

# Introduction to TCP-IP Networking



## **1. What is the purpose of the OSI model?**

- A. To standardize how communications occur between devices
- B. To create a new type of network protocol
- C. To replace the TCP/IP model entirely
- D. To enhance the speed of data transmission

## **2. How many layers does the OSI model have?**

- A. 5 layers
- B. 6 layers
- C. 7 layers
- D. 8 layers

## **3. What is the Protocol Data Unit (PDU) for the Transport layer?**

- A. Frame
- B. Packet
- C. Segment
- D. Data

## **4. Which layer is responsible for managing dialog control in a session?**

- A. Application Layer
- B. Session Layer
- C. Transport Layer
- D. Network Layer

## **5. What does the Data Link layer ensure?**

- A. Data is sent and received without errors
- B. Data is encrypted for security
- C. Data is compressed for faster transmission
- D. Data is routed correctly through the network

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## 6. What protocol does the Application layer use to request web pages?

- A. FTP
- B. HTTP
- C. SMTP
- D. Telnet

## 7. What is the PDU for the Network layer?

- A. Frame
- B. Packet
- C. Segment
- D. Data

## 8. Which layer adds overhead to the data before sending it to the Network layer?

- A. Application Layer
- B. Transport Layer
- C. Data Link Layer
- D. Physical Layer

## 9. What does the Physical layer transmit?

- A. Raw bits of data
- B. Encoded data
- C. Compressed data
- D. Encrypted data

## 10. Which layer is responsible for flow control in the network?

- A. Application Layer
- B. Transport Layer
- C. Network Layer
- D. Data Link Layer

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## **11. What is an example of a Data Link layer protocol?**

- A. IP
- B. HDLC
- C. TCP
- D. HTTP

## **12. What does the Presentation layer determine?**

- A. How data is routed
- B. How data is presented
- C. How data is compressed
- D. How data is encrypted

## **13. What is the main function of the Session layer?**

- A. To manage dialog control
- B. To encrypt data
- C. To route packets
- D. To compress data

## **14. What is the encapsulation process in networking?**

- A. Adding headers to data as it moves down layers
- B. Compressing data for faster transmission
- C. Encrypting data for security
- D. Routing data through the network

## **15. What does the Transport layer do with data from the Session layer?**

- A. Encrypts it
- B. Compresses it
- C. Breaks it into smaller units
- D. Routes it

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## 16. What is the role of the Network layer in data transmission?

- A. To ensure data is error-free
- B. To route data packets
- C. To present data to the user
- D. To manage sessions

## 17. Which protocol is an example of a Transport layer protocol?

- A. IP
- B. TCP
- C. HDLC
- D. HTTP

## 18. What does the Data Link layer break data into?

- A. Packets
- B. Segments
- C. Frames
- D. Bits

## 19. What is the main purpose of the Application layer?

- A. To manage sessions
- B. To present data
- C. To request web pages
- D. To route packets

## 20. What is an example of a Network layer protocol?

- A. HTTP
- B. IP
- C. FTP
- D. SMTP

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## **21. What does the encapsulation process involve?**

- A. Adding headers to data
- B. Compressing data
- C. Encrypting data
- D. Routing data

## **22. What is the role of the Physical layer?**

- A. To manage sessions
- B. To transmit raw bits of data
- C. To route packets
- D. To present data

## **23. What does the Session layer establish during communication?**

- A. Data structure
- B. Dialog control
- C. Data encryption
- D. Data compression

## **24. What is the function of the Data Link layer?**

- A. To ensure data is error-free
- B. To route data packets
- C. To present data to the user
- D. To manage sessions

## **25. What is the main function of the Transport layer?**

- A. To manage sessions
- B. To ensure reliable data transfer
- C. To present data
- D. To route packets

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## **26. What does the Network layer use for addressing?**

- A. Data structure
- B. IP addresses
- C. File types
- D. Protocols

## **27. What is the PDU for the Data Link layer?**

- A. Frame
- B. Packet
- C. Segment
- D. Data

## **28. What is an example of a Presentation layer encoding?**

- A. ASCII
- B. IP
- C. TCP
- D. HTTP

## **29. What does the Application layer interact with?**

- A. Network protocols
- B. User applications
- C. Data structures
- D. Session management

## **30. What is the main purpose of the Network layer?**

- A. To manage sessions
- B. To route data packets
- C. To present data
- D. To ensure data is error-free

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## **31. What does the Transport layer ensure?**

- A. Data is error-free
- B. Data is routed correctly
- C. Data is broken into smaller units
- D. Data is presented to the user

## **32. What is the role of the Data Link layer in data transmission?**

- A. To ensure data is error-free
- B. To route data packets
- C. To present data to the user
- D. To manage sessions

## **33. What is the main function of the Presentation layer?**

- A. To manage sessions
- B. To present data
- C. To route packets
- D. To ensure data is error-free

## **34. What does the Session layer manage?**

- A. Data structure
- B. Dialog control
- C. Data encryption
- D. Data compression

## **35. What is the encapsulation process in networking?**

- A. Adding headers to data as it moves down layers
- B. Compressing data for faster transmission
- C. Encrypting data for security
- D. Routing data through the network

# Introduction to TCP-IP Networking

## **36. What does the Physical layer transmit?**

- A. Raw bits of data
- B. Encoded data
- C. Compressed data
- D. Encrypted data

## **37. What is the main function of the Transport layer?**

- A. To manage sessions
- B. To ensure reliable data transfer
- C. To present data
- D. To route packets

## **38. What is the role of the Network layer in data transmission?**

- A. To ensure data is error-free
- B. To route data packets
- C. To present data to the user
- D. To manage sessions

## **39. What is an example of a Data Link layer protocol?**

- A. IP
- B. HDLC
- C. TCP
- D. HTTP

## **40. What does the Data Link layer break data into?**

- A. Packets
- B. Segments
- C. Frames
- D. Bits



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## **41. What is the main purpose of the Application layer?**

- A. To manage sessions
- B. To present data
- C. To request web pages
- D. To route packets

## **42. What is an example of a Network layer protocol?**

- A. HTTP
- B. IP
- C. FTP
- D. SMTP

## **43. What does the encapsulation process involve?**

- A. Adding headers to data
- B. Compressing data
- C. Encrypting data
- D. Routing data

## **44. What is the role of the Physical layer?**

- A. To manage sessions
- B. To transmit raw bits of data
- C. To route packets
- D. To present data

## **45. What does the Session layer establish during communication?**

- A. Data structure
- B. Dialog control
- C. Data encryption
- D. Data compression

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## **46. What is the function of the Data Link layer?**

- A. To ensure data is error-free
- B. To route data packets
- C. To present data to the user
- D. To manage sessions

## **47. What is the main function of the Transport layer?**

- A. To manage sessions
- B. To ensure reliable data transfer
- C. To present data
- D. To route packets

## **48. What does the Network layer use for addressing?**

- A. Data structure
- B. IP addresses
- C. File types
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## **49. What is the PDU for the Data Link layer?**

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- B. Packet
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- D. Data

## **50. What is an example of a Presentation layer encoding?**

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- D. HTTP

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## **51. What does the Application layer interact with?**

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- B. User applications
- C. Data structures
- D. Session management

## **52. What is the main purpose of the Network layer?**

- A. To manage sessions
- B. To route data packets
- C. To present data
- D. To ensure data is error-free

## **53. What does the Transport layer ensure?**

- A. Data is error-free
- B. Data is routed correctly
- C. Data is broken into smaller units
- D. Data is presented to the user

## **54. What is the role of the Data Link layer in data transmission?**

- A. To ensure data is error-free
- B. To route data packets
- C. To present data to the user
- D. To manage sessions

## **55. What is the main function of the Presentation layer?**

- A. To manage sessions
- B. To present data
- C. To route packets
- D. To ensure data is error-free

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## 56. What does the Session layer manage?

- A. Data structure
- B. Dialog control
- C. Data encryption
- D. Data compression

Answers:

- 1. A
- 2. C
- 3. C
- 4. B
- 5. A
- 6. B
- 7. B
- 8. B
- 9. A
- 10. C
- 11. B
- 12. B
- 13. A
- 14. A
- 15. C
- 16. B
- 17. B
- 18. C
- 19. C
- 20. B

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21. A

22. B

23. B

24. A

25. B

26. B

27. A

28. A

29. B

30. B

31. C

32. A

33. B

34. B

35. A

36. A

37. B

38. B

39. B

40. C

41. C

42. B

43. A

44. B

45. B

46. A

47. B

48. B

49. A

50. A

51. B

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52. B

53. C

54. A

55. B

56. B