   Correct the errors from the following code and explain:
         byte   b = 50;
                 b = b * 2;   **(02 Marks)**
    d.   Write the output of the following code:
         byte   b;
         int   i = 257;
         double d = 323.142;
         b = (byte) i;
         system.out.println(b);
         b = (byte) d;
         system.out.println(b);   **(02 Marks)**

2   a.   What is an applet? Explain different stages in life cycle of applet. **(07 Marks)**
    b.   Create a class figure in JAVA, with following members dim 1, dim 2 and abstract method area. Create a subclasses Triangle, Rectangle with implementation of area. **(07 Marks)**
    c.   Explain dynamic method dispatch in Java with example program. **(06 Marks)**

3   a.   What do you mean by thread? Explain the different ways of creating threads. **(08 Marks)**
    b.   Write a JAVA program to create two threads, one displays "computer science" and another displays "information science" five times. **(08 Marks)**
    c.   Write a JAVA program to find a factorial of N numbers recursively. **(04 Marks)**

4   a.   What is swing? Explain important features of swing. **(04 Marks)**
    b.   Explain the following with an example for each:
         i)   JTextField
         ii)   JTable
         iii) JComboBox   **(12 Marks)**
    c.   Explain components and containers in the swing. **(04 Marks)**

PART – B

5   a.   Explain J2EE architecture. **(08 Marks)**
    b.   Briefly explain the callable statement object. Write a program to call stored procedure using callable statement. **(08 Marks)**
    c.   Give JAVA syntax for the following :
         i)   Selecting the rows from employee table.
         ii)   Counting number of employees working in "research" department. **(04 Marks)**

6 a. What are Servlet? Briefly explain the application of servlet in web programming.   (04 Marks)
    b. Write short notes on:
        i) Session tracking
        ii) Cookies   (08 Marks)
    c. Write a JAVA Servlet to read name from client page and say Hello to the name as response.
                                                                                            (08 Marks)

7 a. What is JSP? Explain the different types of JSP tags.   (06 Marks)
    b. What is RMI? Describe the code snippet RMI at client side.   (10 Marks)
    c. Write the differences between JSP and Servlets.   (04 Marks)

8   Write short notes on:
    a. Session JAVA beans
    b. Entity JAVA beans
    c. JAR file
    d. Deployment descriptor for EJB 1.1   (20 Marks)

* * * * *