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MCA (Revised)
Term-End Examination
December, 2015

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) Explain the differences between JDBC and ODBC. 5

    (b) Write a servlet code to fetch and display all the fields of PRODUCT table with attributes — product id, product name, product qty, product price, model and description. 10

    (c) Explain the benefits offered by EJB component architecture to Application developers and customers, in brief. 10

    (d) (i) Name any five JSP implicit objects and mention,the class they belong to. 5

         (ii) Write a JSP code fragment to insert the following fields into a database after extracting them from an HTML form : 5

              last name

              phone

              e-mail

    (e) Differentiate between SGML and XML. 5

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

(b) Explain the different types of JDBC drivers along with their advantages and disadvantages. *10*

3. (a) Differentiate between the following : *5×3=15*

(i) Get vs Post

(ii) Generic Servlet vs http Servlets

(iii) Servlet Context vs Servlet Config

(iv) Stateful Session Bean vs Entity Bean

(v) Low Level Introspection vs High Level Introspection

(b) Explain various circumstances under which a message driven bean should be used. *5*

4. (a) Assume that there is a table named CUSTOMER in MS-Access with fields — (Cust_id, Cust_name, Cust_phone and Cust_address). Write a code for servlet which will display all the fields of Customer Table in a tabular manner. *15*

(b) Explain the different development goals of XML document. *5*

5. (a) What are customs tags in JSP ? What are the components that make up a tag library in JSP ? *6*

(b) Write an XML DTD to represent the grade card of a student which contains the following : *8*

   (i)   Name – last, middle and first

   (ii) Subject – five subjects

   (iii) Marks

   (iv) Grade

   (v)   Reserved Category (yes/no)

(c) Explain EAI layer software context architecture with diagram. *6*

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