**UNIT-8- SOCKETS**

1Explain a stream socket with a illustrative example for client/server program. [15]

(OR)

Write in detail about how client and server programs can be developed in using TCP based system calls

2Explain a datagram socket with a illustrative example for client/server program. [15]

(OR)

Write in detail about how client and server programs can be developed in using UDP based system calls

3 Explain the sequence of steps to process various socket functions using TCP protocol with example [15]

4. Write a c program to implement echo server and echo client on port number 1234 using connection oriented system calls.

5 Explain briey about the following socket APIs with clear syntax:

(i) socket( ) (ii) bind( ) iii) listen( ) (iv) accept( ) (v)connect( )

6 (a) Explain how TCP connections are established and terminated.

(b) Write notes on byte ordering functions. [7+8]

7(a) How TCP NODELAY option is used while sending small packets?

(b) Explain how a client running on IPV4 con\_gured host communication with a

server in IPV6 host? [6+9]

8(a) De\_ne the three states of TCP connection establishment and termination.

(b) Write a program to illustrate bind( ), listen( ) and accept( ) system calls.

[6+9]

.