Week 3 Assignment 3

1. Which of the following layer provides least-to-most communication services for applications?
   a. Data Link Layer
   b. Network Layer
   c. Transport Layer
   d. Application Layer
   [4 points]

2. Dispersed inside communication used by the IP and UDP protocol, where data may be delivered out of order.
   a. True
   b. False
   [1 point]

3. Which of the following is a reliable protocol?
   a. TCP
   b. UDP
   c. None of these
   [2 points]

4. Congestion control prevents nodes from overloading the ________, flow control prevents the nodes from overloading the ________.
   a. receiver, sender
   b. network, receiver
   c. sender, receiver
   d. None of these
   [2 points]

5. To establish a connection, TCP uses a three-way handshake because both sides need to synchronize their segment sequence numbers during their connection.
   a. True
   b. False
   [1 point]

6. The Protocol Data Unit (PDU) of the transport layer is called
   a. Packet
   b. Byte
   c. Frame
   d. Segment
   [1 point]

7. The ________ field contains the next segment number rather than the sender of the acknowledgment message.
   a. Sequence number
   b. Acknowledgment number
   [1 point]

8. If a segment fails to arrive from a previous connection, which has been closed between the two nodes might still be holding in the amount.
   a. 2-way handshake
   b. 3-way handshake
   [1 point]

9. Which of the following is the correct statement?
   a. TCP is reliable, IP is unreliable
   b. TCP is reliable, IP is reliable
   c. TCP is unreliable, IP is reliable
   d. TCP is unreliable, IP is unreliable
   [2 points]

10. Which of the following is the correct statement?
    a. Go Back N ARQ uses out of order packets
    b. In Selective Repeat ARQ, one or more delivery can set triggers
    c. Go Back N ARQ, number of retransmissions in case of packet drop = n-1
    d. Sliding Window ARQ, lost data packets is resolved by sequence number
    [2 points]