

Hálózatok 2. ellenőrző vizsga

1. What is the purpose of the OSI physical layer?

- **transmitting bits across the local media**

2. A network administrator is measuring the transfer of bits across the company backbone for a mission critical financial application. The administrator notices that the network throughput appears lower than the bandwidth expected. Which three factors could influence the differences in throughput?

- **the amount of traffic that is currently crossing the network**
- **the type of traffic that is crossing the network**
- **the latency that is created by the number of network devices that the data is crossing**

3. What is a primary role of the Physical layer in transmitting data on the network?

- **create the signals that represent the bits in each frame on to the media**

4. With the use of unshielded twisted-pair copper wire in a network, what causes crosstalk within the cable pairs?**

- **the magnetic field around the adjacent pairs of wire**

5. In addition to the cable length, what two factors could interfere with the communication carried over UTP cables?

- **crosstalk**
- **electromagnetic interference**

6. Which two statements describe the services provided by the data link layer?

- **It manages the access of frames to the network media.**
- **It packages various Layer 3 PDUs into a frame format that is compatible with the network interface.**

7. What is a characteristic of the LLC sublayer?

- **It places information in the frame allowing multiple Layer 3 protocols to use the same network interface and media.**

8. Which two functions are performed at the MAC sublayer of the OSI data link layer?

1. Első lehetőség:

- **Controls the NIC responsible for sending and receiving data on the physical medium.**
- **Implements a trailer to detect transmission errors.**

2. Második lehetőség:

- **Provides synchronization between source and target nodes.**
- **Integrates various physical technologies.**
- Communicates between the networking software at the upper layers and the device hardware at the lower layers.
- Adds Layer 2 control information to network protocol data.
- Enables IPv4 and IPv6 to utilize the same network interface and media.

3. Harmadik lehetőség:

- Enables IPv4 and IPv6 to utilize the same network interface and media.
- **Provides synchronization between source and target nodes.**
- **Implements a trailer to detect transmission errors.**
- Adds Layer 2 control information to network protocol data.
- Places information in the frame that identifies which network layer protocol is being used for the frame.

4. Negyedik lehetőség:

- Enables IPv4 and IPv6 to utilize the same network interface and media.
- Adds Layer 2 control information to network protocol data.
- **Integrates various physical technologies.**
- Communicates between the networking software at the upper layers and the device hardware at the lower layers.
- **Provides synchronization between source and target nodes.**

5. Ötödik lehetőség:

- Places information in the frame that identifies which network layer protocol is being used for the frame.
- **Integrates various physical technologies.**
- Adds Layer 2 control information to network protocol data.
- **Controls the NIC responsible for sending and receiving data on the physical medium.**
- Communicates between the networking software at the upper layers and the device hardware at the lower layers.

9. Which two functions are performed at the LLC sublayer of the OSI data link layer?
(Choose two.)

- **Enables IPv4 and IPv6 to utilize the same network interface and media.**
- **Places information in the frame that identifies which network layer protocol is being used for the frame.**

10. Which two functions are performed at the LLC sublayer of the OSI data link layer?
(Choose two.)

- **Adds Layer 2 control information to network protocol data.**
- **Places information in the frame that identifies which network layer protocol is being used for the frame.**

11. Which two functions are performed at the LLC sublayer of the OSI data link layer?
(Choose two.)

- **Adds Layer 2 control information to network protocol data.**
- **Enables IPv4 and IPv6 to utilize the same network interface and media.**

12. Which two functions are performed at the LLC sublayer of the OSI data link layer?
(Choose two.)

- **Enables IPv4 and IPv6 to utilize the same network interface and media.**
- **Adds Layer 2 control information to network protocol data.**