

Seat No. : _____

XV-109

Five Years M.Sc. (CA & IT) Integrated (K.S.)

4th Year M.Sc.

April-2013

CST (Client Server Technologies)

Time : 3 Hours]

[Max. Marks : 100

1. Answer the following (any **four**) : **20**
 - (a) What is client/server ? Explain characteristics of client/server system.
 - (b) Differentiate between Two-Tier and Three-Tier client/server architectures.
 - (c) Explain client/server building blocks.
 - (d) Explain Base services of an Operating System.
 - (e) Differentiate between GUI and OOUI.

2. Answer the following (any **four**) : **20**
 - (a) What security mechanism are provided by modern NOS to meet the C₂ level security on the network ?
 - (b) What are ACID properties of a Transaction ? Explain them in detail.
 - (c) Discuss the flat transaction problems. (any **two**)
 - (d) Explain CORBA services and also explain benefits of CORBA.
 - (e) Differentiate between RPC & MOM.

3. Answer the following : **20**
 - (a) Explain Database Server in details.
 - (b) Explain the Public and Private key encryption technique with diagram.

4. Answer the following : **25**
 - (a) Explain JZEE Architecture in detail with diagram.
 - (b) Explain the Anatomy of request processing using in-process and out-of-process servlet container model.
 - (c) Write a short note on JDBC.
 - (d) Explain Life Cycle of Servlet.
 - (e) Explain how JSP works in detail.
 - (f) List and explain any two objects of JSP.
 - (g) Explain session Tracking Mechanism and any two methods of it.

5. Write JSP code for following (any **three**) :
- (a) Design on HTML form where user enter student details like.
 - (1) Student – ID
 - (2) Student – Marks
 - (3) Student – Grade
 - (4) Student – First name
 - (5) Student – Last nameAlso write code to display details entered by user using servlet.
 - (b) Write a JSP code for online shopping (art for IT products). Display any random items selected by users.
 - (c) Write a JSP code that stores the following items in a session object.
 - (1) Account – Number
 - (2) Transaction – ID
 - (3) Transaction – Date
 - (4) Debit Card – Number
 - (5) User – Name
 - (d) Write a JSP code for Registration of a user. Registration Data should be stored in a database using data. Set object the Registration form has following fields.
 - (1) First – name
 - (2) Last – name
 - (3) Address
 - (4) User – name
 - (5) Password
 - (6) Zip code
 - (7) City
 - (8) State
 - (e) Write a JSP code which accepts user name & password from user using request object and displays users details on success. JSP page if user name and password are correct.
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