



Network

Lec2 : Ch 4



▼ Questions on Lecture 2

1. OSI Model stands for

- a) Open Source Interface
- b) Operating System Interconnect
- c) Open Systems Interconnection
- d) Online Systems Integration

2. OSI Model come first then TCP/IP Model

- a) true
- b) false

3. OSI Model Compose from 4 layers

- a) true
- b) false

4. The OSI model has been planned to ensure different types of devices must all be compatible device are built by various manufacturer

- a) true
- b) false

5. At the Network Layer, data is transmitted in units called

- a) Data
- b) Packets
- c) Frames
- d) Bits

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّونَ عَلَى النَّبِيِّ يَا أَيُّهَا الَّذِينَ آمَنُوا صَلُوْنَا عَلَيْهِ وَسَلَّمُوا تَسْلِيْمًا

6. At the Physical Layer, data is transmitted in units called

- a) Data
- b) Packets
- c) Frames
- d) Bits

7. At the Transport Layer, data is transmitted in units called

 Segment

- a) Packets
- b) Frames
- c) Bits

8. At the Data Link Layer, data is transmitted in units called

- a) Data
- b) Packets
- c) Frames
- d) Bits

9. Which of the following protocols operates at the Data Link Layer

- a) IP
- b) TCP
- c) Ethernet
- d) HTTP

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10. Which of the following protocols operates at the Application Layer

- a) IP
- b) DNS
- c) HTTP
- d) b & c

11. Which of the following protocols operates at the Transport Layer

- a) IP
- b) TCP
- c) Ethernet
- d) HTTP

12. What is a common device used at the Data Link Layer?

- a) Router
- b) Switch
- c) Firewall
- d) IDS

13. What is a common device used at the Network Layer?

- a) Router
- b) Switch
- c) Firewall
- d) IDS

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّونَ عَلَى النَّبِيِّ يَا أَيُّهَا الَّذِينَ آمَنُوا صَلَوَاتٌ عَلَيْهِ وَسَلَامٌ وَتَسْلِيمًا

14. Which of these addresses is used by the Data Link Layer to uniquely identify devices?

- a) IP address
- b) MAC address
- c) Domain name
- d) Port number

15. What is the primary purpose of the Data Link Layer in the OSI model

- a) Routing data packets
- b) Managing physical addresses and error detection
- c) Encrypting data for security
- d) Managing network applications

16. What is the primary purpose of the Presentation Layer in the OSI model

- a) Routing data packets
- b) Managing physical addresses and error detection
- c) Encrypting data for security
- d) Managing network applications

17. What is the layer that user can interact with its Interfaces

- a) Application layer
- b) Presentation layer
- c) Session layer
- d) Transport layer

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّونَ عَلَى النَّبِيِّ يَا أَيُّهَا الَّذِينَ آمَنُوا صَلُّوا عَلَيْهِ وَسَلِّمُوا تَسْلِيمًا

18. What is the primary purpose of the Network Layer in the OSI model

- a) Routing data packets
- b) Managing physical addresses and error detection
- c) Encrypting data for security
- d) Managing network applications

19. What is a common device used at the Physical Layer?

- a) Router
- b) Switch
- c) Hub
- d) IDS

20. Is concerned with the transferred raw bits over a communication channel

- a) Data Link layer
- b) Transport layer
- c) Physical layer
- d) Network layer

21. It provides services such as framing, error detection and correction, and flow control to ensure the accurate and efficient transmission of data

- a) Data Link layer
- b) Transport layer
- c) Physical layer
- d) Network layer

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّوْنَ عَلَى النَّبِيِّ يَا أَيُّهَا الَّذِينَ آمَنُوا صَلَوَا عَلَيْهِ وَسَلَّمُوا تَسْلِيمًا

22. What is the maximum payload size of the original Ethernet frame?

- a) 512 bytes
- b) 1024 bytes
- c) 1582 bytes
- d) 2048 bytes

23. Which field in the original Ethernet frame contains the MAC address of the receiving device?

- a) source address
- b) destination address
- c) preamble
- d) type

24. Which OSI layer adds a trailer to the data

- a) Data Link layer
- b) Transport layer
- c) Physical layer
- d) Network layer

25. What is the purpose of the Frame Check Sequence (FCS) in the original Ethernet frame?

- a) to provide the destination address
- b) to calculate the payload size
- c) to delete errors in the frame data
- d) to identify the protocol type

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّونَ عَلَى النَّبِيِّ يَا أَيُّهَا الَّذِينَ آمَنُوا صَلَوَاتٌ مِّنْهُ وَسَلَامٌ وَسَلَامٌ

26. What is the minimum frame size for the original Ethernet frame to avoid collision detection issues?

- a) 46 bytes
- b) 64 bytes**
- c) 128 bytes
- d) 512 bytes

27. How many bytes in MAC Address

- a) 48
- b) 6**
- c) 32
- d) 4

28. How many bits in IP Address

- a) 48
- b) 6
- c) 32**
- d) 4

29. Packet at layer 4 is called segment

- a) true**
- b) false

30. The start of Ethernet Frame and it is 8 bytes

- a) CRC
- b) Type
- c) Preamble**
- d) Data

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31. Determine the optimal path for data packets to reach their destination by utilizing routing algorithms and maintaining routing tables.

- a) Data Link layer
- b) Transport layer
- c) Physical layer
- d) Network layer

32. It handles issues such as packet loss, congestion control, and quality of service (QoS) to ensure reliable and efficient data transmission

- a) Data Link layer
- b) Transport layer
- c) Physical layer
- d) Network layer

33. The components of Frame in Data link layer is

| Frame Header | Frame Data | Frame Footer |
|--------------|------------|--------------|
|--------------|------------|--------------|

- a) true
- b) false

34. is responsible for the reliable delivery and end-to-end communication of data between hosts on a network

- a) Data Link layer
- b) Transport layer
- c) Physical layer
- d) Network layer

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّوْنَ عَلَى النَّبِيِّ يَا أَيُّهَا الَّذِينَ آمَنُوا صَلَوْا عَلَيْهِ وَسَلِّمُوا تَسْلِيمًا

35. Which layer that TCP and UDP Protocols operates in

- a) Data Link layer
- b) Transport layer**
- c) Physical layer
- d) Network layer

36. TCP is a reliable connection and connectionless protocol

- a) true
- b) false**

37. Which protocol can be good at live streaming

- a) TCP
- b) UDP**
- c) IP
- d) a & b

38. Which protocol can be good when we want to send a professional email

- a) TCP**
- b) UDP
- c) IP
- d) a & b

39. The Network layer provides mechanisms for Authentication, Authorization and Accounting (AAA)

- a) true
- b) false**

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّوْنَ عَلَى النَّبِيِّ يَا أَيُّهَا الَّذِينَ آمَنُوا صَلُوْا عَلَيْهِ وَسَلِّمُوا تَسْلِيمًا

40. Responsible for establishing, managing, and terminating sessions or connections between applications running on different network devices

- a) Application layer
- b) Transport layer
- c) Session layer
- d) Presentation layer

41. Which layer that enables data encryption and protecting the confidentiality and ,decryption integrity of data transmitted between applications

- a) Application layer
- b) Transport layer
- c) Session layer
- d) Presentation layer

42. Which layer that focuses on the formatting, encryption, and compression of data to ensure its compatibility and secure transmission between different systems

- a) Application layer
- b) Transport layer
- c) Session layer
- d) Presentation layer

43. The Client operates with Application layer

- a) true
- b) false

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّوْنَ عَلَى النَّبِيِّ يَا أَيُّهَا الَّذِينَ آمَنُوا صَلَوْا عَلَيْهِ وَسَلِّمُوا تَسْلِيمًا

44. Which layer that responsible for data compression techniques, reducing the size of data for efficient transmission over the network, and decompressing it at the receiving end for proper interpretation

- a) Application layer
- b) Transport layer
- c) Session layer
- d) Presentation layer

45. From the functions of Presentation layer is Translation, Compression and Encryption

- a) true
- b) false

46. UDP stands for User Database Protocol

- a) true
- b) false

47. TCP stands for Transmission Control Protocol.

- a) true
- b) false

48. Which layers that responsible for end-to-end communications between the sender and the destination

- a) 4-1
- b) 7-4
- c) 5-2
- d) none of above

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلِّوْنَ عَلَى النَّبِيِّ يَا أَئُلُو الْأَذْنَى آمَنُوا صَلُوْا عَلَيْهِ وَسَلِّمُوا تَسْلِيمًا

49. What is the main function of the Application Layer in the OSI model?

- a) Routing data packets
- b) Providing network services to end-users**
- c) Managing physical network connections
- d) Ensuring error-free transmission of data

50. Which of the following is a function of the Application Layer?

- a) Establishing physical connections
- b) Providing application-specific services like file transfers**
- c) Routing and forwarding data packets
- d) Ensuring data integrity during transmission

فَإِنَّمَا الْزَّبُودُ فِي ذَهَبٍ جُفَاعَاطَّ وَأَمَّا مَا يَنْفَعُ النَّاسَ فَيَمْكُثُ
فِي الْأَرْضِ

لَا تنسوا الدعاء لأخواتنا في فلسطين ولبنان وكل
المستضعفين من المسلمين