Assignment 3

Assignment overview

Date: [Date]

1. Which of the following statements about packet delivery delay in a router?
   a. In a router, the processing time is 0.2 ms.
   b. In a router, the processing time is 0.2 sec.
   c. The processing time is the time taken to send a packet from the input to the output.
   d. None of these.

2. The default route is specified in a routing table by using the host address:
   a. 0.0.0.0
   b. 255.255.255.255
   c. Both a and b
   d. None of these.

3. Which of the following statements are correct regarding the default route?
   a. Data packets sent to the default route are not subject to routing delays.
   b. The default route can be used to forward packets to another network.
   c. The default route is used when the destination is not known.
   d. None of these.

4. What is the purpose of a routing table?
   a. To store information about the network.
   b. To forward packets to the correct network.
   c. To store the path to the destination.
   d. None of these.

5. What is the role of the routing protocol?
   a. To forward packets to the correct network.
   b. To store information about the network.
   c. To store the path to the destination.
   d. None of these.

6. What is the purpose of the IP header?
   a. To store the source and destination IP addresses.
   b. To store the protocol type.
   c. To store the checksum.
   d. All of the above.

7. What is the purpose of the TCP header?
   a. To store the source and destination port numbers.
   b. To store the sequence number.
   c. To store the acknowledgment number.
   d. All of the above.

8. What is the purpose of the UDP header?
   a. To store the source and destination port numbers.
   b. To store the length of the data.
   c. To store the checksum.
   d. All of the above.

9. What is the purpose of the ICMP header?
   a. To store error messages.
   b. To store the type and code fields.
   c. To store the checksum.
   d. All of the above.

10. What is the purpose of the ARP header?
    a. To store the source and destination MAC addresses.
    b. To store the source and destination IP addresses.
    c. To store the checksum.
    d. All of the above.

11. What is the purpose of the ICMP error message?
    a. To inform the sender of an error.
    b. To inform the receiver of an error.
    c. To store the error type and code.
    d. All of the above.

12. What is the purpose of the IGMP header?
    a. To store group membership information.
    b. To store multicast information.
    c. To store the checksum.
    d. All of the above.

13. What is the purpose of the IGMP query message?
    a. To inform the sender of an error.
    b. To inform the receiver of an error.
    c. To store the error type and code.
    d. All of the above.