1. Packets of the same session may be routed through different paths:

    A. TCP, but not UDP
    B. TCP and UDP
    C. UDP, but not TCP
    D. Neither TCP nor UDP

2. Imagine a TCP connection is transferring 18000 bytes of data. The first byte is the sequence number 1001. Find the sequence number of the second last segment sent if data are sent in 10 segments with the first 8 segments carrying 2000 bytes and the last two-segment carrying 1000 bytes.

A) 18000   B) 17001   C) 18001   D) 19000

3. Suppose the congestion window size of a TCP connection is 16 KB when a timeout occurs. The round trip time of a connection is 50 ms, and the maximum segment size is 2 KB. The time taken by TCP connection to get back to the 16 KB congestion window is _____?

A) 300 ms   B) 600 ms   C) 1000 ms   D) 800 ms

4. Which of the following statements are true about the Congestion window?[MSQ]

A) The sender should not send data greater than the congestion window size.

B) The sender should always send data that is less than or equal to the congestion window size.

C) The congestion window is known only to the sender and is not sent over the links.

D) The sender should send data greater than the congestion window size.

5. Which of the following statements are true about the Slow Start Phase?[MSQ]

A) Initially, the sender sets congestion window size = Maximum Segment Size.

B) In this phase, the size of the congestion window increases exponentially.

C) The sender increases the congestion window size linearly to avoid congestion.

D) This phase continues until the congestion window size reaches the slow start threshold.

6. Does the growth of the congestion window take place?

A) Infinitely

B) Up to Threshold

C) Up to the size of the receiver's window

D) Up to timeout

7. Consider the effect of using a slow start on a line with a 10 msec RTT and no congestion. The receiver window is 24 KB, and the maximum segment size is 2 KB. How long does it take before the first full window can be sent?

A) 90 msec   B) 60 msec   C) 70 msec   D) 80 msec

8. Suppose that the TCP congestion window is set to 18 KB and a time-out occurs. How big will the window be if the next four transmission bursts are all successful? Assume that the MSS is 1 KB.[MSQ]

A) 9 MSS   B) 9 KB   C) 10 MSS   D) 10 KB

9. On a TCP connection, the current congestion window size is 4 KB. The window advertised by the receiver is 6 KB. The last byte sent by the sender is 10240, and the last byte acknowledged by the receiver is 8192. The current window size at the sender is ____.?

A) 2048 B   B) 4096 B   C) 6144 B   D) 8192 B

10. On a TCP connection, the current congestion window size is 4 KB. The window advertised by the receiver is 6 KB. The last byte sent by the sender is 10240, and the last byte acknowledged by the receiver is 8192. The amount of free space in the sender window is _____.?

A) 2048 B   B) 4096 B   C) 6144 B   D) 8192 B