Assignment No.1

Batch 6

1. Write a note on socket interface & client server model & software design.
2. Write a note on algorithms & issues in client server design.

Batch 5

3. Explain in detail about Concurrency.
4. Explain Iterative server in detail.

Batch 4

5. Write the port numbers for the following protocols for TCP/UDP.
   i) ECHO
   ii) DAYTIME
   iii) FTP-DATA
   iv) FTP-CONTROL
   v) TELNET
   vi) HTTP
   vii) POP-3
6. Explain in detail multiprotocol server and multiprocess server.

Batch 1

7. Explain create(), sendto() , recvfrom(), listen() socket system call
8. List and explain socket system calls in detail.

Batch 2

9. Compare the TCP header and the UDP header. List and Explain the fields in the TCP header that are not part of the UDP header.
10. What do you mean by concurrency control? Explain how concurrency managed in client-server architecture

Batch 3

11. Discuss the peer-to-peer paradigm and its application in detail.
12. Write note on Unix internet, super server(inetd).

Assignment No.2

Batch 6

1. Differentiate IPv4 & IPv6.
2. Explain Embedding of IPv4 addresses in IPv6 addresses.

Batch 1

3. Write a short note on.ICMPv6
4. Explain in detail about Transition from IPv4 to IPv6.

Batch 2

5. Write a note on IPv6.
6. Draw and explain IPV6 datagram format. Also explain Fragmentation in IPv6

Batch 3

7. Describe advantages of IPv6 over IPv4. Explain Embedding of IPv4 addresses in IPv6 addresses.
8. Which ICMP messages contain part of the IP datagram? Why is this needed Discuss group membership messages of ICMPv6

Batch 4

9. What is Unicast & Multicast communication? Also mention the applications of it.
10. Explain error message of ICMPv6.

Batch 5

11. Explain Informational message of ICMPv6.
12. Explain Neighbor message of ICMPv6.
13. Explain Group membership message of ICMPv6.

Assignment No.3

Batch 6

1. What is DNS? What is the need of it? Explain the types of records in DNS.
2. Discuss the DNS Message in detail.

Batch 1 & 4

3. Explain BOOTP protocol in detail.
4. Explain DHCP operation with neat state transition diagram

Batch 2

5. Explain DNS name address resolution process in detail
6. Explain DHCP operation in the same network and different Network.

Batch 3 & 5

7. Explain DHCP Packet format.
8. What are the components of DNS? Explain

Assignment No.4

Batch 6

1. What is RRQ or WRQ message? Why do we need an RRQ or WRQ message in TFTP but not in FTP?
2. Discuss six classes of commands sent by the client to establish communication with the server

Batch 1

3. Discuss how file transfer can be done using FTP? Explain three types of file transfer in it.
4. Define different modes of operations in TELNET and their efficiency

Batch 2 & 4

5. Explain flow control and error control mechanism of TFTP. Also explain out-of-band signaling in TELNET.
6. Define TELNET protocol and show how it implements local and remote login using the concept of network virtual terminal

Batch 3 & 5

7. Explain FTP command processing. List and describe at least two commands from each group of FTP commands.
8. Explain different options used in TELNET and TELNET option negotiation in detail.

Assignment No.5

Batch 6

1. Explain role of MUA, MTA and MAA in Electronic Mailing System.
2. Draw and Explain HTTP Query and response message in detail.

Batch 5

3. What are the types of web Documents explain in detail. Also explain how web server serves active document?
4. With neat diagram explain architecture of E-mail system

Batch 4

5. With neat and labeled diagram Explain HTTP architecture
6. Write note on MIME.

Batch 1

7. Explain POP3and IMAP4 protocols in detail
8. Draw and Explain browser Architecture.

Batch 2

9. Write a note on Anonymous FTP.
10. Explain FTP, connections & communication.

Batch 3

11. Explain NVT & embedding.
12. Write a note on TFTP.

Assignment No.6

Batch 1

1. Draw and Explain architecture of H.323
2. Explain all the methods of streaming stored audio and video using media server and RTSP.

Batch 2 &5

3. Discuss in detail about RTP and RCTP.
4. Explain Session Initiation Protocol in detail .Also Explain mechanism of SIP to track the callee.

Batch 3 & 4

5. Discuss how audio and video files are compressed for transmission through the Internet.
6. Discuss the phenomenon called Jitter that can be created on a packet-switched network when transmitting real-time data.

Batch 6

7. Explain is RTP and RTCP?
8. Why does RTP need the service of another protocol, RTCP?