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Seventh Semester B.E. Degree Examination, January/February 2004
Computer Science / Information Science Engineering
Client / Server Computing

Time: 3 hrs.]

[Max.Marks : 100

Note: 1. Answer any FIVE full questions.
2. All questions carry equal marks.

1. (a) Explain the client / server software infrastructure. (10 Marks)
(b) What are the key technologies used at client / server application level? (10 Marks)
2. (a) Which are the types of transparencies the NOS middle ware is suppose to provide? (10 Marks)
(b) Discuss the issues in the implementation of RPC. (10 Marks)
3. (a) Explain any two peer-to-peer protocols in use. (10 Marks)
(b) What is DCE? Explain its components. (10 Marks)
4. (a) What is MOM ? Explain. (10 Marks)
(b) Explain stored procedures.
Compare stored procedures with networked SQL. (10 Marks)
5. (a) What is dataware housing ?
Explain Top - down approach to data ware housing. (10 Marks)
(b) Explain different SQL data base server architectures. (10 Marks)
6. (a) What is Flat transaction ? What are its limitations ? (10 Marks)
(b) Explain the X/open DTP referance model. (10 Marks)
7. (a) Explain the benefits of using client / server oriented TP monitors. (10 Marks)
(b) What is groupware ? How is it different from SQL data bases and TP monitors? (10 Marks)
8. Write short notes on any FOUR of the following.
a) Middle ware (SQL)
b) Kerberos
c) Global Directory services
d) ACID - properties
e) TP - light TP - heavy (4×5=20 Marks)

Seventh Semester B.E. Degree Examination, February 2002Srinivas Institute of Technology
Library, Mangalore**CSE/ISE
Computer Networks**

Time

Time: 3 hrs.]

[Max.Marks : 100

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Note: Answer any FIVE full questions.

1. (a) Compare the OSI reference model and the ICP/IP reference model. (10 Marks)
- (b) Explain the terms: Protocol, SAP, Subnet, Internet and PDU. (5 Marks)
- (c) Briefly discuss the design issues in computer networking. (5 Marks)
2. (a) Explain the Link State routing. (5 Marks)
- (b) Compare VCs and Datagram subnets. (10 Marks)
- (c) What is congestion? Explain the Token Bucket algorithm. (5 Marks)
3. (a) Explain the IP addressing scheme and the formation of subnets. (5 Marks)
- (b) What improvements have been made in IPV6 compared to IPV4? (10 Marks)
- (c) What are the different devices used for internet working? (5 Marks)
4. (a) What is the problem encountered in establishing a transport connection? Explain the Three-way Handshake protocol and its working in the presence of delayed duplicate control TPDU's. (10 Marks)
- (b) Briefly explain the multiplexing of transport connections. (5 Marks)
- (c) Explain the terms: Port, Urgent data, MTU, UDP and bandwidth-delay product. (5 Marks)
5. (a) Describe DES. What is public key cryptography? (10 Marks)
- (b) What are Digital signatures? Explain one approach to have authentication using digital signatures. (5 Marks)
- (c) Write a note on Doman's Name System. (5 Marks)
6. (a) Explain SNMP management model and the SNMP protocol. (10 Marks)
- (b) What are the basic functions supported by e-mail systems? Explain. (5 Marks)
- (c) How is USENET implemented? (5 Marks)
7. (a) What is meant by Lossy and Lossless compression? Explain an entropy encoding method. (5 Marks)
- (b) Explain the digital representation of analog signals. (10 Marks)
- (c) Briefly explain the JPEG compression technique. (5 Marks)
8. Write explanatory notes on:
 - (a) Broadcast routing
 - (b) Firewalls
 - (c) QOS and option negotiation
 - (d) Network Security.

(5 × 4 = 20 Marks)

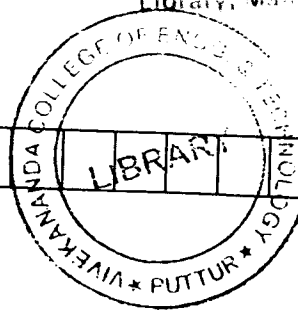
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NEW SCHEME



**Seventh Semester B.E. Degree Examination, May / June 2006
CS / IS**

Client Server Computing

Time: 3 hrs.]

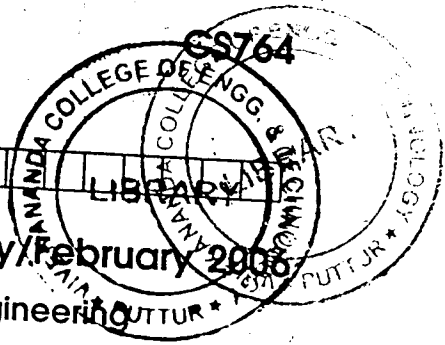
[Max. Marks:100

Note: 1. Answer any FIVE questions.

- 1 a. Describe the client/server computing system. Illustrate the characteristics of the client/server system. (10 Marks)
b. Explain the various advantages of client/server computing over other architectures. (10 Marks)
- 2 a. Explain the various request for services in the client workstations. (10 Marks)
b. Write about the extension of base services and extended service needed from OS to client server systems. (10 Marks)
- 3 a. Briefly explain the execution architecture. List out the various differences between two tier versus three tier. (10 Marks)
b. Describe the client services which operate in an open system environment. (10 Marks)
- 4 a. In a network operating system environment explain the server functionality in detail. (10 Marks)
b. Write about the various database essentials employed in client server systems. (10 Marks)
- 5 a. How connectivity and interoperability are achieved between client work station and server? (10 Marks)
b. Explain the various services the IPC provides in the client server model. (10 Marks)
- 6 a. Discuss the key layers in the network management system architecture. (10 Marks)
b. Explain the various WAN technologies with respect to client/server computing. (10 Marks)
- 7 a. Discuss the various productivity measures employed. (10 Marks)
b. Explain the task allocation on server and the client side. (10 Marks)
- 8 Write short notes about the following :
 - a. Component
 - b. CORBA distributed object
 - c. Opendoc constituent technology
 - d. RPC(20 Marks)

NEW SCHEME

Reg. No.



Seventh Semester B.E. Degree Examination, January/February 2006
Computer Science / Information Science and Engineering
Client Server Computing

Time: 3 hrs.)

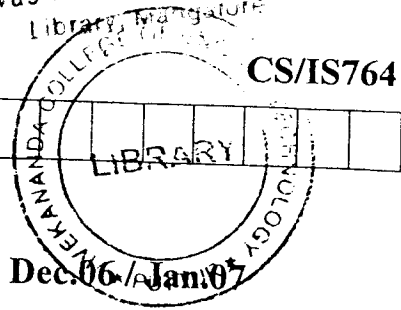
(Max.Marks : 100

Note: Answer any FIVE full questions.
Answer to the point.

1. (a) What are the main components in N-tier architecture ? Explain. (4+8 Marks)
(b) Explain service specific pipes to accomplish a particular client / service type of service. (8 Marks)
2. (a) What is the state of today's wireless WAN connection ? Explain. (3+7 Marks)
(b) What server programs hope to get from their extended operating system ? (4+6 Marks)
3. (a) Explain the Mac OS X architecture. (10 Marks)
(b) Can we obtain C_2 - level security on the intergalactic net ? How ? (10 Marks)
4. (a) Explain server architecture that databases use to handle remote database clients. (3+7 Marks)
(b) Explain the EDA / SQL gateway components. (2+8 Marks)
5. (a) What are the disadvantages of distributed databases ? (10 Marks)
(b) Explain briefly the Oracle distributed component architecture. (10 Marks)
6. (a) What is a two - phase commit protocol ? How it is implemented ? (4+8 Marks)
(b) Bringout the differences between transactional and non-transactional communications. (8 Marks)
7. (a) Explain the key functions of electronic imaging client / server system. (8 Marks)
(b) Explain the architecture of work flow client API. What are its shortcomings ? (8+4 Marks)
8. (a) What are the functions offered by combined notes / domino client / server system ? (10 Marks)
(b) Explain the properties of a minimalist component. (10 Marks)

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NEW SCHEME



Seventh Semester B.E. Degree Examination, Dec. 06 / Jan. 07
CS / IS

Client / Server Computing

Time: 3 hrs.]

[Max. Marks:100

Note: 1. Answer any FIVE full questions.

- 1 a. Explain the main building blocks in client / server system. (03 Marks)
b. Describe the evolution of client / server computing. (07 Marks)
c. List out the advantages of client / server systems. (10 Marks)
- 2 a. Differentiate between 2-tier and 3-tier approaches to client / server computing. (10 Marks)
b. What are the different ways to improve performance and reduce network traffic in client / server systems? (10 Marks)
- 3 a. Client / server applications are client – centric. Explain. (02 Marks)
b. How are clients classified? (08 Marks)
c. What are the minimum services that a server expects from an operating system? (10 Marks)
- 4 a. How does NOS provide redirection? (04 Marks)
b. Discuss the following functionalities provided by a server:
i) File services.
ii) Database services. (08 Marks)
c. Explain the features of 2 players each for client and server operating systems. (08 Marks)
- 5 a. Explain the steps involved in making a RPC. (08 Marks)
b. How does RPC address the following issues :
i) Parameter passing between client and server.
ii) Failures.
iii) Location of server. (09 Marks)
c. Bring out the strengths and weaknesses of RPC. (03 Marks)
- 6 a. How do components compare with objects? (05 Marks)
b. What is CORBA? What are the benefits of using CORBA? (10 Marks)
c. Write 2 points each to say COM object is like and isn't like CORBA object. (05 Marks)
- 7 a. What are the characteristics of peer-to-peer communication? How is peer-to-peer communication possible using :
i) Sockets.
ii) Net BIOS.
iii) Named pipes. (14 Marks)
b. Draw a figure and explain the concept of network management. (06 Marks)
- 8 Write notes on:
a. ODBC.
b. Stored procedures.
c. JEE.
d. MOM. (20 Marks)

