LB-104

April-2014

4th M.Sc. (CA & IT) (Integrated)

Client Server Technologies

Time : 3 Hours]   **[Max. Marks : 100**

1. Answer the following questions : (any **4**)   **20**
   - (1) Explain the characteristics of client/server systems.
   - (2) Explain process per client architecture of a database server.
   - (3) Explain the life cycle of a servlet.
   - (4) Explain CORBA object services.
   - (5) What is a two-phase commit protocol ? Explain.

2. (a) Write short notes on the following : (any **4**)   **12**
   - (1) Digital Certificate
   - (2) Lightweight Distributed Access Protocol
   - (3) Database server
   - (4) COM server
   - (5) Stored procedures

   (b) Answer the following :   **8**
   - (1) Explain Client/Server building blocks.
   - (2) What is a Transaction ? What are the ACID properties of a transaction ? Explain.

3. (a) Explain briefly the following terms : (any **4**)   **12**
   - (1) Sockets
   - (2) Distributed objects
   - (3) Scriplets in JSP
   - (4) ESQL
   - (5) Chained Transactions

   (b) Answer the following : (any **2**)   **8**
   - (1) What are the limitations of a flat transaction ? Explain.
   - (2) What are the phases in the Life Cycle of a JSP Page ?
   - (3) Explain language and auto flush attributes of a page directive in JSP.

4. (a) Answer in brief :
   (1) Explain what do you mean by Session tracking ? Explain any two techniques used for session tracking. **5**
   (2) Write difference between get and post method. **2**

   (b) Write the programs for following :
   (1) Write a JSP program to display all the records in a given table in reverse order. **5**
   The table has following fields :
   Stud_RNo
   Stud_Name
   Percentage
   Date_of_Birth   Stud_RNO is primary key

   (2) Write a JSP code to enter values from Registration form in the Registration table. Check if Username Already exists. If so display the message accordingly and ask the user to choose different Username.
   The table has following fields :
   Username   Password   Email ID   Date of Birth   Address   Gender   **8**

5. (a) Write the purpose of the following methods : **4**
   (1) executeQuery( )
   (2) sendRedirect( )
   (3) beforeFirst( )
   (4) isAfterLast( )

   (b) Answer the following questions :
   (1) Explain any three mechanisms provided by NOS for dealing with tampering and confidentiality of intransit data : **4**
   (2) Compare the following : (any **3**) **12**
      (1) Forward and sendRedirect methods in JSP.
      (2) RPC and MOM
      (3) Transactional communications and Non Transactional model communications.
      (4) Graphical User Interface and Object Oriented user Interface.

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