

1. Which of the following are characteristic of a peer-to-peer network? (Choose all that apply.)

- A. It has centralized security and administration.
- B. A computer can be both a client and a server.
- C. A limited number of computers are involved.
- D. It does not require a hub.

Answer: B, C

2. Which of the following are advantages of a star-wired topology? (Choose all that apply.)

- A. The star topology uses the least amount of cable.
- B. A cable cut between a lone device and its concentrating device affects only the lone device.
- C. There is a single point of failure in the central concentrating device.
- D. Troubleshooting is simplified compared to the other topologies.

Answer: B, D

3. Which of the following is a characteristic of a physical mesh topology?

- A. It has the most physical connections per device.
- B. It is the most common physical LAN topology.
- C. Each device has only an inbound port and an outbound port.
- D. When one device transmits, all other devices hear the transmission.

Answer: A

4. An RJ-45 connector should be wired with _____ pairs when used on a Cat-5e UTP cable.

- A. 1
- B. 2
- C. 4
- D. 8

Answer: C

5. Which layer of the OSI model ensures reliable, end-to-end communications?

- A. Network
- B. Transport
- C. Session
- D. Presentation

Answer: B

6. Which layer of the OSI model provides routing functionality?

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

Answer: D

7. Which layer of the OSI model translates the data from upper-layer protocols into electrical signals and places them on the network media?

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

Answer: A

8. Which OSI model layer has both a MAC sublayer and an LLC sublayer?

- A. Physical

- B. Transport
 - C. Network
 - D. Data Link
- Answer:D**

9. Which OSI layer is responsible for formatting data based on a standard syntax and for character set conversion?

- A. Transport
 - B. Network
 - C. Presentation
 - D. Session
- Answer:C**

10. The two halves of a MAC address are referred to as the _____.

- A. TCP and IP
 - B. OUI and device ID
 - C. OUI and IP
 - D. Device ID and IP
- Answer:B**

11. You are the administrator of a 100-node Ethernet network. Your users are complaining of slow network speeds. What could you replace your hub with to increase your network throughput?

- A. Router
 - B. Bridge
 - C. Switch
 - D. NIC
- Answer:C**

12. At which OSI model layer do routers primarily operate?

- A. Physical
 - B. Data Link
 - C. Transport
 - D. Network
- Answer:D**

13. Which of the following is a MAC address?

- A. 199.165.217.45
 - B. 00076A:01A5BBA7FF60
 - C. 01:A5:BB:A7:FF:60
 - D. 01:B7:BF:A7:FF
- Answer:C**

14. The Class B address range for the first octet is _____.

- A. 1–127
 - B. 128–191
 - C. 192–223
 - D. 224–255
- Answer:B**

15. What does a subnet mask allow a TCP/IP device to differentiate?

- A. Network ID and host ID
- B. Workgroups from each other
- C. Host IDs
- D. All the above

Answer:A

16.What is the default subnet mask for a Class C address?

- A. 255.0.0.0
- B. 255.255.0.0
- C. 255.255.255.0
- D. 255.255.255.255

Answer:C

17. Joe's computer has been configured with an IP address in which the host bits are all binary 1. Joe can't seem to communicate on the network at all. What is the most likely problem?

- A. Joe's computer is configured with an IP address that conflicts with another device.
- B. Joe's computer is configured with the broadcast address for his subnet.
- C. Joe's computer needs to be configured with the IP address of a DNS server.
- D. Joe's computer needs to be configured with the address of the default gateway.

Answer:B

18.Which protocol is considered connection-oriented?

- A. DDP
- B. TCP
- C. NetBEUI
- D. UDP

Answer:B

19.You are installing a Windows XP-based TCP/IP network. You accidentally set workstation B to the same IP address as workstation A. Which workstation(s) will receive an error message?

- A. Workstation A
- B. Workstation B
- C. Neither
- D. Both

Answer:D

20.You are installing a Windows XP-based TCP/IP network. You accidentally set workstation B to the same IP address as workstation A. Which workstation(s) will have a valid IP address?

- A. Workstation A
- B. Workstation B
- C. Neither
- D. Both

Answer:A

21.Which protocol is considered connection-oriented?

- A. DDP
- B. TCP
- C. NetBEUI
- D. UDP

Answer:B

22.Which layer of the OSI model translates the data from upper-layer protocols into electrical signals and places them on the network media?

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

Answer:A

23.What RAID level provides the fastest access times with no fault tolerance?

- A. 0**
- B. 1**
- C. 3**
- D. 5**

Answer:A

24.Which of the following is a function of L2TP?

- A. L2TP allows layer 2 communication over twisted pair.**
- B. L2TP creates a secure connection over the Internet.**
- C. L2TP offers secure tunneling for TCP/IP, IPX, and others.**
- D. L2TP provides authentication of remote access users.**

Answer:B

25.Which of the following is the greatest advantage of PSTN (POTS)?

- A. Readily available**
- B. Greater than 64Kbps data rates**
- C. Fault tolerant**
- D. Not available in all markets**

Answer:A

26. What is the Microsoft TCP/IP protocol that can be used over the Internet to create a secure virtual network?

- A. SLIP**
- B. PPTP**
- C. TCP**
- D. HTTP**

Answer:B

27.Which piece of software allows the computer's operating system to access the NIC hardware?

- A. NIC driver**
- B. Operating system driver**
- C. System driver**
- D. Protocol driver**

Answer:A

28.Which of the following wireless technologies has the highest bit rate?

- A. 802.11a**
- B. 802.11b**
- C. 802.11g**
- D. 802.11n**

Answer:D

29. What is the result of updating an old NIC driver on a system?

- A. It can correct bugs.**
- B. It can be a good way to look like you are doing useful work.**
- C. It can act as a protocol converter.**

D. All of the above.

Answer:A

30.Which network component “shares out” a printer so that printing services can be provided to the entire network?

- A. Print server**
- B. Print facilitator**
- C. PCONSOLE.EXE**
- D. Print manager**

Answer:A

31.With which command you can test network connectivity from your computer to another computer

In your network?

- A. Tracert**
- B. IPconfig**
- C. Telnet**
- D. Ping**

Answer:D

32-Which OSI layer is responsible for dividing data into frames so it can be sent across a network?

- A. Network**
- B. Data Link**
- C. Physical**
- D. Session**
- E. Transport**

Answer:B

33-Which protocol is used by most e- mail programs?

- A. FTP**
- B. TFTP**
- C. SMTP**
- D. SNMP**

Answer:C

34-Which protocol is used by web browsers for opening secure web-pages ?

- A. Http**
- B. FTP**
- C. HTTPS**
- D. POP3**
- E. IMAP4**

Answer:C

35-Where is the packet sent if a client needs to send a packet that is not on the client's subnet?

- A. Local host**
- B. Default gateway**
- C. The nearest bridge**
- D. Nowhere, because the packet is discarded**

Answer:B

36-Which network transmission medium is limited to 10 megabits per second (Mbps) and can support cable segments up to a maximum of 100 meters (330 feet)?

- A. 10Base2
- B. 10Base5
- C. 10Base-F
- D. 10Base-T .

Answer:D

37-Which protocol provide OSI Network layer addresses?

- A. IP
- B. NetBEUI
- C. TCP
- D. SPX

Answer:A

38- Which TCP/IP port number identifies Http sessions?

- A. 21
- B. 23
- C. 25
- D. 80
- E. 110

Answer:D

39.Which layer of the OSI model provides routing functionality?

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

Answer:D

40.What is the default subnet mask for a Class C address?

- A. 255.0.0.0
- B. 255.255.0.0
- C. 255.255.255.0
- D. 255.255.255.255

Answer:C

41-Which networking topology requires less hardware and cabling than other topologies?

- A. Bus
- B. Ring
- C. Star
- D. Mesh

Answer:A

42. A transmission technology that divides that transmission medium into discrete channels so that

multiple signals can share the same cable is known as _____.

- A. duplex communications**
- B. baseband communications**
- C. sideband communications**
- D. broadband communications**

Answer:D

43-Which OSI layer 4 protocol provides connectionless-oriented services?

- A. IP**
- B. UDP**
- C. TCP**
- D. ICMP**

Answer:C

44-Which TCP/IP utility lets you view the table that contains IP address to MAC address resolutions?

- A. Arp**
- B. Ping**
- C. Telnet**
- D. Tracert**
- E. Netstat**

Answer:A

45-Which protocol recovers from lost or corrupted packets during transmission?

- A. IP**
- B. IPX**
- C. UDP**
- D. TCP**
- E. NetBIOS**

Answer:D

46-Which name resolution technique does a hierarchical database?

- A. DNS**
- B. DHCP**
- C. Proxy**
- D. LMHOSTS**

Answer:A

47-A user cannot access one of two files on a server. The other users can access both files.

What is your first step to resolve the problem?

- A. Reboot the server
- B. Reboot the workstation
- C. Check the user's password
- D. Check the user's access permissions
- E. Ask the user to access the problem application

Answer:D

48-Which network transmission medium is limited to 10 megabits per second (Mbps) and can support cable segments up to a maximum of 100 meters (330 feet)?

- A. 10Base2
- B. 10Base5
- C. 10Base-F
- D. 10Base-T
- E. 10Base36

Answer:D

49-Which device connects multiple computers to create a single logical network segment?

- A. Hub
- B. NIC
- C. Router
- D. Bridge

Answer:A

50-What is the copper cable requirement for 1000BaseT?

- A. RG-58 Coax
- B. RG-62 Coax
- C. Category 5e UTP
- D. Category 5 UTP
- E. Telephone Twisted pair (TTP)

Answer:C

51-

Windows 98 IP Configuration

```
Host Name . . . . .:Client1.IDW
DNS Servers . . . . .:
Node Type . . . . .:Broadcast
NetBIOS Scope ID . . . . .:
IP Routing Enabled . . . . .:No
WINS Proxy Enabled . . . . .:No
NetBIOS Resolution uses DNS . . . . .:No
```

1 Ethernet adapter:

```
Description . . . . .:3Com Etherlink PCI
Physical Address . . . . .:00-B0-D0-5A-56-EA
DHCP Enabled . . . . .:Yes
IP Address . . . . .:10.0.0.130
Subnet Mask . . . . .:255.255.255.0
Default Gateway . . . . .:
DHCP Server . . . . .:10.0.0.110
Primary WINS Server . . . . .:
Secondary WINS Server . . . . .:
```

Which command's output is displayed in the exhibit?

- A. Ipconfig
- B. Ipconfig/all
- C. Ipconfig/renew
- D. Ipconfig/release

Answer:B

52-What should you configure to allow nodes on one local network to communicate with nodes on another network?

- A. WINS
- B. DHCP
- C. ARP Cache
- D. Default gateway

Answer:D

53-Network A is IP network 192.168.100.0/24. What is a valid IP address for a computer located on network A?

- A. 192.168.1.1
- B. 192.167.101.10
- C. 192.168.100.254
- D. 192.168.100.255

Answer:C

54-

```
C:\WINDOWS>"command" 10.0.0.131

"command" 10.0.0.131 with 32 bytes of data:

Reply from 10.0.0.0.131:bytes=32 time<10ms TTL=120
Reply from 10.0.0.0.131:bytes=32 time<10ms TTL=120
Reply from 10.0.0.0.131:bytes=32 time<10ms TTL=120
Reply from 10.0.0.0.131:bytes=32 time<10ms TTL=120

"command" statistics for 10.0.0.131:
    Packets Sents = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Which command's output is displayed in the exhibit?

- A. Ping
- B. Tracert
- C. Nstat
- D. Traceroute

Answer:A

55-A client machine needs to communicate with a NetWare 3.11 server and a UNIX system. Which two protocols should you implement?

- A. SNA
- B. TCP/IP
- C. IPX/SPX
- D. NetBEUI

Answer:C

56-Network B is IP network 172.17.0.0/16

The IP address of the router for Network B is 172.17.0.1.

What is the subnet mask for a computer attached to network B?

- A. 127.0.0.1
- B. 172.17.0.0
- C. 172.17.0.1
- D. 255.255.0.0
- E. 255.255.255.0

Answer:D

57-Which networking topology is the easiest to reconfigure?

- A. Bus
- B. Ring

- C. Star
- D. Mesh

Answer:C

58-With which service you can automatically give IP Address to your network computers?

- A. DHCP
- B. NetBIOS
- C. DNS
- D. WINS

Answer:A

59-On a network that uses the TCP/IP protocol each device that has a logical IP address is known as a _____?

- A. Peer
- B. Host
- C. Server
- D. Client
- E. Station

Answer:B

60-Which connector should you use in a 10BASE2 environment?

- A. SC
- B. ST
- C. BNC
- D. RJ-11
- E. RJ-45

Answer:C

61- You want to implement two separate networks. You have only one switch. What should you do to complete your task?

- A. Enable SNMP on the switch
- B. Enable SNTP on the switch
- C. Implement QoS on the switch
- D. Implement VLANs on the switch

Answer:D

62-You have dispatched a technician to a remote site. After talking through multiple troubleshooting sequences, you need to have the technician test the Ethernet NIC. You ask the technician to make a Cross Cable. Your network speed is 100Mbps.

Which two sets of pins should you connect when creating a hardware Cross Cable?(Choose two.)

- A. 1 and 2
- B. 1 and 3

- C. 2 and 5
- D. 2 and 6
- E. 3 and 4
- F. 4 and 6

Answer:B,D

63-According to industry standards, at which OSI layer does a switch operate?

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

Answer:A

**64-Which two pieces of information are required when logging on to a Windows 7?
(Choose two.)**

- A. Password
- B. Username
- C. IP address
- D. MAC address

Answer:A,B

65-which of below ip address range is private ?(choose that apply)

- A. 192.168.255.1
- B. 200.200.220.1
- C. 20.20.1.1
- D. 172.16.1.1

Answer:A,D

66- Users call you that they cant connect to servers in the network. Your servers have static IPaddresses. You use DHCP for IP addressing for your clients in the network with IP range of 192.168.1.0/24.

You verify that now your clients have the ip address of 169.254.x.x/16.

What is the problem?

- A. The DNS server is down.
- B. The DHCP server is down.
- C. The NetBIOS over TCP/IP has been disconnected.
- D. The workstations has become unplugged from the network.

Answer:B

67-What is the maximum segment length of a 1000Base-T segment?

- A. 100 meters
- B. 325 meters
- C. 550 meters
- D. 3 kilometers

Answer:A

68. With which command you can estimate number of hop between your computer to destination host ?

- A. Tracert
- B. IPconfig
- C. Telnet
- D. Ping

Answer:A

69. You installed a Windows 2000 client in your network, and you are running a Novell network with version 3.12. What is needed to gain access to the application GAMES on the Novell NETWARE server?

- A. TCP/IP
- B. NetBEUI
- C. DLC
- D. NWLink

Answer:D

70. To avoid data loss and reduced downtime, which is the best method of fault tolerance?

- A. Saving Database on a Server
- B. Save Database on local Hard Disk
- C. Save Database on Floppy Disk

Answer:A

71. Which of the following is a non- routable transport protocol?

- A. Net BEUI
- B. Apple talk
- C. IPX/SPX
- D. TCP/IP

Answer:A

72. Which of the following statements is true of NetBEUI?

- A NetBeui is routable
- B NetBeui provide highest security
- C NetBeui is a NetWare protocol only
- D NetBeui is a small, very fast, and efficient transport layer protocol used with Microsoft network.

Answer:D

73. Which type of connector assembly is responsible for twisted-pair?

- A. AUI
- B. BNC
- C. RJ-55
- D. RJ-45

Answer:D

74. Which of the following cable types can be used for 100 Mbps networks?

- A. RG-58 A/U
- B. RG-11
- C. Infra Red
- D. UTP

Answer:D

75. Translating the data format is the responsibility of which layer of the OSI model?

- A. Application
- B. Physical
- C. Data link
- D. Presentation

Answer:D

76. You have just finished a design that connects IBM and Windows NT operating systems. Which protocol is used in your design to enable communication between the two systems?

- A. NetBEUI
- B. DLC
- C. NWLink
- D. TCP/IP

Answer:B

77. You are setting up a network in your new large office for the first time, and there is no preinstalled wiring. Which type of cabling should you consider first?

- A. Thicknet
- B. RG-58
- C. UTP
- D. Thinnet

Answer:C

77. At which layer of the OSI model does a repeater operate?

- A. Physical
- B. Network
- C. Transport
- D. all the 7 Layers

Answer:A

78. At which layer of the OSI model does a Router operate?

- A. Physical
- B. Network
- C. Transport
- D. all the 7 Layers

Answer:B

79. At which layer of the OSI model does a Gateway operate?

- A. Physical
- B. Network
- C. Transport
- D. all the 7 Layers

Answer:D

80. You are in charge of installing cables for an network . You need a high speed connection on your network. Which type of cable should you install in this situation?

- A. Fiber Optic B. Thicknet C. Cat5 UTP D. RG-45

Answer:A

81. Which layer of the OSI model is responsible for data encryption?

- A. Transport B. Session C. Presentation D. Network

Answer:C

82. What type of cabling is needed to provide no interference at 1000Mbps?

- A. Fiber Optic B. Cat 5 C.RG11 D. RG-58

Answer:A

83.What type of topology is ideal for a small and temporary network?

- A. Mesh
B. Star
C. Bus
D. Token Ring

Answer:C

84.Which of the following is a valid IP address?

- 127.20.11.1
229.121.54.6
100.2.255.255
194.178.10.0

Answer:C

85.Which of the following is a network ID?

- 1.128.0.0
109.10.15.0
172.16.5.0
127.0.0.0

Answer:C

86.Which command is used for checking network connectivity?

- Ipconfig
Ipconfig / all
Ping
My network Places

Answer:C

87.Which of the following protocols used for Internet communication?

DLC
NetBEUI
TCP/IP
Apple talk

Answer:C

88. Which of the following protocols used for Communication between Macintosh and Microsoft Platforms?

TCP/IP
IPX/SPX
NetBEUI
Apple talk

Answer:D

89. The OSI layer above and below the session layer are: (select all the correct answers)

A. Application B. Presentation C. Transport D. Network

Answer:B,C

90. Which of the OSI model provides flow control and ensure messages are delivered error free?

A. Transport B. Session C. Network D. Physical

Answer:A

91. What is the cable length for 100baseT?

A. 185m B. 500m C. 100m D. 200m

Answer:C

92. Which of the following topologies is used in Ethernet?

A. Star B. Mesh C. Ring D. Token Ring

Answer:A

93. Which of the following access method is used in Ethernet architecture?

A. CSMA/CD B. CSMA/CA C. Token Passing D. all

Answer:A

94. Which type of cable is used in 1000baseFL?

A. RG-58 B. UTP C. Fiber Optic D. Coax

Answer:C

95. Which of the following architecture is the most popular?

A. Token Ring B. Apple Talk C. Ethernet D. Bus

Answer:C

96. Which is the speed of 10base5?

A. 10Mbps B.100Mbps C.1000Mbps D. 500Mbps

Answer:A

97. Which of the following access method is used in Token Ring architecture?

A. CSMA/CD B. CSMA/CA C. Token Passing D. all

Answer:C