# Question 1: Choose the correct options defining OSI protocol layers/sublayers and their functionality. [MSQ]

- 1) Data Link layer and Variable Size Framing
- 2) Data Link Layer and Error Correction
- 3) Data Link Layer and Error Detection
- 4) Network Layer and Congestion control
- A) 1 & 2 only
- B) 2 & 3 only
- C) 1, 2 & 3 only
- D) 4 only

### Question 2: Choose the correct options for defining TCP-IP Layers and protocols used. [MSQ]

- 1) Network Layer with ARP
- 2) Transport Layer with UDP
- 3) Network Layer with ICMP
- 4) Data Link Layer DNS
- A) 1 & 2 only
- B) 2 & 3 only
- C) 1, 2 & 3 only
- D) 4 only

# Question 3: Which one of the following protocols is used to resolve one form of address to another one? [MSQ]

- 1) DNS
- 2) ARP
- 3) DHCP
- 4) RARP
- A) 1 & 2 only
- B) 2 & 3 only
- C) 1, 2 & 3 only
- D) 1, 2 & 4 only

#### Question 4: Which of the following is correct? [MSQ]

- 1) The network layer is responsible for packet delivery from host to host.
- 2) IPv4 addresses are unique.
- 3) Router and Bridge work at the Network layer.

A) 1 & 2 only B) 2 & 3 only C) 1, 2 & 3 only D) 1, 2 & 4 only
Question 5: Which address is used on the internet to employ the TCP/IP protocols?[MSQ]
1) Physical address
<ul><li>2) Logical address</li><li>3) Port address</li></ul>
4) None of these
A) 1 & 2 only B) 2 & 3 only C) 1, 2 & 3 only D) 1, 2 & 4 only
Question 6: Which layer is responsible for process-to-process delivery in a general
network model?
1) Network layer 2) Transport layer 3) Session layer 4) Data link layer  A) 1 & 2 only B) 2 only C) 1, 2 & 3 only D) 1, 2 & 4 only
b) 1, 2 & 4 Only
Question 7: Which layer provides the services to the user?
1) Application layer 2) Session layer 3) Presentation layer 4) Physical layer
A) 1 only B) 2 & 3 only C) 1, 2 & 3 only

4) Communication at the network layer in the Internet is Connectionless.

### D) 1, 2 & 4 only

Question 8: Assume that a Source in INDIA and Destination Silicon Valley are connected through three intermediate routers in between. Determine how many times each packet has to visit the network layer, data link layer, and physical layer during transmission from source to destination.

- A) 5, 5, 5
- B) 2, 4, 8
- C) 2, 5, 8
- D) 5, 8, 8

Question 9: Which layer of the ISO-OSI layer is responsible for the synchronization of the stream of data?

- A) Session Layer
- B) Presentation Layer
- C) Network Layer
- D) Data Link Layer

- 1. Data Link Layer
- 2. Network Layer
- 3. Transport Layer
- a. IP address
- b. MAC Address
- c. Well Known Port number
- d. point-to-point protocol
- A) 1-a, 2-d, 3-b
- B) 1-d, 2-a,3-c
- C) 1-b, 2-a,3-c
- D) 1-b, 2-a, 3-d