# MCA (Revised)

## Term-End Examination

## June, 2013

## MCS-051 : ADVANCED INTERNET TECHNOLOGIES

*Time : 3 hours* *Maximum Marks : 100*

*Note : Question No. 1 is **compulsory**. Attempt any three questions from the rest.*

1.  (a)  How does Session Bean differ from the Entity     5
         Bean in terms of object sharing, object state
         and failure recovery ?

    (b)  Using servlet, JSP, JDBC and XML create a    10
         web application for a courier company to
         provide online help in tracking the delivery
         status of items.

    (c)  Write code to use a form to authenticate a    10
         client using the session information stored
         in the HTTP session object in the web server.

    (d)  Create a database of students enrolled at one    10
         of the study center of IGNOU and then
         write a program using JSP and JDBC to
         display their names, addresses and the
         names of the courses in which they are
         enrolled .

(e) Explain different types of system vulnerabilities. **5**

2. (a) What are the advantages of using Java's multiple layer security implementation ? **10**

   (b) Draw the layered architecture of EJB and explain its components briefly. **10**

3. (a) Explain the different types of restrictions on EJB. **5**

   (b) What are the advantages of XML over HTML ? **5**

   (c) Explain the life cycle of servlet. Write a code for demo servlet to explain all the three stages of servlet life cycle. **10**

4. (a) What are the custom tags in JSP ? Explain their features. What are the three components that make up a tag in library ? Explain with the help of an example. **10**

   (b) What is message driven bean ? Explain different circumstances under which message driven bean can be used. **10**

5. (a) Draw a diagram to show security objects dependencies and explain each security object with the help of examples. **10**

   (b) What is DTD ? Why do we use it with XML documents ? Explain the different components of DTD with example. **10**

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