- **Print your name.**

- Close-book policy: You may not use the text, my class notes and/or any notes and study guides you have created. You may use a calculator. You may not use a cell phone or computer.

| Problem | Points | Score |
|---------|--------|-------|
| 1       | 1      |       |
| 2       | 1      |       |
| 3       | 1      |       |
| 4       | 1      |       |
| 5       | 1      |       |
| Total:  | 5      |       |

1. (1 point) TCP connection is a logical one, consisting of _____ in the two communicating hosts

    A. buffers

    B. variables

    C. socket connection to a process

    **D. all of the above**

2. (1 point) In TCP protocol, the timeout interval is solely determined by the estimating value of RTT.

    A. True      **B. False**

3. (1 point) TCP flow control and congestion control take similar actions — the throttling of the sender.

    **A. True**      B. False

4. (1 point) TCP fast retransmit addresses the problem of relatively long time-out period

    **A. True**      B. False

5. (1 point) What is the main difference between GBN (go-back-N) protocol and TCP?

    > **Solution:** When timeout, a GBN sender will retransmit all `N` unacknowledged packets; a TCP sender will only retransmit the oldest unacknowledged packet.