>traceroute
Networking Fundamentals Assessment

1) What is an IPv4 address?

   a. A 64 bit, Layer 3 Address Scheme. It is part of a TCP/IP Protocol stack.

   b. A 32 bit, Layer 2 Address Scheme. It is part of a TCP/IP Protocol stack.

   c. A 32 bit, Layer 3 Address Scheme. It is part of a TCP/IP Protocol stack.

   d. A 128 bit, Layer 3 Address Scheme. It is the addressing assigned at the Data Link Layer.

2) Which of the following correctly presents equipment and the OSI layer at which they primarily operate?

   a. Switch – Layer 1, Router – Layer 2, Hub – Layer 3

   b. Switch – Layer 3, Router – Layer 2, Hub – Layer 1

   c. Switch – Layer 2, Router – Layer 3, Hub – Layer 1

   d. Switch – Layer 1, Router – Layer 3, Hub – Layer 2

3) Which of the following devices forward broadcast packets out all interfaces?

   a. Hub

   b. Unmanaged Switch

   c. Managed Switch

   d. Router

4) What information in an Ethernet frame does an Ethernet Switch primarily evaluate to make forwarding decisions?

   a. Source MAC Address

   b. Destination MAC Address

   c. Source IP Address

   d. Destination IP Address

   e. None of the above

5) What information in an Ethernet frame does a Router primarily evaluate to make forwarding decisions?

   a. Source MAC Address

   b. Destination MAC Address

   c. Source IP Address

   d. Destination IP Address

   e. None of the above

6) What internally stored information does a host consult when framing a packet for transmission?

   a. Routing Table

   b. ARP Cache

   c. Forwarding Table/Learned Address Table

   d. None of the above

7) What internally stored information does an Ethernet Switch consult when making forwarding decisions?

   a. Routing Table

   b. ARP Cache

   c. Forwarding Table/Learned Address Table

   d. None of the above

8) What internally stored information does a Router consult when making forwarding decisions?

   a. Routing Table

   b. ARP Cache

   c. Forwarding Table/Learned Address Table

   d. None of the above

9) Which of the following would cause a network end-device such as a PC to utilize its configured Default Gateway?

   a. The default gateway is always used for communication via IP.

   b. The subnet mask of the destination device does not match the PC's subnet mask.

   c. The destination IP address has no entry in the PC's ARP cache.

   d. An address comparison results in the fact that the Destination IP resides in a different subnet than the PC.