

Cisco CCNA 2.0
INTERNETWORKING BASICS

1. Which two statements about frame tagging are true? (Choose two)

- A. A filtering table is developed for each switch.
- B. Frame tagging assigns a unique user defined ID to each frame.
- C. A unique identifier is placed in the header of each frame as it is forwarded between switches.
- D. Frame tagging is a technique that examines particular information about each frame based on user defined offsets.

Answer: B, D

2. Which two statements about the store and forward switching method are true? (Choose two)

- A. Latency remains constant regardless of frame size.
- B. Latency through the switch varies with frame length.
- C. The switch receives the complete frame before forwarding it.
- D. The switch checks the destination address as soon as it receives the header and begins forwarding the frame immediately.

Answer: B, C

3. A router on one side of a PPP link uses the username RTR1 and the password COPP1-PWD. Which configuration line on RTR1 enables a connection between RTR1 and another router named RTR2?

- A. username RTR2 password COPP1-PWD,
- B. username RTR1 password COPP1-PWD,
- C. username RTR2 password COPP2-PWD,
- D. username RTR1 password COPP2-PWD,

Answer: A

4. What is the command to start IP RIP version 1 routing on a Cisco router?

- A. show rip
- B. enable rip
- C. router enable
- D. router rip

Answer: D

5. Which line from a show spanning-tree 1 command output indicates that virtual LAN 1 (VLAN1) is functioning properly?

- A. Root port is FastEthernet 0/26
- B. Port Ethernet 0/1 of VLAN1 is Forwarding
- C. Designated port is Ethernet 0/1, path cost 10
- D. Designated root has priority 0 address 00D0 588F B600
- E. VLAN1 is executing the IEEE compatible Spanning Tree Protocol

Answer: E

6. In order to enable RIP, which two tasks need to be performed? (choose two)

- A. Specify the routing protocol
- B. Confound static RIP routes
- C. Specify directly connected subnets
- D. Specify directly connected networks

Answer: A, D

7. If you are in IOS user mode, which command do you use to enter the privileged mode?

- A. Set
- B. Enable
- C. Configure
- D. Privileges

Answer: B

8. Which two solutions are used to reduce the chance of distance vector routing loops? (choose two)

- A. split horizon
- B. route poison
- C. area hierarchies
- D. link state algorithms

Answer: A, B

9. Which command displays all the commands in the history buffer?

- A. CTRL H
- B. show buffer
- C. show history
- D. show history buffer

Answer: C

10. Switching methods include cut-through, store and forward, and a modified version of the first two methods. Which statement about switching methods is true?

- A. The store and forward method has low latency
- B. The cut through method of switching has high latency
- C. The modified version holds the packet in memory until 50 percent of the packet reaches the switch
- D. The modified version holds the packet in memory until the data spoon of the packet reaches the switch

Answer: C

11. With one method for transmitting frames through a switch, the switch receives the complete frame and checks the frame CRC before forwarding the frame. What is the switch transmission method called?

- A. CSMA/CD
- B. Full Duplex
- C. Cut-Through
- D. Half-Duplex

E. Fragmentation
F. Store and Forward
Answer: F

12. Which command enables directly connected network 199.55.72.0 to be used by RIP?
A. Router(config router)# rip 199.55.0.0
B. Router(config router)# rip 199.55.72.0
C. Router(config router)# network 199.55.0.0
D. Router(config router)# network 199.55.72.0
Answer: D

13. What are the two primary operating modes for frame switching?
A. Full Duplex
B. Half-Duplex
C. CSMA/CD
D. Cut-through
E. Fragmentation
F. Store and Forward
G. User mode
H. Privileged mode
Answer: D, F

14. What are four functions/characteristics of the network layer of the OSI model? (Choose four)
A. It uses a two-part address
B. It maintains routing tables
C. It uses broadcast addresses
D. It establishes network addresses
E. It provides access to the LAN media
F. It provides media independence for upper layers
G. It provides path selection for Internetwork communication
Answer: A, B, D, G

15. Which statement about an IP network is true?
A. A broadcast source MAC address contains all zeros
B. A MAC address is part of the physical layer of the OSI model
C. MAC addresses are used by bridges to make forwarding decisions. IP addresses are used by routers.
D. IP addresses allow a flat addressing scheme. MAC addresses use a hierarchical addressing scheme.
Answer: C

16. What is an advantage of local area network (LAN) segmentation?
A. smaller collision domains
B. elimination of broadcasts
C. decreased cost of implementation
D. larger number of users within the same domain
Answer: A

17.What is a key use of a device hardware address?
A. to obtain a vendor code / serial number from the user
B. to transmit a frame from one Interface to another Interface
C. to transmit a packet from one local device to another local device
D. to transmit data from one local device to a remote device across the internet
E. to contain logical information about the device to use for end-to-end transmission
Answer: B

18.What is the protocol and what is the second part of the following network address? 172.16.0.254 mask - 255.255.0.0
A. IPX MAC address
B. IP Class C directed broadcast
C. Private IP address node number
D. Public IP directed broadcast
E. Private IP directed broadcast
Answer: C

19.What is the result of segmenting a network with a router into segments 1 and 2?
A. It increases the number of collisions
B. It decreases the number of broadcast domains
C. It connects segment 1 and broadcasts to segment 2
D. It connects segment 1 and broadcasts from segment 1 to segment 2
Answer: B

20.What was the key reason the International Organization for Standardization released the OSI model?
A. users could access network servers faster
B. different vendor networks could work with each other
C. the industry could create a standard for how computers work
D. network administrators could increase the overall speed of their network
Answer: B

21.Which statement is true?
A. While bridges are used to segment networks, they will not isolate broadcast or multicast packets.
B. A bridge looks at every packet within its network segment and works like a hub re-broadcasting the packet if the destination is within its network segment.
C. A bridge maintains a table of the IP addresses of the hosts within its network segment and forwards the packet directly to the destination based upon the IP address.
D. A bridge resets the hop count by keeping all packets within the network segment. Only packets addressed to a specific destination host outside the network segment are allowed to pass through the bridge.

Answer: A

22.What is the most common layer 2 device?

- A. Hub
- B. Router
- C. Switch
- D. Repeater

Answer: C

23.What is a function of a reliable transport layer connection?

- A. route selection
- B. acknowledgements
- C. session checkpoints
- D. system authentication

Answer: B

24.Which two statements about a bridge are true? (Choose two)

- A. A bridge floods multicasts
- B. A bridge floods broadcasts
- C. A bridge does not flood multicasts
- D. A bridge does not flood broadcasts

Answer: A, B

25.During encapsulation, in which order is information packaged?

- A. Data, Packet, Segment, Frame
- B. Segment, Data, Packet, Frame
- C. Data, Segment, Packet, Frame
- D. Packet, Data, Segment, Frame
- E. Frame, Data, Segment, Packet
- F. Bread, Peanut Butter, Jelly, Bread

Answer: C

26.Which three basic switch functions increase available bandwidth on the networks? (Choose three)

- A. loop avoidance
- B. address learning
- C. hop count limiting
- D. broadcast filtering
- E. packet forward/filtering
- F. broadcast packet hop count learning/forward/filtering

Answer: A, D, E

27.What is NOT a characteristic of a network segment on a switch?

- A. The segment has its own collision domain
- B. The segment can translate from one media to a different media
- C. All devices in the segment are part of the same broadcast domain
- D. One device per segment can concurrently send frames to the

switch.
Answer: B

28. Which three are typical operational phases in a basic connection oriented network service?

- A. call setup
- B. data transfer
- C. load balancing
- D. call termination
- E. caller ID
- F. call prioritization
- G. data segmentation
- H. data and momma
- I. data link identification
- J. calling book

Answer: A, B, D

29. Your network uses a Class C address of 210.10.10.0. You must now split up the network into separate shores to handle multiple buildings separated by routers. Which two steps must you take to determine the proper shored mask for your networks? (Choose two)

- A. determine the number of separate networks required
- B. determine how many devices will require DHCP addressing
- C. determine the maximum number of hosts that will be on each shored
- D. determine the minimum number of hosts that will be on each shored
- E. determine which router will be the IP default gateway for each shored

Answer: A, C

30. Which Cisco IOS command should you use to display the Novell IPX address assignments on a router?

- A. show ipx addresses
- B. show ipx interface
- C. show me the money
- D. ipx, network (number)
- E. display ipx addresses
- F. show ipx routing details

Answer: B

31. Which three statements about common elements of the TCP/IP protocol stack are true? (Choose three)

- A. IP provides connectionless service and routing capabilities
- B. APP enables devices to locate the IP address of local devices
- C. UDP provides simple connectionless service without windowing or acknowledgments
- D. ICMP provides connection oriented management data to routers and Layer 3 switches
- E. TCP enables devices to send large quantities of data using windowing in a connection oriented manner

Answer: A, C, E

32. Which two protocol tools use ICMP? (Choose two)

- A. ping
- B. telnet
- C. configure
- D. traceroute
- E. show commands
- F. standard access lists

Answer: A, D

33. Using the TCP/IP protocol suite a message is sent from host A to a destination IP address on the same LAN. How does host A determine the destination of MAC address?

- A. It uses a proxy APP
- B. It uses ARP requests
- C. It uses RARP requests
- D. It uses a router lookup table

Answer: B

34. What is the result of using a hierarchical addressing framework?

- A. increased availability of addresses
- B. decreased distance between routers
- C. increased router memory requirements
- D. no need to maintain routing information

Answer: A

35. Which command successfully pings an individual IP address?

- A. Router> ping 192.5.5.0
- B. Router# ping 192.5.5.30
- C. Router> ping 192.5.5.256
- D. Router# ping 192.5.5.255

Answer: B

36. What are the two most common request/reply pair with ICMP messages when using the ping command? (Choose two)

- A. echo reply
- B. echo request
- C. source quench
- D. fragment onset
- E. information redirect
- F. destination reachable
- G. echo control message

Answer: A, B

36. What are the two most common request/reply pair with ICMP messages when using the ping command? (Choose two)

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- B. echo request
- C. source quench

D. fragment onset
E. information redirect
F. destination reachable
G. echo control message
Answer: A, B

37. Which commands should you use to enable IGRP routing?
A. router igrp 100
Network 192.168.1.0
Network 10.0.0.0
B. router igrp 100
Network 192.168.2.0
Network 10.0.0.0
C. router igrp 100
Network 192.168.1.0 192 168.1.1
Network 10.2.0.0 10.2.1.1
D. router igrp 100
Network 192.168.1.0 255.255.255.0
Network 10.2.0.0 255.255.255.0
Answer: A

38. Which statement about the flow control function of TCP is true?
A. TCP makes no snarl to check for lost or duplicate data packets
B. The application layer must sequence data packets when using TCP
C. TCP controls the flow of UDP data through negative acknowledgements (NAK)
D. TCP is a connection-oriented protocol that acknowledges receipt of data packets and is considered reliable
Answer: D

39. Company XYZ has an employee that works out of the home. The employee runs big client server applications and must quickly transfer large files. The company wants the best cost/benefit on this connection. What would be the most practical solution?
A. an ISDN Basic Rate Interface (BRI) connection to the user at home
B. a dedicated T1 connection to the user at home
C. a dedicated Frame Relay connection to the user at home.
D. a standard 28.8 analog dialup connection to the user at home.
Answer: A

40. Which show command should you use to view Frame Relay Local Management Interface (LMI) Frame statistics?
A. show lmi
B. show ip route
C. show interface
D. show statistics
E. show frame-relay lmi

Answer: E

41.What is the bandwidth capacity of one ISDN B channel

- A. 64 kbps
- B. 128 kbps
- C. 512 kbps
- D. 1.54 mkbps

Answer: A

42.Which statement about the data link connection identifier (DLCI) is true?

- A. It is a number that identifies a local virtual circuit in a Frame Relay network
- B. It is a signaling standard between the CIDE device and the Frame Relay switch
- C. It is the clock speed (pod speed) of the connection (local loop) to the Frame Relay Cloud
- D. It is the Maximum number of uncommitted bits that the Frame Relay switch will attempt to transfer beyond the Committed Information Rate (CIP)

Answer: A

43.Which three tasks are required to confound a dial on demand routing (DDR) Basic Rate Interface (BRI) connection? (Choose three)

- A. define static routes
- B. confound the abler information
- C. specify the interesting franc that can enable the link
- D. define a DDR password to exchange when the link comes up

Answer: A, B, C

44.Which three statements about Frame Relay configurations using subinterfaces is true? (Choose three)

- A. Each subinterface is conferred either multipoint or point to point
- B. Any network address must be removed from the physical interface
- C. The configuration of subinterfaces is done in router (config-if)# mode
- D. Frame Relay encapsulation must be conferred on each subinterface

Answer: A, B, C

45.Which command specifies a second subinterface on serial interface 0?

- A. interface s 0.2 point-to-point
- B. interface 2 s.0 point-to-point
- C. suberinterface 2.s 0 point-to-point
- D. interface s 0 sub 2 point-to-point
- E. interface s 0.1 point-to-point sub 2

Answer: A

46. Which command should you use to create an IP standard access list?

- A. access-list standard 172.16.4.13
- B. access-list 1 deny 172.16.4.13 0.0.0.0
- C. access-list 100 deny 172.16.4.13 0.0.0.0
- D. access-list 198 deny 172.16.4.13 255.255.255.255

Answer: B

47. Which router command allows you to determine if an IP access list is enabled on a particular interface?

- A. Router# show ip interface
- B. Router> show access-list
- C. Router# show ip access-list
- D. Router> show interface ip access-list
- E. Route 1 P.O. box 198

Answer: A

48. Which router command allows you to view the entire contents of all access lists?

- A. Router# show interface
- B. Router> show ip interface
- C. Router# show access-list
- D. Router> show all access-list

Answer: C

49. Which of these is the Private key?

- A. Bear
- B. Cave
- C. Indian
- D. Cowboy

Answer: B

50. Which statement should you use to deny FTP access (only) from network 210 93 105 0 to network 223 8 151 0?

- A. access list 1 deny 210 93 105 0 0 0 0 0 any eq ftp access list 1 permit any
- B. access list 100 deny tcp 210 93 105 0 0 0 0 255 223 8 151 0 0 0 0 255 eq ftp
- C. access list 100 deny ip 223 8 151 0 0 0 0 255 any eq ftp access list 100 permit hp any any
- D. access list 100 deny tcp 210 93 105 0 0 0 0 255 223 8 151 0 0 0 0 255 eq ftp access list 100 permit ip any any

Answer: D

51. Which statement about Ethernet networks is true?

- A. The advantage of a full duplex is the ability to transmit data over 111 cable
- B. Full duplex Ethernet requires a point-to-point connection when only two nodes are present
- C. Ethernet switches can use full duplex mode to connect multiple nodes to a single port of a switch

D. Half duplex is a cut through packet processing method that is very fast little error correction Full duplex is a store and forward method that is slower but has better error correction
Answer: B

52. On a network design project you determine that a new testing application requires multiple hosts. These hosts must be capable of sharing data between each host and an enterprise server at 10 Mbps bandwidth. Other divisions in the company use applications that require less than 2 Mbps bandwidth of the enterprise server. What is your most economical recommendation?

- A. That existing 10BaseT hubs be replaced with 100BaseT hubs to improve overall performance
 - B. That a router can separate the testing application from the rest of the network, thus allowing the testing application more bandwidth.
 - C. That a switch be installed, so that the enterprise server can be provided a 100 Mbps port and each of the testing application hosts can be given dedicated 10 Mbps ports
 - D. That a bridge be placed between the enterprise server and all other users with the exception of the testing application
- Answer: C

53. What does CCNA stand for?

- A. Cisco Certified Network Administrator
- B. Cisco Certified Network Associate
- C. Certified Circuitry in Networking Apprentice
- D. Calico Cats of North America

Answer: B

54. What is the distance limitation for 100BaseT?

- A. 305.955 ft
- B. 7283.46 inches
- C. 184 Meters
- D. 185 Kilometers

Answer: B

55. What is the distance limitation for 100BaseT?

- A. 607 ft
- B. 25 Meters
- C. 1,000 ft
- D. 185 Meters

Answer: D

56. A network is very congested currently all the devices are connected through a hub. Which would best decrease congestion on this network?

- A. add a second hub
- B. replace the hub with a router
- C. replace the hub with a switch
- D. replace the hub with a repeater

Answer: C

57. Which command should you use to confound a router so that it can become a TFTP server host for a router system image that is run in a Flash?

- A. copy flash tftp
- B. config tftp server
- C. write, network -router name-
- D. tftp-server system -file name-
- E. setup server tftp -system name-

Answer: D

58. Which command loads a new version of the Cisco IOS into a router?

- A. copy flash ftp
- B. copy ftp flash
- C. copy flash tftp
- D. copy tftp flash

Answer: D

59. In the setup dialog, what do the square brackets indicate?

- A. current or default spores
- B. hard coded values that cannot be modified
- C. values entered by the administrator but not saved
- D. values that must be written to PAVRAM before becoming enabled

Answer: A

60. What not a name of an ISP?

- A. MSN
- B. Comcast
- C. Verizon
- D. McDonalds

Answer: D

61. How does inter-VLAN communication take place?

- A. It takes place through any Cisco router
- B. It takes place through a Cisco router that can run ISL
- C. It takes place through a router but this disables all the router a security and filtering functionality for the VLANs
- D. For nonroutable protocols (e.g. NetBeui) the router provides communications between VLAN domains
- E. Inter-VLAN communication is not possible because each VLAN is a separate broadcast domain

Answer: B

62. Which technology is used by Catalyst switches to resolve topology loops and ensure data flows properly through a single network path?

- A. virtual LANS (VLANs)
- B. frame filtering

- C. cut-through switching
- D. spanning-tree protocol

Answer: D

63. Which two statements about IP RIP are true? (Choose two)

- A. It limits hop counts to 31
- B. It is a link state routing protocol
- C. It uses autonomous system numbers
- D. It is capable of load sharing over multiple paths
- E. It uses bandwidth as the metric for path selection
- F. It broadcasts updates every 30 seconds by default

Answer: D, F

64. What are two purposes for segmenting a network with a bridge? (Choose two)

- A. to reduce collisions
- B. to increase collisions
- C. to add collision domains
- D. to reduce collision domains
- E. to have more broadcast domains

Answer: A, C

65. What is the protocol and what is the purpose of the following address?

238 255 255 255

- A. IPX a SAP broadcast
- B. IP a multicast group
- C. IP a reserved address
- D. IP a directed broadcast
- E. IPX a flooded broadcast

Answer: D

66. Which of the following is true?

- A. The default is to send debug output to the console screen.
- B. To view debug output from a telnet session, the "terminal monitor" command must be used
- C. If the "logging buffered" command is used, the debug output would be sent to RAM and can be viewed with the "show log" command
- D. If the "no console login" command were configured, output would be sent to a telnet session
- E. All of the above
- F. None of the above
- G. A, B, and C.
- H. A, C, D, and E.

Answer: E

67. What is the maximum number of subnets that can be assigned to networks when using the address 172.16.0.0 with a subnet mask of 255.255.240.0? (Assume older version UNIX workstations are in use.)

- A. 16
- B. 32

- C. 30
 - D. 14
 - E. It is an invalid subnet mask for the Network.
- Answer: D

68. How many total hosts are possible with a Class C address and a subnet mask of 255.255.255.252?

- A. 4
- B. 30
- C. 60
- D. 62
- E. 112
- F. 124

Answer: F

69. Which of the following is True regarding passwords on a Cisco router?

- A. All passwords can be encrypted
- B. All passwords can be entered using the set-up dialogue
- C. A password can be set before a user can enter the privileged mode
- D. A password can be set for individual lines
- E. TACACS or Radius password authentication can be used.

Answer: A, C, D, E

70. Which of the following are true of standard half-duplex Ethernet circuitry?

- A. It is alternate one-way communication
- B. The receive (RX) is wired directly to the transmit (TX) of the remote station
- C. The transmit (TX) is wired directly to the receive (RX) of the remote station
- D. Collisions are not possible
- E. Both stations can transmit simultaneously

71. Which three basic switch functions increase available bandwidth on the networks? (Choose three)

- A. loop avoidance
- B. address learning
- C. hop count limiting
- D. broadcast filtering
- E. packet forward/filtering

Answer: A, D, E

72. What is an advantage of local area network (LAN) segmentation?

- A. smaller collision domains
- B. elimination of broadcasts
- C. decreased cost of implementation
- D. larger number of users within the same domain

Answer: A

73.What was the key reason the International Organization for Standardization released the OSI model?
A. users could access network servers faster
B. different vendor networks could work with each other
C. the industry could create a standard for how computers work
D. network administrators could increase the overall speed of their network
Answer: B

74.Given the following descriptions of layers of the OSI model
<hr>
1) This layer segments and reassembles data into a data stream

2) This layer manages device addressing tracks the location of devices on the network and determines the best way to move data

3) This layer provides the physical transmission of the data and handles error notification network topology and flow control.

Choose the statement that lists the layers in the order described above
A. physical data link network
B. physical session data link
C. data link network transport
D. data link transport network
E. transport network data link
F. transport data link network
Answer: E

75.Which three are typical operational phases in a basic connection oriented nelyord service? (Choose three)
A. call setup
B. data transfer
C. load balancing
D. call termination
E. call prioritization
F. data segmentation
G. data link identification
Answer: A, B, D

76.What are the two components of an IPX address?
A. network number IP address
B. MAC address node number
C. network number MAC address
D. network number arched number
Answer: C

77.Which statement is true when a broadcast is sent in an Ethernet/802.3 ITAN?
A. The ip shored used is 255.255.255.0

- B. The IP address used is 255.255.255.255
- C. The MAC address used is 00 00 00 00 00 00
- D. The MAC address used is FF FF FF FF FF FF

Answer: D

78. Each department has its own file server and the company has an enterprise server that is shared by all departments. What does a network administrator use to provide a secure separation between the management and sales departments?

- A. a bridge between management and sales
- B. routers to provide the most secure segmentation
- C. a hub to provide ease of management and a satisfactory alternative for network security
- D. an Ethernet switch to maintain secure separation through programming the access lists for each port of the switch

Answer: B

79. Eight stations connected to separate 10 Mbps pods on a Layer 2 switch will give each station how many Mbps of bandwidth?

- A. 1.25
- B. 4
- C. 16
- D. 10
- E. 80

Answer: D

80. Which term describes the process in which frames from one network system are placed inside the frames of another network system?

- A. bridging
- B. tunnelling
- C. data link control
- D. generic routing
- E. packet switching

Answer: B

81. Which statement about switched and routed data flows is correct?

- A. Switches create a single collision domain and a single broadcast domain. Routers provide separate collision domains
- B. Switches create separate collision domains but a single broadcast domain. Routers provide a separate broadcast domain
- C. Switches create a single collision domain and separate broadcast domains. Routers provide a separate broadcast domain as well
- D. Switches create separate collision domains and separate broadcast domains. Routers provide separate collision domains

Answer: B

82. Assuming no subnetting, which two pieces of information can be derived from the IP address 144.132.25.10? (Choose two)

- A. It is a Class C address
- B. It is a Class B address
- C. The network address is 144.0.0.0
- D. The network address is 144.132.25.0
- E. The host spoon of the address is 25.10

Answer: B, E

83. Given an IP host address of 172.16.2.160 and a shored mask of 255.255.255.192 to which shored does the host belong?

- A. 172.16.2.32
- B. 172.16.2.64
- C. 172.16.2.96
- D. 172.16.2.128
- E. 172.16.2.192

Answer: D

84. Which three protocols are correctly matched to their transport layer functions? (Choose three)

- A. route selection IP
- B. sliding window UDP
- C. well known pods IP
- D. route validation ICMP
- E. connection oriented TCP
- F. three-way handshake TCP
- G. no sequence and acknowledgement UDP

Answer: E, F, G

85. Which IP host address range is allowable given an IP address of 172.37.2.56 and 12 bits of subnetting

- A. 172.37.2.48 to 172.37.2.63
- B. 172.37.2.48 to 172.37.2.62
- C. 172.37.2.49 to 172.37.2.62
- D. 172.37.2.49 to 172.37.2.63
- E. 172.37.2.55 to 172.37.2.126

Answer: C

86. IPX traffic using different encapsulation types can go over the same data link

- A. true
- B. false

Answer: A

87. The ICMP (referred to in PFC 1700) is implemented by all TCP/IP hosts

- A. true
- B. false

Answer: A

88. When you use the Cisco IOS command show configuration on a router which part of the output shows the specific conferred IP addresses and shored masks?

- A. the IP host table
- B. the interfaces output
- C. each section of the output
- D. the global configuration statements
- E. the section under the autonomous system number

Answer: B

89. Novell IPX network addresses have two conferrable parts. The network administrator specifies the IPX network number. How is the node number determined?

- A. It is the serial number of the given device
- B. It is assigned as a lease by Novell DHCP
- C. It is also set by the network administrator
- D. It is usually the MAC address of one interface
- E. It is downloaded by Netware Core Protocol (NCP)

Answer: D

90. How many valid host IP addresses are available on the following network/subnetwork? 176.12.44.161/30

- A. 2
- B. 30
- C. 254
- D. 16,382
- E. 65,534

Answer: A

91. What are two functions of the ICMP protocol? (Choose two)

- A. to map IP addresses to Ethernet addresses
- B. to map common names to network addresses
- C. to forward SNMP alerts to management consoles
- D. to generate an echo reply in response to a ping test
- E. to send a host or pod unreachable message from a router to the source of an undeliverable packet

Answer: D, E

92. Using the TCP/IP protocol suite, a message is sent from host A to a destination IP address on the same LAN. How does host A determine the destination of a MAC address?

- A. It uses a proxy ARP
- B. It uses ARP requests
- C. It uses RARP requests
- D. It uses a router lookup table

Answer: B

93. Which command sets IGRP as the routing protocol for autonomous system 100?

- A. Router(config)#igrp 100
- B. Router(config)#network 100
- C. Router(config)#router igrp 100
- D. Router(config)#enable igrp 100

Answer: C

94. Which statement about the flow control function of TCP is true?

- A. TCP makes no snarl to check for lost or duplicate data packets
- B. The application layer must sequence data packets when using TCP
- C. TCP controls the flow of UDP data through negative acknowledgements (NAK)
- D. TCP is a connection oriented protocol that acknowledges receipt of data packets and is considered reliable

Answer: D

95. Which two steps are part of the process of creating Frame Relay subinterfaces on a point to point connection? (Choose two)

- A. configure the router to forward all broadcast packets
- B. remove any network address assigned to the physical interface
- C. configure the local data link connection identifier (DLCI) for the subinterfaces
- D. cartoon the total committed information rate (CIR) available among the subinterfaces

Answer: B, C

96. Your network is having IP problems connecting to one or more Frame Relay peer routers. Which two commands should you use to show the routers that are reachable? (Choose two)

- A. show ip map
- B. show ip router
- C. show frame-relay map
- D. debug frame-relay map

Answer: B, C

97. Which statement about the Committed Information Rate (CIR) is true?

- A. It is the rate in bits per second at which the Frame Relay switch agrees to transfer data
- B. It is the clock speed (pod speed) of the connection (local loop) to the Frame Relay cloud
- C. It is the maximum number of bits that switch can transfer during any Committed Rate Measurement Interval
- D. It is a signaling standard between the 3PE device and FR switch. It is responsible for managing the connection and maintaining status between the devices.

Answer: A

98. Which encapsulation methods are most commonly used with dialup Integrated Services Digital Network (ISDN)?

- A. IP and IPX
- B. IP and PPP
- C. PPP and SDLC
- D. PPP and HDLC

Answer: D

99. Company XYZ has an employee that works out of the home. The employee runs big client server applications and must quickly transfer large files. The company wants the best cost/benefit on this connection. What would be the most practical solution?

- A. an ISDN Basic Rate Interface (BRI) connection to the user at home
- B. a dedicated T1 connection to the user at home
- C. a dedicated Frame Relay connection to the user at home
- D. a standard 28.8 analog dialup connection to the user at home

Answer: A

100. What are three benefits of Integrated Services Digital Network (ISDN) (Choose three)

- A. PVCs are faster and more reliable
- B. No specialized equipment is required
- C. Data transfer is faster than typical modems
- D. Call setup is faster than with standard telephone service
- E. It carries many types of data trams such as voice video and data

Answer: C, D, E

101. Which configuration task must you complete if a remote Frame Relay router does NOT support Inverse ARP?

- A. configure static maps
- B. define an IP address locally
- C. disable DHCP on the Frame Relay router
- D. configure a static route to the remote network

Answer: A

102. Given the configuration example

```
<HR><BR>
<B>interface ethernet0<BR>
ipx network 4a<BR>
ipx access group 800 out<BR>
interface ethernet1<BR>
ipx network 3d<BR>
interface ethernet2<BR>
ipx network 5c<BR>
access list 800 permit 3d 4a<BR></B><HR>
```

Which two actions result from implementing this configuration? (Choose two)

- A. IPX network 5c will not receive any traffic
- B. Traffic from network 3d for network 4a will be forwarded out e0
- C. Traffic from network 4a for network 3d will be forwarded out e0
- D. Traffic from network 3d destined for network 4a will be forwarded out e2
- E. The access list is applied to an outgoing interface and filters outbound traffic

Answer: D, E

103. Which two commands show your access lists? (Choose two)

- A. show filters
- B. show access-lists
- C. show ip access-lists
- D. show running-config

Answer: B, D

104. Which two steps are required to configure and apply standard access lists on an interface? (Choose two)

- A. define an access list number and its parameters
- B. enable an interface to become part of the access list group
- C. define the number of access lists to be supported on an interface
- D. copy the access list definition to each interface that will support it

Answer: A, B

105. What does the command show access-lists 101 list?

- A. all configured access lists
- B. all access lists within the router
- C. the contents of standard access list 101
- D. the contents of configured access list 101

Answer: D

106. What is a back off on an 802.3 networks?

- A. It is latency in store and forward switching
- B. It is the time used for token passing from machine to machine
- C. It is the retransmission delay that is enforced when a collision occurs
- D. It is the result of two nodes transmitting at the same time. The frames from each transmitting device collide and are damaged

Answer: C

107. What are four ways that Fast Ethernet compares to 10BaseT Ethernet? (Choose four)

- A. Fast Ethernet uses the same Maximum Transmission Unit (MTU)
- B. Fast Ethernet is based on an extension to the IEEE 802.3 specification
- C. Fast Ethernet uses the same Media Access Control (MAC) mechanisms
- D. Fast Ethernet preserves the frame format that is used by 10BaseT Ethernet
- E. Fast Ethernet errors a speed increase one hundred times that of the 10BaseT Ethernet

Answer: A, B, C, D

108. How many collisions are caused by transmitting and

receiving frames simultaneously in a full-duplex Ethernet technology?

- A. one
- B. two
- C. none
- D. several

Answer: C

109.What does the term Base refer to in 100BaseT

- A. cabling type
- B. signal type
- C. 100 mode type
- D. spectrum used
- E. speed category

Answer: B

110.How do you get help on a command after you have received the % incomplete command response from a switch CLI?

- A. type "history" to review the prompt before the error
- B. enter a question mark to display all the console commands
- C. type help followed by the command to see command parameters
- D. reenter the command followed by a question mark to view keywords

Answer: D

111.Which show underrate serial 1 status statement indicates that the shutdown command was issued on that interface?

- A. Serial 1 is up line protocol is up
- B. Serial 1 is up line protocol is down
- C. Serial 1 is down line protocol is down
- D. Serial 1 is administratively down the line protocol is down

Answer: D

112.Which command loads a new version of the Cisco IOS into a router?

- A. copy flash ftp
- B. copy ftp flash
- C. copy flash ftp
- D. copy tftp flash

Answer: D

113.Which router component stores routing tables APP cache and packet buffers?

- A. ROM
- B. RAM
- C. AVRAM
- D. Flash memory

Answer: B

114.In Cisco IOS software which command displays the backup configuration?

- A. show flahh
- B. show version
- C. show tftp-config
- D. show backup-config
- E. show startup-config

Answer: E

115. Which command assigns the login password CISCO on the console terminal line?

- A. line vty 0 login password cisco
- B. line console login password cisco
- C. line login terminal password cisco
- D. line console 0 login
- E. line console 0 login password cisco

Answer: E

116. In which three situations is a hold down timer reset?
(Choose three)

- A. when the hold down timer expires
- B. when infinity is finally defined as some maximum number
- C. when the router exchanges update summaries at area borders
- D. when the router detects faulty LSPs propagating through the internetwork
- E. when another update is received indicating a new route with a better metric
- F. when another update is received indicating the original route to the network has been restored
- G. when the router receives a processing task proportional to the number of links in the internetwork

Answer: A, E, F

117. Which EXEC command displays system hardware configuration information software version and the names and sources of configuration files and boot images on a router?

- A. show boot
- B. show flash
- C. show config
- D. show version

Answer: D

118. Which symbol in the router prompt indicates you are in the privileged mode?

- A. >
- B. !
- C. #
- D. :

Answer: D

119. Which information must a router know in order to perform proper and pungent routing?

- A. destination application of an incoming packet
- B. number of other packets in a single flow of data

C. destination network address of an incoming packet
D. number of routers that also know a path to the destination
Answer: C

120. In the setup dialog, what do the square brackets indicate?
A. current or default spores
B. hard coded values that cannot be modified
C. values entered by the administrator but not saved
D. values that must be written to NVRAM before becoming enabled
Answer: A

121. Routers that have Flash memory typically have a pre-loaded copy of Cisco IOS software. Which command should you use to make a backup copy of the software image onto a given network server?
A. copy flash tftp
B. save copy to tftp
C. write backup tftp
D. write, backup -server-name-
E. copy backup to -server-name-
Answer: A

122. Which statement about the Point to Point Protocol (PPP) is true?
A. PPP supports TCP/IP but not Novell IPX
B. PPP is being phased out of existence by the Serial Line Internet Protocol (SLIP)
C. PPP provides router to router and host to network connections over both synchronous and asynchronous circuits
D. PPP is an ITU T and ANSI standard that defines the process for sending data over a packet switched data network (PSDN)
Answer: C

123. What is a benefit of a virtual LAN (VLAN)?
A. It increases the number of broadcast domains
B. It decreases the number of broadcast domains
C. It increases the number of collision domains
D. It decreases the number of collision domains
E. Since it is a virtual Interface it never shuts down
Answer: A

124. IP RIP routing is configured on a router but not all interfaces attach to RIP networks. What should you use to prevent all RIP routing updates from being sent through selected interfaces without using access lists?
A. passive route
B. default routes
C. passive interface
D. route update filtering
Answer: C

125.What is the bit length and expression form of a MAC address?

- A. 24 bits expressed as a decimal number
- B. 24 bits expressed as a hexadecimal number
- C. 36 bits expressed as a binary number
- D. 48 bits expressed as a decimal number
- E. 48 bits expressed as a hexadecimal number

Answer: E

126.What is a disadvantage of using a connection oriented protocol such as TCP?

- A. Packet acknowledgement may add overhead
- B. packets are not tagged with sequence numbers
- C. Loss or duplication of data packets is more likely to occur
- D. The application layer must assume responsibility for correct sequencing of the data packets

Answer: A

127.Which type of LAN segmentation device enables high speed data exchange?

- A. hub
- B. bridge
- C. switch
- D. repeater

Answer: C

128.What are two ways IPX supports multiple logical networks on an individual network? (Choose two)

- A. network number
- B. routing protocol
- C. encapsulation type
- D. autonomous system number

Answer A, C

129.What are characteristics of UDP

- A. It is reliable and acknowledged
- B. It is unreliable and acknowledged
- C. It is reliable and unacknowledged
- D. It is unreliable and unacknowledged

130.Given the following IP address from the Class B address range 172.35.21.12. Your network plan requires no more than 126 hosts on a subnet. Which value should you use as the subnet mask?

- A. 255.255.0.0
- B. 255.255.128.0
- C. 255.255.126.0
- D. 255.255.255.128
- E. 255.255.255.252

Answer: D

131. At which layer of the OSI model does the ping command operate?

- A. session
- B. network
- C. transport
- D. maintenance

132. Which command displays the IP addresses assigned to specific host names?

- A. show hosts
- B. show interface
- C. ping host name
- D. config host name
- E. show host mapping
- F. show host ip address
- G. trace ip addresses host name
- H. a partridge in a pear tree

Answer: A

133. What is the connection oriented protocol in the TCP/IP protocol stack?

- A. IP
- B. UDP
- C. TCP
- D. DNS
- E. OSPF

Answer: C

134. Which two statements accurately define IP addressing rules? (Choose two)

- A. IP multicast addresses start with 240
- B. A host Carbon of all 1 a indicates a network broadcast
- C. The value of zero (0) in the host Carbon means all hosts on the network
- D. IP addresses are four octets long and contain a network Carbon and a host Carbon

Answer: B, D

135. Which network mask should you place on a Class C address to accommodate a user requirement of two subnetworks with a maximum of 35 hosts on each networks

- A. 255.255.255.192
- B. 255.255.255.224
- C. 255.255.255.240
- D. 255.255.255.248

Answer: A

136. What are two characteristics of the RARP protocol? (Choose two)

- A. it generates parameter problem messages
- B. it maps IP addresses to Ethernet addresses

C. it maps Ethernet addresses to IP addresses
D. it is implemented directly on top of the data link layer
Answer: C, D

137. Which command verifies encapsulation as well as Layer 1 and Layer 2 statistics on a router configured for Frame Relay?
A. show ip
B. show interface
C. show statistics
D. show frame-relay
Answer: B

138. Which configuration mode and command combination sets the bandwidth metric of a Frame Relay connection?
A. router(config)# clock rate 56
B. router(config)# bandwidth 56
C. router(config)# bandwidth 56000
D. router(config)# clock rate 56000
Answer: B

139. What must you do to test connectivity on a dial on demand routing (DDR) link?
A. increase the idle Import parameter
B. send interesting traffic across the link
C. reboot one of the integrated services digital network (ISDN) routers
D. reset the DDR integrated services digital network (ISDN) router statistics to zero
Answer: B

140. Which two statements about integrated services digital network (ISDN) are true?
A. ISDN provides data only capability
B. ISDN provides an integrated voice/data capability
C. The ISDN standards define the hardware and call setup schemes for end to end digital connectivity
D. Users receive more bandwidth on WANS with a leased line of 56 Kbps than with multiple B channels
Answer: B, C

141. You are configuring a Frame Relay router with subinterfaces on interface Serial 0. Which subinterface numbers could you use for this configuration?
A. 1 and 2
B. 0.2 and 0.3
C. 1.0 and 1.1
D. 0.1a and 0.1
Answer: B

142. Which element is used to define the rate in bits per second that a Frame Relay switch agrees to transfer data?

- A. clock rate (CP)
- B. Committed Information Rate (CIR)
- C. Local Management Interface (LMI)
- D. data link connection identifier (DICI)
- E. Committed Rate Measurement Intercal (CRIMI)

Answer: B

143. Which range of possible numbers do standard ipx access lists have?

- A. 100 199
- B. 600 699
- C. 800 899
- D. 1000-1099

Answer: C

144. Which statement about Ethernet switches is true?

- A. Symmetric switching allows connection between pods of unlike bandwidth and does not require memory buffering
- B. Memory Buffering is used to prevent a bottleneck when pods of different bandwidth are connected on a symmetric switch
- C. The latency can be reduced if the switch utilizes the store and forward method of switching store and forward is better for error detection
- D. The cut through method of switching is faster because the switch forwards the packet to the destination as soon as it reads the destination address

Answer: D

145. Which two statements are true? (Choose two)

- A. Ethernet 802.3 utilizes a half duplex method for data transfer
- B. In a 100 MBS point to point connection a full duplex connection can provide 400 Mbs of data transfer
- C. Ethernet switches can use the full duplex mode to connect multiple nodes on a single pod of a switch
- D. Full duplex Ethernet takes advantage of UTP using one pair for transmission and the other pair for reception

Answer: A, D

146. You have just issued the erase startup-config Command and reloaded your router. In which mode will your router be when you react?

- A. setup
- B. startup
- C. user EXEC
- D. userd privileged
- E. global configuration

Answer: A

147. Which three pieces of CDP information about neighbours routers are displayed on your console terminal? (Choose three)

- A. neighbours router a host name
 - B. the neighbours router a hardware platform
 - C. up to one address for each protocol supported
 - D. up to two addresses for each protocol supported
- Answer: A, B, C

148. You have powered on a new router and you want to create an initial configuration. Which mode should you use?

- A. copy mode
- B. user mode
- C. setup mode
- D. startup mode

Answer: C

149. When you issue the command show version your router returns "Configuration register is 0x0101" From where does the router boot?

- A. ROM
- B. NVRAM
- C. Flash
- D. a TFTP server

Answer: A

150. Which two types of route table entries are used by a Layer 3 router to determine the appropriate path to destination? (Choose two)

- A. static route entry
- B. default route entry
- C. Dynamic route entry
- D. temporary route entry
- E. permanent route entry

Answer: A, C

151. Which two physical interfaces support PPP? (Choose two)

- A. Ethernet
- B. Token Ring
- C. Synchronous serial
- D. Asynchronous serial

Answer: C, D

152. Which two statements about a reliable connection oriented data transfer are true? (Choose two)

- A. recipients acknowledge receipt of data
- B. when buffers are filled to capacity, datagrams are discarded and not retransmitted
- C. windows are used to control the amount in outstanding unacknowledged data segments
- D. if the sender a timer expires before receipt of an acknowledgement the sender drops the connection
- E. The receiving device waits for acknowledgements from the sending device before accepting more data segments

Answer: A, D

153. Which three functions are supported by connection oriented servkps? (Choose three)

- A. connection parameters are synchronized
- B. any loss or duplication of packets can be corrected
- C. the data packet is independently routed and the service does not guarantee the packet will be processed in order
- D. a data communication path is established between a requesting entity and the peer device on the remote end system

Answer: A, B, D

154. Given the following IP address from the Class C address range 192.168.21.12. Your network plan needs addresses for 28 small prkps Each office uses its own shored. The network design specifies that you confound for five bits of subnetting. When you confound for this in Cisco IOS software which shored mask should you use?

- A. 255.255.0.28
- B. 255.255.255.0
- C. 255.255.255.28
- D. 255.255.255.248
- E. 255.255.255.252

Answer: D

155. What is an example of a valid MAC address?

- A. 192.201.63.251
- B. 19-22-01-63-25
- C. 0000.1234.FEGA
- D. 00.00.12.34.FE.AA

Answer: D

156. What are the generic parts of a network layer address?

- A. an intenetworks number and a URL
- B. a vendor code and a serial number
- C. a network number and a host number
- D. a broadcast number and a unicast number
- E. a domain identifier and a device identifier

Answer: C

157. Whith the hierarchical numbering of IP addressing what determines the spoon of the address that will identify the network number?

- A. subnet mask
- B. dots between octets
- C. class of the first octet
- D. assignments of DHCP
- E. address resolution process

Answer A.

158. Which three protocols are corerectly matched to their transport layer functions? (Choose three)

- A. route selection IP
- B. sliding window UDP
- C. well known ports IP
- D. route validation ICMP
- E. connection oriented TCP
- F. three way handshake TCP
- G. no sequence and acknowledgement UDP

Answer: E, F, G

159. What is the link state routing protocol in the TCP/IP protocol stack?

- A. IP
- B. IS-IS
- C. NLSP
- D. OSPF
- E. RIP version 2

Answer: D

160. The ICMP (referred to in RFC 1700) is implemented by all TCP/IP hosts.

- A. true
- B. false

Answer: A

161. What is the result of using a hierarchical addressing framework?

- A. increased availability of addresses
- B. decreased distance between routers
- C. increased router memory requirements
- D. no need to maintain routing information

Answer: A

162. In which two modes can the ICMP ping command be used? (Choose two)

- A. user
- B. privileged
- C. global configuration
- D. interface configuration

Answer: A, B

163. Which two encapsulation names are correctly paired with the Cisco IOS encapsulation names? (Choose two)

- A. Ethernet_II-ARPA
- B. Ethernet_802.3-SAP
- C. Ethernet_802.2-LLC
- D. Ethernet_SNAP-SNAP

Answer: A, D

164. IPX traffic using different encapsulation types can go over the same data link

- A. True

B. False
Answer: True

165. Which network mask should you place on a Class C address to accommodate a user requirement for five networks with a maximum of 17 hosts on each network?

- A. 255.255.255.192
- B. 255.255.255.224
- C. 255.255.255.240
- D. 255.255.255.248

Answer: B

166. Which two commands allow you to verify address configuration in your network? (Choose two)

- A. ping
- B. trace
- C. verify
- D. test ip
- E. Echo ip
- F. config ip

Answer: A, B

167. When you configure an IP address on a router which command starts the IP processing on the interface?

- A. ip enable
- B. network ip-address
- C. ip address ip-address subnet mask
- D. the exit command from the enabled configuration
- E. copy running-configuration to startup-configuration

Answer: C

168. What are four benefits that can result from applying ISDN networking? (Choose four)

- A. Full time connectivity across the ISDN is spoofed by Cisco IOS routers using dial on demand routing (DDR)
- B. Small Office and Home Office sites can be economically supported with ISDN Basic Rate Interface (BRI) services
- C. ISDN replaces Signaling System 7 (SS7) in the Public Switched Telephone Network (PSTN) backbone
- D. ISDN can be used as a backup service for a leased line connection between the remote and central offices
- E. Modem racking and cabling can be eliminated by integration of digital modem cards on Cisco IOS Network Access Servers (NAS)

Answer: A, B, D, E

169. What does the Frame Relay switch use to distinguish between each PVC connection?

- A. data-link connection identifiers (DLCIs)
- B. BECNs
- C. FECNs
- D. the Local Management Interface (LMI)

Answer: A

170. You have a Frame Relay link on serial 1. Which command displays the Local Management Interface (LMI) data link connection identifier (DLCI) and bandwidth for that link?

- A. show interface serial1
- B. show frame-relay serial1
- C. show protocol frame-relay serial1
- D. show serial1 encapsulation frame-relay

Answer: A

171. What is the total bandwidth of all channels on a BRI circuit?

- A. 56 kps
- B. 64 kps
- C. 112 kps
- D. 128 kps
- E. 144. kps

Answer: E

172. Which command displays the interfaces using a given access list?

- A. show filters
- B. show ip interface
- C. show active lists
- D. show interface parameters
- E. configure ip access lists
- F. show access-list interfaces

Answer: B

173. Which command displays access list 111?

- A. show access-list 111
- B. show ip access-list 111
- C. display ip access-list 111
- D. display access-list 111 details

Answer: B

174. What is a backoff on an 802.3 network?

- A. It is latency in store and forward switching
- B. It is the time used for token passing from machine to machine
- C. It is the retransmission delay that is enforced when a collision occurs
- D. It is the result of two nodes transmitting at the same time. The frames from each transmitting device collide and are damaged.

Answer: C

175. Which statement about half duplex Ethernet operations is true?

- A. With half duplex transmission frames feed into a single

cable in one direction at a time.

B. Half duplex transmission between stations is achieved by using point to point Ethernet and Fast Ethernet connections

C. Half duplex transmission between stations is achieved by using point to multipoint Ethernet and Fast Ethernet connections

D. Half duplex Ethernet technology provides a transmit circuit connection wired directly to the receiver circuit at the other end of the connection

Answer: A

176. Which three commands are used to configure information into RAM on a router? (Choose three)

A. configure memory

B. configure terminal

C. configure overwrite

D. copy tftp startup-config

E. copy running-config startup-config

F. copy startup-config running-config

Answer: A, B, F

177. When you enter router passwords during the setup dialog what is the difference between enable and the enable secret passwords?

A. The enable password is encrypted

B. The enable secret password uses IPsec password authentication

C. The enable secret password cannot be seen as clear text when viewing the configuration

D. The enable secret password acts as a backup in case the enable password is compromised

Answer: C

178. You just entered the following command_Router(config)# line console 0 Which operation is most likely to follow?

A. Configure terminal type

B. enter protocol parameters for a serial line

C. create a password on the console terminal line

D. establish a terminal type 4 connection to a remote host

E. change from configuration mode to console privileged mode

Answer:

C

