**NP Review Questions**

Chapter: Elementary UDP Sockets (Refer PPT)

1. Explain Socket functions for UDP Client/Server (fig 8.1)

2. Expalin 'recvfrom' and 'sendto' Functions

3. Explain Simple echo client/server using UDP or develop UDP Echo Server: 'main' Function

4. Write UDP Echo Server: 'dg\_echo' Function

5. Write UDP Echo Client: 'main' Function

6. Write UDP Echo Client: 'dg\_cli' Function

Chapter: IPV4&IPV6 Interoperability (Refer Notes)

1. Expain IPv4 Client, IPv6 Server (Figure 12.2. IPv6 server on dual-stack host serving IPv4 and IPv6 clients.+ 6points

2. 2. Explain Processing of received IPv4 or IPv6 datagrams, depending on type of receiving socket. (Answer: Figure 12.3.+explanation +dual stack rules 3 points)

3. Explain IPv6 Client, IPv4 Server (fig 12.4 3+ 4points)

What do you understand by the term Network Programming? What are the high-level decisions to be made before you design the details of a protocol? With a neat diagram, explain how the communication takes place between a client and a server over LAN.

With a neat flow chart, explain the steps involved in building an Echo Client-Server application using TCP. .

With a neat sketch explain the TCP State Transition diagram

Defend the use of htons/htonl and inet\_pton functions in network programming. Write a sample program to demonstrate the use of above functions.

Illustrate the significance of socket functions for elementary TCP client/server with a neat block diagram.

Demonstrate with appropriate code, the application of fork() and exec() APIs in Concurrent Server implementation

What are Concurrent Servers? Explain how does Concurrent Servers handle multiple clients at the same time.

 Illustrate the steps that allow an IPV6 TCP client to communicate with IP dual stack  Summarize the steps that allow an IPV4 TCP client to communicate with IPV6  server using dual stack

Develop the C program to demonstrate UDP echo server: main function

Develop the C program to demonstrate UDP echo server: dg\_echo function

Develop the C program to demonstrate UDP echo client: main function

Develop the C program to demonstrate UDP echo client: dg\_cli function

Explain in detail, Socket functions for UDP Client /Server 10m

Explain the following arguments of a socket function   
a) Family

b) Type  
c) Protocol

Compare the little-endian and big-endian byte ordering functions with a neat diagrams

Write the function protype for a) recvfrom b) sendto

Explain the Value-Result arguments

What are Concurrent Servers? Explain how does Concurrent Servers handle multiple clients at the same time with necessary diagrams and codes.

Compare the host and network byte ordering functions with a neat diagrams

Explain the function protype for a) recvfrom b) sendto

Illustrate the significance of socket functions for elementary TCP client/server with a neat block diagram.

 Expalinmalloc,calloc and realloc functions

Expalin with a neat diagrams the following

a)     TCP Connection Establishment b)TCP data Transfer c)TCP Connection Termination

Summarize the steps that allow an IPV4 TCP client to communicate with IPV6  server using dual stack

Develop the C program to demonstrate UDP echo server: dg\_echo function

Summarize the steps that allow an IPV4 TCP client to communicate with IPV6  server using dual stack

Develop a C++ program to implement compile time and run time configuration limits for

the below given tasks

a) Max. no. of open files

b) Max. no of characters allowed in path name.

Expalin with a neat diagrams the following

a)     TCP Connection Establishment b)TCP data Transfer c)TCP Connection Termination