

Demystifying Networking (NOC20CS86)
Week 1 Assignment

1. Represent the following IP address in binary octet form: 192.16.79.142.
(MCQ)
 - A. 11110000.00001000.01101111.10001111
 - B. 11000000.00011000.01000111.10001110
 - C. 11000000.00010000.01001111.10001110**
 - D. 11100000.00010000.01001111.11001111

2. Concept of Layering is important because: (MSQ)
 - A. Layering makes it easier to design and develop applications quickly and manage them easily.**
 - B. Without layering, it would not be possible to communicate over any network.
 - C. Layering makes it easier to identify and troubleshoot network issues.**
 - D. All of the above.

3. Which of the following are advantages of IPv6 over IPv4? (MCQ)
 - A. IPv6 has larger address space.**
 - B. IPv6 implements IP broadcast.
 - C. IPv6 implements Multicasting whereas IPv4 does not.
 - D. Both - IPv6 has larger address space and IPv6 implements IP broadcast.

4. Which of the following are **NOT** the responsibilities of Transport Layer?
(MSQ)
 - A. Process-to-process delivery of the entire message
 - B. Logical Addressing**
 - C. Physical Addressing**
 - D. Routing**
 - E. Segmentation and reassembly of message.

5. For an IP address 20.12.180.16/26, the subnet mask is:
 - A. 255.255.255.0

B. 255.255.255.192

C. 255.255.255.248

D. 255.255.255.224

6. If an IP packet is sent on a _____, it is intended for all devices of that network. (MCQ)

A. Broadcast address

B. Network address

C. Multicast address

D. Unicast address

7. What would be the network address of the IP address 20.12.180.17 with subnet mask 255.255.255.224? (MCQ)

A. 20.12.180.0

B. 20.12.0.0

C. 20.12.180.192

D. 255.12.180.224

8. Consider the following statements:

a. Terms “Protocol” and “Interface” are used interchangeably to describe the set of rules that govern data communication.

b. Syntax and Semantics are key elements of Protocol.

c. Interface determines which services does lower layers make available to upper layers

d. Protocol determines which services does lower layers make available to upper layers

Which of the above statements are TRUE? (MCQ)

A. Only c

B. Only d

C. a and b

D. b and c

E. b and d

9. Logical address is translated into IP address by: (MCQ)

- A. DNS**
- B. ARP
- C. NAT
- D. CPT

10. In what modes does Cisco Packet Tracer (CPT) work? (MSQ)

- A. Passive mode**
- B. Generation mode
- C. Realtime mode**
- D. Simulation mode**