MCA (Revised)
00369   # Term-End Examination
December, 2016

MCS-051(S) : 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 life cycle of entity beans with its required methods with the help of a diagram.   5

    (b)   Assume there is a table named 'customer' in the "Bank" database with the following fields :

          cust_id, cust_name, dob, email

          Write a code for servlet and JDBC to connect to the "Bank" database and display customer records. Assume ORACLE as RDBMS.   10

    (c)   Write a code fragment to show how persistent cookies are used for session tracking for shopping cart application.   10

(d) What are the different recovery procedures in security implementation ? Explain. *5*

(e) The telephone directory is usually displayed in the department order hierarchy and shows for each department, the name, designation and telephone number of each employee working in it. Create an XML file containing some directory data. *10*

2. (a) What is Java Naming and Directory Interface authentication ? Explain it with a suitable example. *5*

(b) Explain the call back methods of entity beans with an example. *5*

(c) Differentiate between the following : *10*

   (i) Get and Post

   (ii) Servlet engine and Servlet chaining

   (iii) SGML and XML

   (iv) Data integrity and System integrity

3. (a) Write a code fragment to explain all the three stages of life cycle of a servlet. *6*

(b) Explain different types of system vulnerabilities. *4*

(c) Write a JSP code fragment to insert the following fields into a database after extracting them from an HTML form : *10*

Last Name

Phone

e-mail

4. (a) Explain the need of entities in XML documents. Describe all the three types of entities with the help of an example. *10*

(b) Describe the following HTTP authentication mechanisms for authentication of a user to a web server : *10*

(i) HTTP Basic Authentication

(ii) HTTP Client Authentication

5. (a) Explain five different types of services offered by EJB container. *5*

(b) What is a well formed tag ? Name two HTML tags that are not well formed. *5*

(c) Explain how business logic and presentation logic are separated using Java server page. *5*

(d) Explain the purpose of different types of JDBC SQL statements. *5*

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