Learn Computer Network MCQs

1. A computer network employs _____ processing.

    A. Centralized
    B. Distributed

Answer: B) Distributed

Explanation:

A computer network employs distributed processing, which divides tasks across multiple computers. Instead, one computer handles the entire operation, but each separate machine handles a piece of it.

2. What is the full form of NIC?

    A. Network ID card
    B. Network interface card
    C. National interface card
    D. New interface card

Answer: C) National interface card

Explanation:

NIC stands for National interface card.

3. What is NIC? Select the best answer.

    A. A network interface card (NIC) is a device that allows a computer to communicate with another device.
    B. A network interface card (NIC) is a central device that divides a network connection among several devices.
    C. A network interface card (NIC) is a networking device that connects all of the devices on the network to transport data to another device.

Answer: A) A network interface card (NIC) is a device that allows a computer to communicate with another device.

Explanation:

A network interface card (NIC) is a device that allows a computer to communicate with another device.

4. How many types of NIC are there?

    A. 5
    B. 4
    C. 3
    D. 2

Answer: D) 2

Explanation:

There are two types of NIC: Wireless NIC and Wired NIC.

5. All the modern laptops use _____ types of NIC.

    A. Wireless NIC
    B. Wired NIC

Answer: A) Wireless NIC

Explanation:

All modern laptops use Wireless types of NIC.

6. A ____ is a central device that divides a network connection among several devices.

    A. Switch
    B. Hub
    C. Router
    D. Modem

Answer: B) Hub

Explanation:

A hub is a central device that divides a network connection among several devices.

7. A ____ is a networking device that connects all of the devices on the network to transport data to another device.

    A. Switch
    B. Hub
    C. Router
    D. Modem

Answer: A) Switch

Explanation:

A switch is a networking device that connects all of the devices on the network to transport data to another device.

8. Among Switch or Hub which is better?

    A. Switch
    B. Hub

Answer: A) Switch

Explanation:

A switch is better than a hub because it does not broadcast the message across the network; instead, it transmits the message to the device to which it belongs.

9. How many types of cables are there?

    A. 5
    B. 4
    C. 3
    D. 2

Answer: C) 3

Explanation:

There are 3 types of cables:

- Twisted pair cables
- Coaxial cable
- Fibre optic cable

10. Which of the following types of cable is installed at the government level?

    A. Twisted pair cables
    B. Coaxial cable
    C. Fibre optic cable

Answer: C) Fibre optic cable

Explanation:

Fibre optic cable is a high-speed data transmission wire that uses light beams to transport data. When compared to other cables, it gives a high data transmission speed. Because it is more expensive than other cables, it is installed at the government level.

11. Which of the following statement is True?

    A. A modem links a computer to the internet via an existing phone connection.
    B. A modem is a device that connects the local area network (LAN) to the internet.

Answer: A) A modem links a computer to the internet via an existing phone connection.

Explanation:

A modem links a computer to the internet via an existing phone connection.

12. How many types of network architecture are used?

    A. 4
    B. 3
    C. 2
    D. 1

Answer: C) 2

Explanation:

The two types of network architecture are used:

- Peer-To-Peer network
- Client/Server network

13. Which architecture is used for small environments?

    A. Peer-To-Peer network
    B. Client/Server network

Answer: A) Peer-To-Peer network

Explanation:

Peer-To-Peer network architecture is used for small environments usually up to 10 computers.

14. Peer-To-Peer network has _____ dedicated servers.

    A. 1
    B. 2
    C. 3
    D. None

Answer: D) None

Explanation:

Peer-To-Peer network has no dedicated server.

15. Does the Peer-To-Peer network backup the data?

    A. Yes
    B. No

Answer: B) No

Explanation:

A peer-to-peer network has no centralized system. As a result, it cannot back up the data because the data differs in different locations.

16. Does the client/server network back up the data?

    A. Yes
    B. No

Answer: A) Yes

Explanation:

A Client/Server network contains the centralized system. As a result, we can easily back up the data.

17. Does the Client/Server network have a dedicated server?

    A. Yes
    B. No

Answer: A) Yes

Explanation:

A Client/Server network includes a dedicated server, which increases overall system performance.

18. A computer network is mainly of how many types?

    A. 2
    B. 3
    C. 4
    D. 5

Answer: C) 4

Explanation:

A computer network is mainly of four types:

- LAN(Local Area Network)
- PAN(Personal Area Network)
- MAN(Metropolitan Area Network)
- WAN(Wide Area Network)

19. How many types of personal area networks are there?

    A. 5
    B. 4
    C. 3
    D. 2

Answer: D) 2

Explanation:

There are two types of Personal Area Networks: Wireless Personal Area Networks and wired Personal Area Networks.

20. How many types of internetworking are there?

    A. 2
    B. 3

C. 4
D. 5

Answer: B) 3

Explanation:

Mainly there are three types of internet working:

- Extranet
- Intranet
- Internet

21. An ____ is a communication network that uses Internet protocols such as the Transmission Control Protocol (TCP) and the Internet Protocol (IP).

A. Extranet
B. Intranet

Answer: A) Extranet

Explanation:

An extranet is a communication network that uses Internet protocols such as the Transmission Control Protocol (TCP) and the Internet Protocol (IP).

22. Can an extranet have a single LAN?

A. Yes
B. No

Answer: B) No

Explanation:

An extranet cannot have a single LAN, but it must have at least one link to the outside network.

23. The ____ topology is designed such that all stations are linked by a single cable known as a backbone cable.

A. Ring
B. Tree
C. Mesh
D. Bus

Answer: D) Bus

Explanation:

The bus topology is designed such that all stations are linked by a single cable known as a backbone cable.

24. Which of the following statement is the common access method of the bus topologies?

A. CSMA
B. Token passing

Answer: A) CSMA

Explanation:

The most prevalent bus topology access method is CSMA.

25. What is the full form of CSMA?

A. Carrier senses marginal access
B. Carrier system multiple access
C. Carrier sense multiple access
D. Carrier sense mostly access

Answer: C) Carrier sense multiple access

Explanation:

CSMA stands for carrier sense multiple access.

26. The ring topology Data is ____.

A. Unidirectional
B. Bidirectional

Answer: A) Unidirectional

Explanation:

The ring topology Data moves in only one way, making it unidirectional.

27. In a ring topology, data flows in a ____ manner.

A. Anti clockwise
B. Clockwise

Answer: B) Clockwise

Explanation:

In a ring topology, data flows in a clockwise manner.

28. Which of the following is the most common access method of the ring topology?

A. CSMA
B. Token passing

Answer: B) Token passing

Explanation:

The most common access method of the ring topology is token passing.

29. Mesh topology can be created using which of the following formula?

A. Number of cables = (n*(n-1))/2
B. Number of cables = (n*(n-1))*2
C. Number of cables = (n*(n+1))/2
D. Number of cables = (n*(n+1))*2

Answer: A) Number of cables = (n*(n-1))/2

Explanation:

Mesh topology can be created using the following formula:Number of cables = (n*(n-1))/2.

30. Mesh topology is divided into how many categories?

A. 3
B. 4
C. 5
D. 2

Answer: D) 2

Explanation:

Mesh topology is classified into two types:

- Fully connected mesh topology
- Partially connected mesh topology

31. What is the other name of the transmission mode?

A. Parallel node
B. Series node
C. Communication node
D. Feedback node

Answer: C) Communication node

Explanation:

The transmission mode is also known as the communication mode.

32. The transmission node is defined in which layer?

A. Physical layer
B. Data link layer
C. Transport layer
D. Session layer

Answer: A) Physical layer

Explanation:

The transmission mode is defined at the physical layer.

33. How many types of transmission nodes are there?

A. 5
B. 4
C. 3
D. 2

Answer: C) 3

Explanation:

There are three types of transmission modes:

- Simplex mode
- Half-duplex mode
- Full-duplex mode

34. In Simplex mode, communication is _____, with data flowing in only one direction.

A. Unidirectional
B. Bidirectional

Answer: A) Unidirectional

Explanation:

In Simplex mode, communication is unidirectional, with data flowing in only one direction.

35. Which of the following is the example of simplex mode?

A. Walkie talkie

B. Telephone
C. Radio

Answer: C) Radio

Explanation:

Radio is an example of simplex mode since it sends the signal but never permits listeners to communicate back.

36. Which of the following is the example of Half duplex mode?

A. Keyboard
B. Television
C. Mouse
D. Walkie talkie

Answer: D) Walkie talkie

Explanation:

Half-duplex mode is illustrated via a walkie-talkie.

37. Which of the following is the fastest mode of communication between devices?

A. Simplex mode
B. Half-duplex mode
C. Full-duplex mode

Answer: C) Full-duplex mode

Explanation:

The Full-duplex mode is the quickest form of communication between devices.

38. Which of the following is the most common application of full-duplex mode?

A. Walkie talkie
B. Telephone
C. Television

Answer: B) Telephone

Explanation:

The most common application of full-duplex mode is a telephone network.

39. What is OSI?

A. Open secure Intercommunication
B. Open system Intercommunication
C. Open shift Intercommunication
D. Open swing Intercommunication

Answer: B) Open system Intercommunication

Explanation:

OSI stands for Open system Interconnection.

40. OSI consists of how many layers?

A. 8

B. 6
C. 7
D. 5

Answer: C) 7

Explanation:

OSI consists of seven layers:

- Physical Layer
- Data-Link Layer
- Network Layer
- Transport Layer
- Session Layer
- Presentation Layer
- Application Layer

41. Which layer's primary duty is to transmit individual bits from one node to another?

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

Answer: A) Physical Layer

Explanation:

The physical layer's primary duty is to transmit individual bits from one node to another.

42. Which of the following Layer serves as a network data translator?

A. Transport Layer
B. Session Layer
C. Presentation Layer
D. Application Layer

Answer: C) Presentation Layer

Explanation:

The Presentation Layer serves as a network data translator.

43. Which of the following layer delivers network services to end users?

A. Transport Layer
B. Session Layer
C. Data link Layer
D. Application Layer

Answer: D) Application Layer

Explanation:

The application layer delivers network services to end users.

44. The _____ layer is in charge of the error-free transport of data frames.

A. Transport Layer
B. Session Layer
C. Data link Layer
D. Network Layer

Answer: C) Data link Layer

Explanation:

The Data-Link layer is in charge of the error-free transport of data frames.

45. The data link layer consists of how many sublayers?

A. 2
B. 3
C. 4
D. 5

Answer: A) 2

Explanation:

The data link layer contains two sub-layers:

- Logical Link Control Layer
- Media Access Control Layer.

46. Which of the following layer finds the optimum path to transport data from the source to the destination depending on network circumstances, service priority, and other considerations?

A. Transport Layer
B. Session Layer
C. Data link Layer
D. Network Layer

Answer: D) Network Layer

Explanation:

The network Layer finds the optimum path to transport data from the source to the destination depending on network circumstances, service priority, and other considerations.

47. Which of the following layer ensures that messages are transmitted in the sequence in which they are sent and that no data is duplicated?

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

Answer: D) Transport Layer

Explanation:

The transport layer ensures that messages are transmitted in the sequence in which they are sent and that no data is duplicated.

48. Which of the following protocols are used in the transport layer?

A. TCP
B. UDP
C. Both

Answer: C) Both

Explanation:

The two protocols used in the Transport layer are:

- Transmission Control Protocol
- User Datagram Protocol.

49. The ____ layer establishes, maintains, and synchronizes communication between devices.

   A. Session
   B. Transport
   C. Data link layer

Answer: A) Session

Explanation:

The Session layer establishes, maintains, and synchronizes communication between devices.

50. The TCP/IP model consists of how many layers?

   A. 5
   B. 4
   C. 3
   D. 2

Answer: A) 5

Explanation:

There are five layers in the TCP/IP model: the application layer, transport layer, network layer, data link layer, and physical layer.

51. A network layer of TCP/IP is a mix of the ____ layer and the ____ layer as outlined by the OSI reference model.

   A. Physical Layer and Data-Link Layer
   B. Network Layer and Transport Layer
   C. Data-Link Layer and Network Layer
   D. Transport Layer and Physical layer

Answer: A) Physical Layer and Data-Link Layer

Explanation:

A network layer is a mix of the Physical layer and the Data Link layer as outlined by the OSI reference model.

52. Which of the following is the network layer protocol?

   A. IP Protocol
   B. ARP
   C. ICMP
   D. All of the above

Answer: D) All of the above

Explanation:

The network layer has three protocols:

- IP Protocol
- ARP
- ICMP

53. UDP provides ____ service.

   A. Connectionless
   B. Connection-oriented

Answer: A) Connectionless

Explanation:

UDP provides a connectionless service.

54. Does UDP specify which packet is lost?

    A. Yes
    B. No

Answer: B) No

Explanation:

UDP does not disclose which packet was lost. UDP contains simply the checksum and no data segment ID.

55. Which of the following is the topmost layer in the TCP/IP model?

    A. Application layer
    B. Transport layer
    C. Network layer
    D. Data link layer
    E. Physical layer.

Answer: A) Application layer

Explanation:

The application layer is the topmost layer in the TCP/IP model.

56. Digital-to-digital encoding is divided into how many categories?

    A. 5
    B. 4
    C. 2
    D. 3

Answer: D) 3

Explanation:

Digital-to-digital encoding is divided into three categories:

- Unipolar Encoding
- Polar Encoding
- Bipolar Encoding

57. In Unipolar Encoding, '1' represents a _____ voltage, and '0' represents a _____ voltage.

    A. High and Zero
    B. Zero and High

Answer: A) High and Zero

Explanation:

In Unipolar Encoding, '1' represents a high voltage, and '0' represents a zero voltage.

58. NRZ stands for?

    A. Not returning zero
    B. Non-return zero
    C. Number rendering zero

Answer: B) Non-return zero

Explanation:

NRZ stands for Non-return zero.

59. What is Biphase encoding?

A. Biphase encoding is a type of encoding in which the signal changes in the middle of the bit interval but does not return to zero.
B. Biphase encoding is a type of encoding in which the signal changes in the middle of the bit interval but does return to zero.

Answer: A) Biphase encoding is a type of encoding in which the signal changes in the middle of the bit interval but does not return to zero.

Explanation:

Biphase encoding is a type of encoding in which the signal changes in the middle of the bit interval but does not return to zero.

60. Bipolar encoding scheme represents how many voltage levels?

A. 2
B. 3
C. 4
D. 5

Answer: B) 3

Explanation:

Bipolar encoding scheme represents three voltage levels: positive, negative, and zero.

61. How many types of Bipolar encodings are there?

A. 5
B. 4
C. 3
D. 2

Answer: C) 3

Explanation:

Bipolar can be classified as AMI, B8ZS, HDB3.

62. What do you mean by PAM?

A. Pulse amplification method
B. Pulse amplifier method
C. Public amplitude modulation
D. Pulse amplitude modulation

Answer: D) Pulse amplitude modulation

Explanation:

PAM stands for pulse amplitude modulation.

63. PAM is a technique that is used in ____.

A. Analog-to-digital conversion
B. Digital-to-Analog-to conversion.

Answer: A) Analog-to-digital conversion

Explanation:

PAM is a technique used in analog-to-digital conversion.

64. What is PCM?

   A. Pulse control method
   B. Pulse control modulation
   C. Pulse code modulation

Answer: C) Pulse code modulation

Explanation:

PCM stands for Pulse code modulation.

65. What is the other name of guided media?

   A. Bounded media
   B. Enclosed media
   C. Fixed media

Answer: A) Bounded media

Explanation:

The other name of guided media is Bounded media.

66. How many types of twisted pair cables are there?

   A. 5
   B. 4
   C. 3
   D. 2

Answer: D) 2

Explanation:

Types of twisted pair: An unshielded twisted pair and A shielded twisted pair.

67. An _____ twisted pair is commonly used in telecommunications.

   A. Unshielded twisted pair
   B. Shielded twisted pair.

Answer: A) Unshielded twisted pair

Explanation:

An unshielded twisted pair is commonly used in telecommunications.

68. In _____ twisted pairs, the wires are surrounded by a mesh, allowing a higher transmission rate.

   A. Unshielded twisted pair
   B. Shielded twisted pair.

Answer: B) Shielded twisted pair.

Explanation:

In shielded twisted pairs, the wires are surrounded by a mesh, allowing a higher transmission rate.

69. How many types of coaxial cables are there?

A. 5
B. 4
C. 3
D. 2

Answer: D) 2

Explanation:

Types of coaxial cables: Baseband transmission and Broadband transmission.

70. What is a Broadband transmission?

A. Broadband transmission is described as the process of sending numerous signals at the same time.
B. Broadband transmission is the technique of sending a single signal at a high rate.

Answer: A) Broadband transmission is described as the process of sending numerous signals at the same time.

Explanation:

Broadband transmission is described as the process of sending numerous signals at the same time.

71. Unguided transmissions are also known as _____.

A. Wired transmission
B. Wireless transmission
C. Feedback transmission

Answer: B) Wireless transmission

Explanation:

An unguided transmission sends electromagnetic waves without the use of a physical medium. As a result, it is often referred to as wireless transmission.

72. Radio waves are?

A. Bi-directional
B. Unidirectional
C. Omnidirectional

Answer: C) Omnidirectional

Explanation:

Radio waves are omnidirectional, which means that signals can travel in all directions.

73. How many types of microwaves are there?

A. 5
B. 4
C. 3
D. 2

Answer: D) 2

Explanation:

Microwaves are of two types:

- Terrestrial microwave
- Satellite microwave communication

74. Multiplexing is done in a _____ manner.

    A. One-to-one
    B. One-to-many
    C. Many-to-many
    D. Many-to-one

Answer: D) Many-to-one

Explanation:

Multiplexing is done in a many-to-one manner, with n input lines and one output line.

75. DEMUX follows which of the following approach?

    A. One-to-one
    B. One-to-many
    C. Many-to-many
    D. Many-to-one

Answer: B) One-to-many

Explanation:

DEMUX divides a signal into its constituent signals (one input and n outputs). As a result, demultiplexing follows the one-to-many strategy.

76. Frequency-division Multiplexing (FDM) is an _____ technique.

    A. Analog
    B. Digital

Answer: A) Analog

Explanation:

Frequency-division Multiplexing (FDM) is an Analog technique.

77. Which of the following is mainly used in radio broadcasts and TV networks?

    A. FDM
    B. TDM
    C. Prism

Answer: A) FDM

Explanation:

FDM is mainly used in radio broadcasts and TV networks.

78. Time Division Multiplexing is a _____ technique.

    A. Analog
    B. Digital

Answer: B) Digital

Explanation:

Time Division Multiplexing is a digital technique.

79. Which of the following statement is True about TDM?

    A. When using Time Division Multiplexing, all signals run at the same frequency and at the same time.

B. When using Time Division Multiplexing, all signals run at the same frequency but at separate times.
C. When using Time Division Multiplexing, all signals run at a different frequencies and at different times.

Answer: B) When using Time Division Multiplexing, all signals run at the same frequency but at separate times.

Explanation:

When using Time Division Multiplexing, all signals run at the same frequency but at separate times.

80. How many types of TDM are there?

A. 5
B. 3
C. 2
D. 1

Answer: C) 2

Explanation:

There are two types of TDM:

- Synchronous TDM
- Asynchronous TDM

81. Most of the slots in Synchronous TDM are _____.

A. Fully utilized
B. Unutilized

Answer: B) Unutilized

Explanation:

Most of the slots in Synchronous TDM are unutilized, whereas slots in asynchronous TDM are fully utilized.

82. How many types of switching modes are there?

A. 5
B. 4
C. 3
D. 2

Answer: C) 3

Explanation:

There are 3 types of switching modes:

- Store-and-forward
- Cut-through
- Fragment-free

83. In which of the following switching modes/techniques do intermediate nodes store the received frame before checking for defects and passing the packets to the next node?

A. Store-and-forward
B. Cut-through
C. Fragment-free

Answer: A) Store-and-forward

Explanation:

Store-and-forward is a strategy in which intermediate nodes store the received frame before checking for defects and passing the packets to the next node.

84. Does the Cut-through switching technique have an error-checking technique?

A. Yes
B. No

Answer: B) No

Explanation:

Cut-through switching technique lacks an error-checking method.

85. Which of the following switching technique creates a dedicated path between the sender and the receiver?

A. Circuit switching
B. Space division switches
C. Packet switching

Answer: A) Circuit switching

Explanation:

Circuit switching is a switching technique that creates a dedicated path between the sender and the receiver.

86. In the public telephone network, _____ switching is employed.

A. Circuit switching
B. Space division switches
C. Packet switching

Answer: A) Circuit switching

Explanation:

In the public telephone network, circuit switching is employed. It is used to transmit voice.

87. Space Division Switches can be categorized in how many ways?

A. 5
B. 4
C. 3
D. 2

Answer: D) 2

Explanation:

Space Division Switches can be categorized in two ways:

- Crossbar Switch
- Multistage Switch

88. A _____ switch is a switch with n input and n output lines.

A. Crossbar switch
B. Multistage switch

Answer: A) Crossbar switch

Explanation:

A Crossbar switch is a switch with n input and n output lines.

89. The number of cross points ____ as the number of stations is increased.

    A. Decreases
    B. Increases

Answer: B) Increases

Explanation:

The number of cross points increases as the number of stations is increased.

90. A ____ switch is created by dividing a crossbar switch into smaller components and then connecting them.

    A. Multiphase
    B. Multistage
    C. Fixed

Answer: B) Multistage

Explanation:

A multistage switch is created by dividing a crossbar switch into smaller components and then connecting them.

91. ____ is a switching technique in which the communication is broken into smaller bits and sent separately rather than all at once.

    A. Circuit switching
    B. Space division switches
    C. Packet switching

Answer: C) Packet switching

Explanation:

Packet switching is a switching technique in which the communication is broken into smaller bits and sent separately rather than all at once.

92. Which of the following are the data link layer protocols?

    A. Ethernet
    B. Token ring
    C. FDDI
    D. PPP
    E. All of the above

Answer: E) All of the above

Explanation:

Ethernet, token ring, FDDI, and PPP are Data Link Layer protocols.

93. Errors can be categorized into how many types?

    A. 5
    B. 4
    C. 3
    D. 2

Answer: D) 2

Explanation:

Errors can be classified into two categories:

- Single-Bit Error
- Burst Error

94. Single-Bit Error mainly occurs in ____ Data Transmission.

  A. Serial
  B. Parallel

Answer: B) Parallel

Explanation:

Single-Bit Error mainly occurs in Parallel Data Transmission.

95. ____ Error occurs when two or more bits are altered from 0 to 1 or from 1 to 0.

  A. Single-Bit Error
  B. Burst Error

Answer: B) Burst Error

Explanation:

Burst Error occurs when two or more bits are altered from 0 to 1 or from 1 to 0.

96. The ____ Error is calculated by counting the number of corrupted bits from the first to the last.

  A. Single-Bit Error
  B. Burst Error

Answer: B) Burst Error

Explanation:

The Burst Error is calculated by counting the number of corrupted bits from the first to the last.

97. The noise duration in Burst Error is ____ than the noise duration in Single-Bit.

  A. Greater
  B. Smaller
  C. Same

Answer: A) Greater

Explanation:

The noise duration in Burst Error is greater than the noise duration in Single-Bit.

98. Burst errors are the most common type of error in ____ data transmission.

  A. Serial
  B. Parallel

Answer: A) Serial

Explanation:

Burst errors are the most common type of error in serial data transmission.

99. In Single Parity checking, If the number of 1s bits is odd, then parity bit ___ is appended.

   A. 1
   B. 0

Answer: A) 1

Explanation:

In Single Parity checking, If the number of 1s bits is odd, then parity bit 1 is appended.

100. In Single Parity checking, if the number of 1s bits is even, then parity bit ____ is appended at the end of the data unit.

   A. 1
   B. 0

Answer: B) 0

Explanation:

In Single Parity checking, if the number of 1s bits is even, then parity bit 0 is appended at the end of the data unit.

101. Single parity checking can detect just ____ errors, which are extremely unusual.

   A. Single-bit errors
   B. Burst errors

Answer: A) Single-bit errors

Explanation:

Single parity checking can detect extremely unusual and just single-bit errors.

102. Which of the following functionality determines which device can send, and when it can send the data?

   A. Flow control
   B. Error control
   C. Line discipline

Answer: C) Line discipline

Explanation:

Line discipline determines which device can send, and when it can send the data.

103. Line Discipline can be achieved in how many ways?

   A. 1
   B. 4
   C. 3
   D. 2

Answer: D) 2

Explanation:

Line Discipline can be achieved in two ways:

- ENQ/ACK
- Poll/Select

104. How many methods have been developed to control the flow of data?

A. 5
B. 4
C. 2
D. 6

Answer: C) 2

Explanation:

Two methods have been developed to control the flow of data:

- Stop-and-wait
- Sliding window

105. Which layer is responsible for converting logical addresses into physical addresses?

A. Physical layer
B. Data link layer
C. Transport layer
D. Network layer

Answer: D) Network layer

Explanation:

The network layer is responsible for converting logical addresses into physical addresses.

106. An IP address is divided into how many parts?

A. 5
B. 4
C. 3
D. 2

Answer: D) 2

Explanation:

An IP address is divided into two parts:

- Network ID
- Host ID

107. Class A IP address have _____ bits long Host ID.

A. 16
B. 8
C. 24
D. 32

Answer: C) 24

Explanation:

The host ID is 24 bits long in a Class A IP address.

108. Class C IP address have _____ bits long network ID.

A. 16
B. 8
C. 24
D. 32

Answer: C) 24

Explanation:

Class C IP addresses have 24 bits-long network IDs.

109. Class C IP address have _____ bits long Host ID.

A. 16
B. 8
C. 24
D. 32

Answer: B) 8

Explanation:

Class C IP addresses have 8 bits-long host IDs.

110. Routing can be classified into how many categories?

A. 5
B. 4
C. 3
D. 2

Answer: C) 3

Explanation:

Routing can be classified into three categories:

- Static Routing
- Default Routing
- Dynamic Routing

111. Static Routing is also known as _____ Routing.

A. Nonadaptive Routing
B. Adaptive Routing

Answer: A) Nonadaptive Routing

Explanation:

Static Routing is also known as Nonadaptive Routing.

112. When networks have a single exit point, _____ routing is employed.

A. Static Routing
B. Default Routing
C. Dynamic Routing

Answer: B) Default Routing

Explanation:

When networks have a single exit point, default routing is employed.

113. Dynamic routing is also known as _____ Routing.

A. Nonadaptive Routing

B. Adaptive Routing

Answer: B) Adaptive Routing

Explanation:

Dynamic routing is also known as Adaptive Routing.

114. In Dynamic Routing, which protocols are utilized to discover new routes?

    A. RIP
    B. OSPF
    C. Both
    D. None

Answer: C) Both

Explanation:

In Dynamic Routing, the protocols RIP and OSPF are utilized to discover new routes.

115. What is ARP?

    A. Address recommendation protocol
    B. Address routing protocol
    C. Address Resolution Protocol.

Answer: C) Address Resolution Protocol.

Explanation:

ARP stands for Address Resolution Protocol.

116. Which address is used to identify the actual device?

    A. MAC address
    B. IP address

Answer: A) MAC address

Explanation:

The MAC address is used to identify the actual device.

117. RARP stands for ____.

    A. RARP stands for Route Address Resolution Protocol.
    B. RARP stands for Render Address Resolution Protocol.
    C. RARP stands for Reverse Address Resolution Protocol.

Answer: C) RARP stands for Reverse Address Resolution Protocol.

Explanation:

RARP is an abbreviation for Reverse Address Resolution Protocol. Reverse Address Resolution Protocol is the protocol used to acquire an IP address from a server.

118. The ICMP protocol handles how many sorts of errors?

    A. 6
    B. 5
    C. 4
    D. 3

Answer: B) 5

Explanation:

Five types of errors are handled by the ICMP protocol:

- Destination unreachable
- Source Quench
- Time Exceeded
- Parameter problems
- Redirection

119. What is IGMP?

A. IP Group Message Protocol.
B. Internet Group MAC Protocol.
C. Internet Group Message Protocol.

Answer: C) Internet Group Message Protocol.

Explanation:

IGMP is an abbreviation for Internet Group Message Protocol.

120. The IGMP protocol is used by the hosts and router to support ____.

A. Multicasting
B. Unicasting

Answer: A) Multicasting

Explanation:

The IGMP protocol is used by the hosts and router to support multicasting.

121. The Routing algorithm is divided into how many categories?

A. 5
B. 4
C. 3
D. 2

Answer: D) 2

Explanation:

The Routing algorithm is divided into two categories:

- Adaptive Routing algorithm
- Non-adaptive Routing algorithm

122. How many types of adaptive routing algorithms are there?

A. 3
B. 4
C. 5
D. 6

Answer: A) 3

Explanation:

An adaptive routing algorithm can be classified into three parts:

- Centralized algorithm
- Isolation algorithm
- Distributed algorithm

123. Which of the following type of adaptive routing algorithm is also known as the global routing algorithm because it computes the least-cost path between source and destination using comprehensive and global network knowledge?

    A. Centralized algorithm
    B. Isolation algorithm
    C. Distributed algorithm

Answer: A) Centralized algorithm

Explanation:

Centralized algorithm is also known as the global routing algorithm because it computes the least-cost path between source and destination using comprehensive and global network knowledge.

124. _____ is an algorithm that obtains routing information by utilizing local data rather than getting data from other nodes.

    A. Centralized algorithm
    B. Isolation algorithm
    C. Distributed algorithm

Answer: B) Isolation algorithm

Explanation:

The isolation algorithm is an algorithm that obtains routing information by utilizing local data rather than getting data from other nodes.

125. Distributed algorithm is also known as _____.

    A. Decentralized algorithm
    B. Computing algorithm
    C. Feedback algorithm

Answer: A) Decentralized algorithm

Explanation:

The distributed algorithm is also known as the Decentralized algorithm.

126. How many types of non-adaptive routing algorithms are there?

    A. 3
    B. 4
    C. 2
    D. 5

Answer: C) 2

Explanation:

The Non-Adaptive Routing algorithm is of two types:

- Flooding
- Random walks

127. The Distance vector algorithm is a _____ algorithm.

    A. Dynamic
    B. Static

Answer: A) Dynamic

Explanation:

The Distance vector algorithm is a dynamic algorithm.

128. DNS is a _____ protocol used on different platforms.

    A. UDP
    B. TCP/IP

Answer: B) TCP/IP

Explanation:

DNS is a TCP/IP protocol used on different platforms.

129. The domain name space is divided into how many different sections?

    A. 5
    B. 4
    C. 3
    D. 2

Answer: C) 3

Explanation:

The domain name space is divided into three different sections: generic domains, country domains, and inverse domains.

130. What is SNMP?

    A. Social Network Management Protocol.
    B. Strict Network Management Protocol.
    C. Simple Network Management Protocol.
    D. Soft Network Management Protocol.

Answer: C) Simple Network Management Protocol.

Explanation:

SNMP is an abbreviation for Simple Network Management Protocol.