

# Computer Networks

## Assignment 3

1. With a diagram, explain the congestion avoidance phase of TCP Congestion Control.
2. With a FSM, explain Reno TCP.
3. With a diagram, explain the sending of the request packet in the setup phase of the virtual circuit approach.
4. A datagram contains 8000 bytes of data and no options. This datagram is fragmented into Three fragments consisting of 3400 bytes, 2600 and 2000 bytes respectively. The fragment containing 2600 bytes is further fragmented into two fragments consisting of 1800 bytes and 800 bytes respectively. Draw a neat diagram representing the fragmentation. Show the values of all the fields which are relevant to fragmentation.
5. An organization is granted a block of addresses with the beginning address 14.24.74.0/24. The organization needs to have 3 subblocks of addresses to use in its three subnets: one subblock of 10 addresses, one subblock of 20 addresses, and one subblock of 40 addresses. Design the subblocks.