SET 1

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CSLR31 – Network Programming Laboratory

B.TECH / CSE (B) – V Semester

Date : 11.09.2020 **Regular Lab-1** **Duration : 3 Hours**

Answer All the Questions

SOCKET PROGRAMMING – TCP and UDP

1. Messages are sent from transmitter A to receiver B. Assume that the channel from A to B is initialized and that there are no messages in transit. Each message from A to B contains a data part and a sequence number, i.e., a value that is 0 or 1. B has two acknowledge characters that it can send to A: ACK0 and ACK1. Assume that the channel may corrupt a message. In a normal transmission, the transmitter A sends a message with sequence number 0 and waits for the ACK1 message from receiver B. When A receives an ACK1 message it sends the next message with sequence number 1 and waits for the ACK0. The ACK must be received before the timer set for each message.

   Using socket programming (both TCP and UDP) in C, demonstrate the following:

   1. Normal transmission
   2. Lost or damaged message
   3. Lost Acknowledgement
   4. Delayed Acknowledgement numbers

********** ALL THE BEST **********