

## EL-GY 5373 Online Review Questions - Set 2

Answer True or False to the following questions:

1. An IP host is identified by an IP address. Furthermore, an application running by this host can be identified by the Protocol field in IPv4 header (a.k.a. the Next Header with IPv6).

a) True

b) False

Note: need port number(s) to identify Application.

2. Maximum Transmission Unit (MTU) determines the Maximum Segment Size (MSS) in TCP data transfer.

a) True

b) False

Note: MTU, L2 hub-by-hub chrateristics, can't be related to MSS, L4 host-to-host data transfer, due to TCP receiver's specification.

3. Delayed Acknowledgement is used by the receiver to reduce number of messages to a sender that appears to advertise a smaller *awnd*.

a) True

b) False

Note: Delayed ACK does help to reduce number of messages, but it's not triggered by smaller *awnd*.

4. Congestion window size (*cwnd*) is used to advertize TCP sender's sliding window size in TCP connection establishment.

a) True

b) False

Note: *awnd*, not *cwnd*, gets used by receiver all the time during a TCP connection.

5. During TCP data transfer, Ack = 101 from a receiver implies that it has received 100 bytes of data and is ready to receive byte 101.

a) True

b) False

Note: Ack = 101 doesn't imply of receiving 100 bytes data. What if ISN is not set to 1?

6. Karn's Algorithm suggests not to use RTT measurement in determining network congestion under certain circumstances.

a) True

b) False

Note: under which circumstances?

7. DHCP Relay Info Option (Option 82) allows DHCP server to assign IP address to each client device based on it's location, which ultimately supports efficient routing to more clients for broadband access service.

a) True

b) False

8. Public-key encryption uses paired encryption keys: a public key and a shared secret key.

a) True

b) False

Note: they're a public key and a private key. A shared secret key is used by symmetric-key cipher.