

MC questions for Unit 3

Red color indicates the correct answer.

Questions 1-7

True or False?

1. Processes on two different end systems communicate with each other by exchanging messages across the computer network. **T**
2. The client-server architecture achieves perfect security. **F**
3. Socket is a hardware interface through which a process sends messages into, and receives messages from the network. **F**
4. No data loss is tolerated in multimedia applications such as conversational audio/video. **F**
5. Developing a new network application for the Internet often requires one to decide whether to choose UDP or TCP. **T**
6. Suppose Host A is sending a large to Host B over a TCP connection. If the sequence number for a segment of this connection is m , then the sequence number for the subsequent segment will necessarily be $m+1$. **F**
7. Suppose Host A sends one segment with sequence number 38 and 4 bytes of data over a TCP connection to Host B. In this same segment the acknowledgement number is necessarily 42. **F**

Question 8

TCP is a _____ transport protocol

- A. Connectionless, reliable
- B. Connectionless, unreliable
- C. Connection-oriented, reliable**
- D. Connection-oriented, unreliable

Question 9

UDP is a _____ transport protocol

- A. Connectionless, reliable

- B. Connectionless, unreliable
- C. Connection-oriented, reliable
- D. Connection-oriented, unreliable

Question 10

Suppose Host A sends a TCP segment to Host B over a TCP connection. The segment consists of x bytes of data. The sequence number and acknowledgement number in the header of the segment are y and z , respectively. Suppose Host B receives the segment correctly and sends an acknowledgement to Host A. What will the acknowledgment number be?

Answer: $x + y$