

CCNA 1 version 3.1 :Module 2-11 100% (Definitely)answer + Final Practise 100% Date:Mid February 2006.Still Fresh.

Answer is the one with colour or *

Chapter 1 is not 100%.Only 94%

Assessment 1

1

Several computers in the company require new NICs. A technician has located a good price on the Internet for the purchase of these NICs. Before these NICs are purchased and installed, what details must be verified? (Choose three.)

the MAC address on the NIC

the size of the RAM on the NIC

the bandwidth supported by the NIC

the type of media supported by the NIC

the type of network architecture supported by the NIC

2

What is the hexadecimal equivalent for the binary number 00100101?

15

20

25

30

37

40

3

Which phrases describe a byte? (Choose two.)

a single binary digit

+5 volts of electricity

the value range 0 to 127

a grouping of eight binary digits

a single addressable data storage location

4

Which specialized equipment is used to make a physical connection from a PC to a network?

router

RAM

CD ROM

network interface card

5

What is the binary equivalent for the decimal number 248?

11100000

11110000

11110100

11111000

6

Convert the binary number 01011011 into its hexadecimal equivalent. Select the correct answer from the list below.

5A

5B

5C

5D

6B

7A

7

What is the binary equivalent for decimal number 149?

10010111

10010101 10011001

10010111

10101011

10101101

8

In an 8 bit binary number, what is the total number of combinations of the eight bits?

128

254

255

256

512

1024

9

Which device connects a computer with a telephone line by providing modulation and demodulation of incoming and outgoing data?

NIC

CSU/DSU

router

modem

telco switch

10

What is the binary equivalent for the decimal number 162?

10101010

10100010

10100100

10101101

10110000

10101100

11

Which of the following are popular web browsers? (Choose two.)

Acrobat

Internet Explorer

Macromedia Flash

Netscape Navigator

Quicktime

World Wide Web

12

Convert the Base 10 number 116 into its eight bit binary equivalent. Choose the correct answer from the following list:

01111010

01110010

01110100

01110110

01110111

01010110

13

What is the hexadecimal equivalent for the binary number 10001110?

22

67

142

AE

8E

14

Represented as a decimal number, what is the result of the logical ANDing of binary numbers 00100011 and 11111100?

3

32

35

220

255

15

Convert the decimal number 231 into its binary equivalent. Select the correct answer from the list below.

11110010

11011011

11110110

11100111

11100101

11101110

16

What are three conditions that would require a network administrator to install a new NIC? (Choose three.)

whenever a NIC is damaged

when there is a need to provide a secondary or backup NIC

when there is a change from copper media to wireless

whenever operating system security patches are applied

whenever the PC has been moved to a different location

Chapter 2 (100%)

1

Which two features apply to WAN connections? (Choose two.)

operate using serial interfaces

make network connection using a hub

limited to operation over small geographic areas

typically operate under local administrative control

provide lower bandwidth services compared to LANs

2

What is the term used to describe the transport layer protocol data unit?

bits

packets

segments

frames

data streams

3

Which layer of the OSI model provides connectivity and path selection between two end systems where routing occurs?

physical layer

data link layer

network layer

transport layer

4

Which of the following are data link layer encapsulation details? (Choose two.)

A header and trailer are added.

Data is converted into packets.

Packets are packaged into frames.

Frames are divided into segments.

Packets are changed into bits for Internet travel.

5

Which of the following are ways that bandwidth is commonly measured? (Choose three.)

GHzps

kbps

Mbps

Nbps

MHzps

Gbps

6

What makes it easier for different networking vendors to design software and hardware that will interoperate?

OSI model

proprietary designs

IP addressing scheme

standard logical topologies

standard physical topologies

7

A	B	C	D
Application	Application	Application	Application
Session	Presentation	Presentation	Presentation
Presentation	Transport	Transport	Session
Transport	Session	Session	Transport
Network	Data Link	Network	Network
Data Link	Network	Data Link	Data Link
Physical	Physical	Physical	Physical

Refer to the exhibit. Which column shows the correct sequence of OSI model layers?

A

B

C

D

8

The central hub has malfunctioned in the network. As a result, the entire network is down. Which type of physical network topology is implemented?

bus

star

ring

mesh

9

What is one advantage of defining network communication by the seven layers of the OSI model?

It increases the bandwidth of a network.

It makes networking easier to learn and understand.

It eliminates many protocol restrictions.

It increases the throughput of a network.

It reduces the need for testing network connectivity.

10

Refer to the following list. Choose the correct order of data encapsulation when a device sends information.

1. segments
2. bits
3. packets
4. data
5. frames

1 - 3 - 5 - 4 - 2

2 - 1 - 3 - 5 - 4

2 - 4 - 3 - 5 - 1

4 - 3 - 1 - 2 - 5

4 - 1 - 3 - 5 - 2

3 - 5 - 1 - 2 - 4

11

Which three features apply to LAN connections? (Choose three.)

operate using serial interfaces

make network connection using a hub

limited to operation over small geographic areas

provide part-time connectivity to remote services

typically operate under local administrative control

provide lower bandwidth services compared to WANs

12

Which term describes the process of adding headers to data as it moves down OSI layers?

division

encoding

separation

segmentation

encapsulation

13

Which of the following are factors that determine throughput? (Choose two.)

types of passwords used on servers

type of Layer 3 protocol used

network topology

width of the network cable

number of users on the network

14

Which layer of the OSI model provides network services to processes in electronic mail and file transfer programs?

data link

transport

network

application

15

Which of the following are layers of the TCP/IP model? (Choose three.)

Application

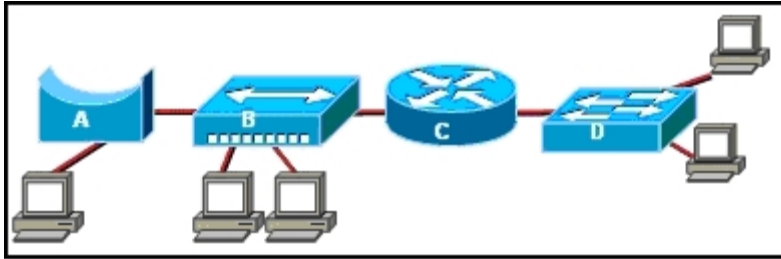
Physical

Internet

Network Access

Presentation

16



Refer to the exhibit. Identify the devices labeled A, B, C, and D in the network physical documentation.

A=bridge, B=switch, C=router, D=hub

A=bridge, B=hub, C=router, D=switch

A=bridge, B=router, C=hub, D=switch

A=hub, B=bridge, C=router, D=switch

17

Which best describes the function of the physical layer?

Defines the electrical and functional specifications for the link between end systems.

Provides reliable transit of data across a physical link.

Provides connectivity and path selection between two end systems.

Concerned with physical addressing, network topology and media access.

18

A switch has failed in the network. As a result, only one segment of the network is down. Which type of physical network topology is implemented?

bus

ring

star

extended star

19

In your opinion (this has no bearing on your grade), please indicate your interest in this course:

20

In your opinion (this has no bearing on your grade), please indicate how enthusiastic you are about the content of this course and the things you're learning (or have learned):

21

In your opinion (this has no bearing on your grade), please rate your motivation to do well in this course:

Chapter 3 with 100%

1

What are two advantages of using UTP cable in a networking environment? (Choose two.)

is stiffer than STP

*is less expensive than fiber

*is easier to install than coaxial

provides longer distances than coaxial provides

is less susceptible to outside noise sources than fiber is

2

What are two advantages of using fiber-optic cabling instead of UTP? (Choose two.)

lower cost

easier to install

*allows longer distances

*less effected by external signals

easier to terminate the cable ends

3

What is the difference between a wireless NIC and an Ethernet NIC?

The Ethernet NIC operates at 100 Mbps, whereas a wireless NIC operates at 10 Mbps.

The Ethernet NIC uses a PCI expansion slot, and a wireless NIC cannot use an expansion slot.

The wireless NIC uses CSMA/CA, whereas a Ethernet NIC uses token passing as an access method.

*The wireless NIC associates to an access point, and an Ethernet NIC attaches to a hub or switch using a cable.

The Ethernet NIC attaches to a hub or a switch using only fiber cabling, and a wireless NIC attaches to a wireless antenna using air as a network medium.

4

Refer to the exhibit. The JacksCo is a small start-up company that took over an office space from another small company that closed. The older company left a room of network equipment behind. An inventory list is shown. As the newly hired network technician, you have been asked to determine which components in the storeroom would be best to use to install a small wireless LAN that currently only needs the employees to be able to share data. Note that the wireless LAN also needs to connect to an existing wired LAN. Which components should you choose?

access point and wireless NICs

*wireless NICs, access point, straight-through cables, and a switch

hub, wireless NICs, two wireless bridges, crossover cables, and an access point

wireless NICs, Ethernet NICs, a switch, an external modem, two wireless bridges

Ethernet NICs, wireless NICs, switch, hub, two wireless bridges, straight-through cables, crossover cables, and a router

5

A company is converting a cabled LAN to a wireless Ethernet LAN. What must be changed on every host on the network?

No changes are required.

Each host will require a new IP address.

*Each host will require an appropriate NIC or adapter.

Each host will require that the operating system be upgraded.

6

Refer to the exhibit. Which answer correctly identifies the pinout of the UTP cables

labeled Cable A, Cable B, and Cable C?

A=straight, B=rollover, C=crossover

A=rollover, B=crossover, C=straight

A=crossover, B=straight, C=straight

*A=crossover, B=straight, C=rollover

A=straight, B=crossover, C=rollover

A=rollover, B=straight, C=crossover

7

What factors should be considered when selecting the appropriate cable for connecting a PC to a network? (Choose two.)

type of system bus

motherboard model

*distance of cable run

*speed of transmission

computer manufacturer

8

Select the characteristics specified by 10BaseT. (Choose three.)

*twisted pair cable

T style connectors

*baseband transmission

10 gigabits per second data rate

*10 megabits per second data rate

decimal encoded data transmission

9

When is a straight-through cable used in a network?

when configuring a router

when connecting a host to a host

*when connecting a switch to a router

when connecting one switch to another switch

10

What type of cable is used to make an Ethernet connection between a host and a LAN switch?

console

rollover

crossover

*straight-through

11

Which of the following are used for data communication signals? (Choose three.)

*light patterns

*electrical voltages

controlled air pulses

mixed media impulses

magnetized fluid wave

*modulated electromagnetic waves

12

What does UTP cable rely on to reduce signal degradation caused by EMI and RFI?

shielding

magnetism

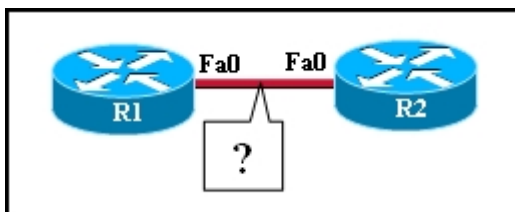
*cancellation

insulation

properly grounded connections

RJ-45 connectors

13



Refer to the exhibit. What type of cable connects the two routers together without any intermediary device?

console

rollover

*crossover

straight-through

14

Which Ethernet implementation requires the signal on the media to be boosted at a maximum distance of 100 meters?

10BASE2

10BASE5

*100BASE-T

100BASE-FX

1000BASE-CX

15

Which cable connectors are used to connect a cable from a router's console port to a PC? (Choose two.)

RJ-11

RJ-12

*RJ-45

DB-8

*DB-9

DB-10

Chapter 4 with 100%

1

A company needs to extend the LAN to six separate buildings. To limit the amount of signal attenuation on the LAN media, what type of media would be the best to use between the buildings?

air (wireless)

coaxial cable

*fiber

shielded twisted pair

unshielded twisted pair

2

Which of the following are detected by the wire map test? (Choose three.)

near-end crosstalk (NEXT)

*opens

propagation delay

return loss

*reversed-pair faults

*short circuits

3

What is a cause of crosstalk in UTP cable?

cable pairs that are shorted

cable pairs crossed during termination

cabling runs installed in separate conduit

*cable pairs that are untwisted because of poor termination of the cable

4

A small company is experiencing difficulties on its LAN. After performing some tests, a technician has determined that the copper media supporting the LAN is experiencing abnormal attenuation. What are two possible causes of the problem? (Choose two.)

*defective connectors

*excessively long cable lengths

use of higher grade cabling

low frequency signals used in the media

network cable runs isolated from other cables

5

How are binary ones and zeros represented in fiber optic installations? (Choose two.)

+5 volts/-5 volts

0 volts/5 volts

*light/no light

high to low electrical transition

low to high electrical transition

*increasing/decreasing light intensity

6

What factors need to be considered to limit the amount of signal attenuation in Ethernet cable runs? (Choose two.)

type of users

number of users

*length of cable

type of electrical equipment

*installation of connectors on the cable

7

To ensure reliable LAN communications, what should a technician be looking for when attaching connectors to the ends of UTP cable?

that the white-orange/orange pair is attached first

*that the wire pairs remain twisted as much as possible

that one end of the shield is properly ground but not the other

that 50 ohm termination resistors are on both ends

8

Which of the following describes frequency?

length of each wave

height of each wave

*number of cycles each second

amount of time between each wave

9

What conditions are described when transmission signals from one wire pair affects another wire pair? (Choose two.)

*noise

resistance mismatch

jitter

*crosstalk
attenuation

10

What is expected when crosstalk is present in networks with higher transmission frequencies? (Choose two.)

jitter

*increase in crosstalk

higher signal attenuation

increases in cancellation effect

*destruction of more of the data signal

Chapter 5 with 100%

1

Refer to the exhibit. What is the appropriate cable to use at each of the numbered network connections?

1-crossover; 2-straight-through; 3-crossover; 4-straight-through

1-straight-through; 2-crossover; 3-straight-through; 4-straight-through

1-straight-through; 2-crossover; 3-crossover; 4-straight-through

*1-rollover; 2-crossover; 3-straight-through; 4-straight-through

1-rollover; 2-straight-through; 3-straight-through; 4-straight-through

2

Which two devices are considered OSI Layer 1 devices? (Choose two.)

*hubs

routers

bridges

switches

*repeaters

3

What device is used to connect hosts to an Ethernet LAN and requires a straight-

through UTP cable between the hosts and this device?

NIC

router

*switch

server

4

What is the most common type of cabling used in LANs?

STP

*UTP

coax

fiber

5

In which situations would a crossover cable be used to connect devices in a network?

(Choose two.)

switch to PC

*switch to hub

switch to router

switch to server

*switch to switch

6

Refer to the exhibit. How many collision domains exist in the network?

1

*2

4

7

8

7

What type of cable would be used to make the connection between the console port

of a router and a workstation?

crossover

*rollover

straight-through

patch

8

Which function is a unique responsibility of the DCE devices shown in the exhibit?

transmission of data

reception of data

*clocking for the synchronous link

noise cancellation in transmitted data

9

Which address does a bridge use to make filtering and switching decisions?

source MAC

source IP

*destination MAC

destination IP

network IP address

10

What is characteristic of the operation of a hub?

selectively drops packets that represent potential security risks

*forwards a frame out all interfaces except the inbound interface

based on IP address, dynamically learns the interfaces to which all devices are attached

upon power on, queries the devices on all interface to learn the MAC addresses of the attached devices

transmits a frame to the specific interface to which the device with the MAC

destination address is attached

11

Users with systems that are attached to a hub are complaining about poor response time. What device could replace the hub and provide immediate response time improvement?

router

*switch

bridge

repeater

12

Which of the following are benefits of peer-to-peer networks? (Choose three.)

centralized security

*easy to create

very scalable

*no centralized equipment required

*centralized administrator not required

centralized control of assets

13

Which statement is accurate about a WAN link?

*The link transmits data serially.

The link uses a maximum distance of 100 meters.

The link uses the same transmission rate as all other WAN links use.

The link uses the same standardized connector style that is used for all WAN technologies.

14

Which items in the exhibit are DTE devices?

A and B

B and C

C and D

*A and D

A, B, C, and D

15

At which layer of the OSI model does the MAC address of a NIC reside?

physical

application

network

transport

*data link

session

16

Refer to the exhibit. A technician measured the lengths of the CAT 5e structured cable runs in the exhibit. How should the technician evaluate the cabling shown in the diagram to the network administrator?

All cabling to work areas are within specifications.

Station A and B may experience intermittent problems because the length exceeds the recommended standard.

*Station B may experience intermittent problems because the length exceeds the recommended standard.

Station C may experience intermittent network connectivity because the length is less than the recommended standard.

Station A and B will have intermittent problems because the length exceeds the recommended standard.

Station C will not have network connectivity because the length is less than the recommended standard.

17

Which statement describes a typical use of Gigabit Ethernet?

to provide high-speed desktop connectivity for average users

to provide connectivity to low to medium volume applications

to provide medium volume connectivity to workgroup servers

*to provide high-speed connectivity for backbones and cross connects

18

The ends of a UTP cable are shown in the exhibit. Which cable configuration is shown?

crossover

rollover

reversed-pair

*straight-through

split-pair

console

19

The ends of a UTP cable are shown in the exhibit. Which cable configuration is shown?

console

*crossover

rollover

reversed-pair

split-pair

straight-through

20

Which of the following are benefits of a wireless network? (Choose two.)

higher data speeds

better security

*mobility

less expensive NIC cards

*no need to run cables to hosts

Chapter 6 with 100%

1

Where does the MAC address originate?

DHCP server database

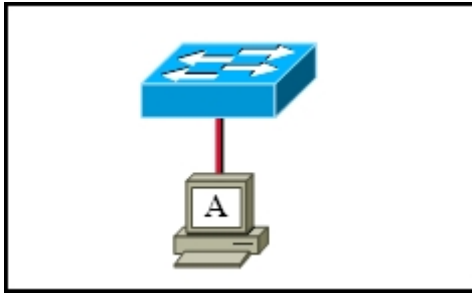
configured by the administrator

burned into ROM on the NIC card

network configuration on the computer

included in the creation of the processor chip

2



Refer to the exhibit. A technician wants to increase the available bandwidth for the workstation by allowing the switch and the NIC on the workstation to transmit and receive simultaneously. What will permit this?

CSMA/CD

full-duplex

FastEthernet

crossover cable

3

Which of the following are specified by IEEE standards as sublayers of the OSI data link layer? (Choose two.)

Logical Link Control

Logical Layer Control

Media Access Control

Logical Link Communication

Media Access Communication

Physical Access Communication

4

Which characteristics describe carrier sense multiple access collision detect (CSMA/CD)? (Choose three.)

reliable

point-to-point

nondeterministic

connection-oriented

collision environment

first-come, first-served approach

5

A router has an Ethernet, Token Ring, serial, and ISDN interface. Which interfaces will have a MAC address?

serial and ISDN interfaces

Ethernet and Token Ring interfaces

Ethernet and ISDN interfaces

Token Ring and serial interfaces

6

In an Ethernet LAN, how does the NIC know when it can transmit data?

An Ethernet NIC transmits data as soon as the frame is received.

An Ethernet NIC transmits data as soon as the NIC receives a token.

An Ethernet NIC transmits data when it senses a collision.

An Ethernet NIC transmits data after listening for the absence of a signal on the media.

7

Which two devices can provide full-duplex Ethernet connections? (Choose two.)

hub

modem

repeater

NIC

Layer 2 switch

8

Why do hosts on an Ethernet segment that experience a collision use a random delay before attempting to transmit a frame?

A random delay is used to ensure a collision-free link.

A random delay value for each device is assigned by the manufacturer.

A standard delay value could not be agreed upon among networking device vendors.

A random delay helps prevent the stations from experiencing another collision during the transmission.

9

On a local area network, one workstation can send data on the line while it is receiving data. What type of data transfer does this describe?

hybrid

half duplex

full duplex

multilink

10

At what layer of the OSI model does a MAC address reside?

1

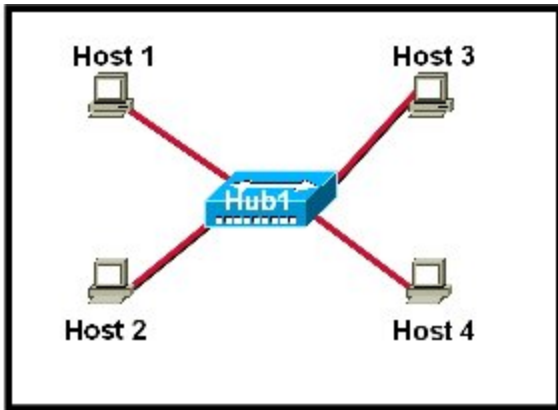
2

3

4

7

11



Refer to the exhibit. All hosts are in listen mode. Host 1 and Host 4 both transmit data at the same time. How do the hosts respond on the network? (Choose two.)

Hosts 1 and 4 may be operating full duplex so no collision will exist.

The hub will block the port connected to Host 4 to prevent a collision.

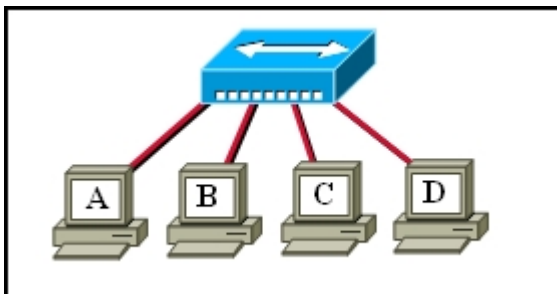
After the end of the jam signal, Hosts 1, 2, 3, and 4 invoke a backoff algorithm.

When the four hosts detect the collision, Hosts 1, 2, 3, and 4 generate a jam signal.

Hosts 1 and 4 are assigned shorter backoff values to provide them priority to access the media.

If a host has data to transmit after the backoff period of that host, the host checks to determine if the line is idle, before transmitting.

12



Refer to the exhibit. The small office network shown in the exhibit consists of four computers connected through a hub. Which configuration would cause collisions and errors on the network?

autonegotiation

FastEthernet

peer-to-peer shared resources

administratively configured full duplex

13

How many hexadecimal digits are in a MAC address?

2

8

12

16

32

14

Which statement describes how CSMA/CD on an Ethernet segment manages the retransmission of frames after a collision occurs?

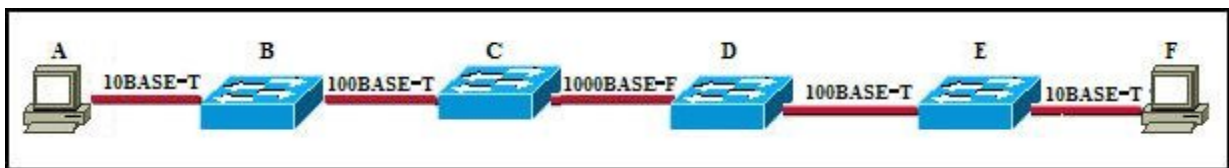
The first device to detect the collision has the priority for retransmission.

The device with the lowest MAC address determines the retransmission priority.

The devices on the network segment hold an election for priority to retransmit data

The devices transmitting when the collision occurs DO NOT have priority for retransmission.

15



Refer to the exhibit. Host A is communicating with host F. What happens to a frame sent from host A to host F as it travels over the Ethernet segments?

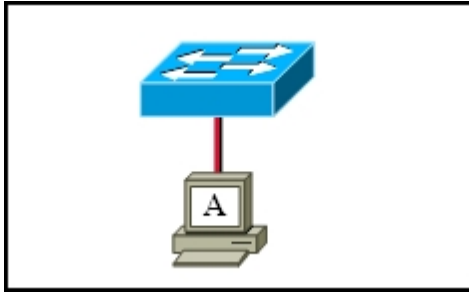
The frame format is modified as it passes through each switch.

The frame format remains the same across each Ethernet segment.

The frame format is modified as the media speed changed at switch B and switch E.

The frame format is modified as the media material changes between copper and fiber at switch C and switch D.

16



Refer to the exhibit. The switch and workstation are administratively configured for full-duplex operation. Which statement accurately reflects the operation of this link?

No collisions will occur on this link.

Only one of the devices can transmit at a time.

The switch will have priority for transmitting data.

The devices will default back to half duplex if excessive collisions occur.

17

In which two layers of the OSI model does Ethernet function? (Choose two.)

application

session

transport

network

data link

physical

18

When a collision occurs in a network using CSMA/CD, how do hosts with data to transmit respond after the backoff period has expired?

The hosts return to a listen-before-transmit mode.

The hosts creating the collision have priority to send data.

The hosts creating the collision retransmit the last 16 frames.

The hosts extend their delay period to allow for rapid transmission.

19

What are three functions of a NIC in a PC? (Choose three.)

A NIC connects the PC to the network media.

A NIC detects collisions on the Ethernet segment.

A NIC checks the formatting of data before it is transmitted.

A NIC passes the contents of selected frames to the upper OSI layers.

A NIC acknowledges and retransmits data that was not received properly.

A NIC discards frames when the destination IP address does not match the local host.

Chapter 7 with 100%

1 Which Ethernet standard does the IEEE 802.3 standard recommend for backbone installations?

10BASE-T

100BASE-T

100BASE-FX

1000BASE-LX

2 How does 1000BASE-T use the UTP wire pairs to accomplish transmission?

two pairs are used to transmit and two pairs are used to receive

one pair is used to transmit, one pair is used to receive, one pair is used for clocking, and

one pair is used for error correction

all four pairs are used in parallel by both hosts to transmit and receive simultaneously

two pairs of wires are used as in 10BASE-T and 100BASE-TX

3 Which statements describe Gigabit Ethernet technology? (Choose two.)

operates at 100 Mbps

typically used for backbone cabling

requires shielded twisted-pair cabling

can be implemented over copper and fiber

primarily used between workstations option

4 To make sure timing limitations are not violated when implementing a 10 Mbps Ethernet network involving hubs or repeaters, a technician should adhere to which rule?

the 4-5-3 rule

the 6-4-2 rule

the 3-4-5 rule

the 5-4-3 rule

5 At which OSI layer do the differences between standard Ethernet, Fast Ethernet and Gigabit Ethernet occur?

physical layer

data link layer

network layer

transport layer

6 Which of the following are Fast Ethernet technologies? (Choose two.)

100BASE-5

100BASE2

1000BASE-F

100BASE-FX

100BASE-TX

7 What RJ-45 pins are unused when transmitting and receiving data in an Ethernet 100BASE-T Category 5 UTP cable? (Choose two.)

1 and 2

3 and 6

4 and 5

7 and 8

8 What is the maximum distance that 10BASE-T will transmit data before signal attenuation affects the data delivery?

100 meters

185 meters

300 meters

500 meters

9 Which media types can be used in an implementation of a 10BASE-T network? (Choose three.)

Category 5 UTP

Category 5e UTP

Category 3 UTP

coaxial cable

multi-mode fiber

single mode fiber

10 Which of the following Ethernet technologies are considered legacy Ethernet? (Choose three.)

10BASE2

10BASE5

10BASE-T

100BASE-T

100BASE-FX

100BASE-TX

Chapter 8 with 100%

1



Refer to the exhibit. The switch and the hub have default configurations, and the switch has built its CAM table. Which of the hosts will receive the data when workstation A sends a unicast packet to workstation C?

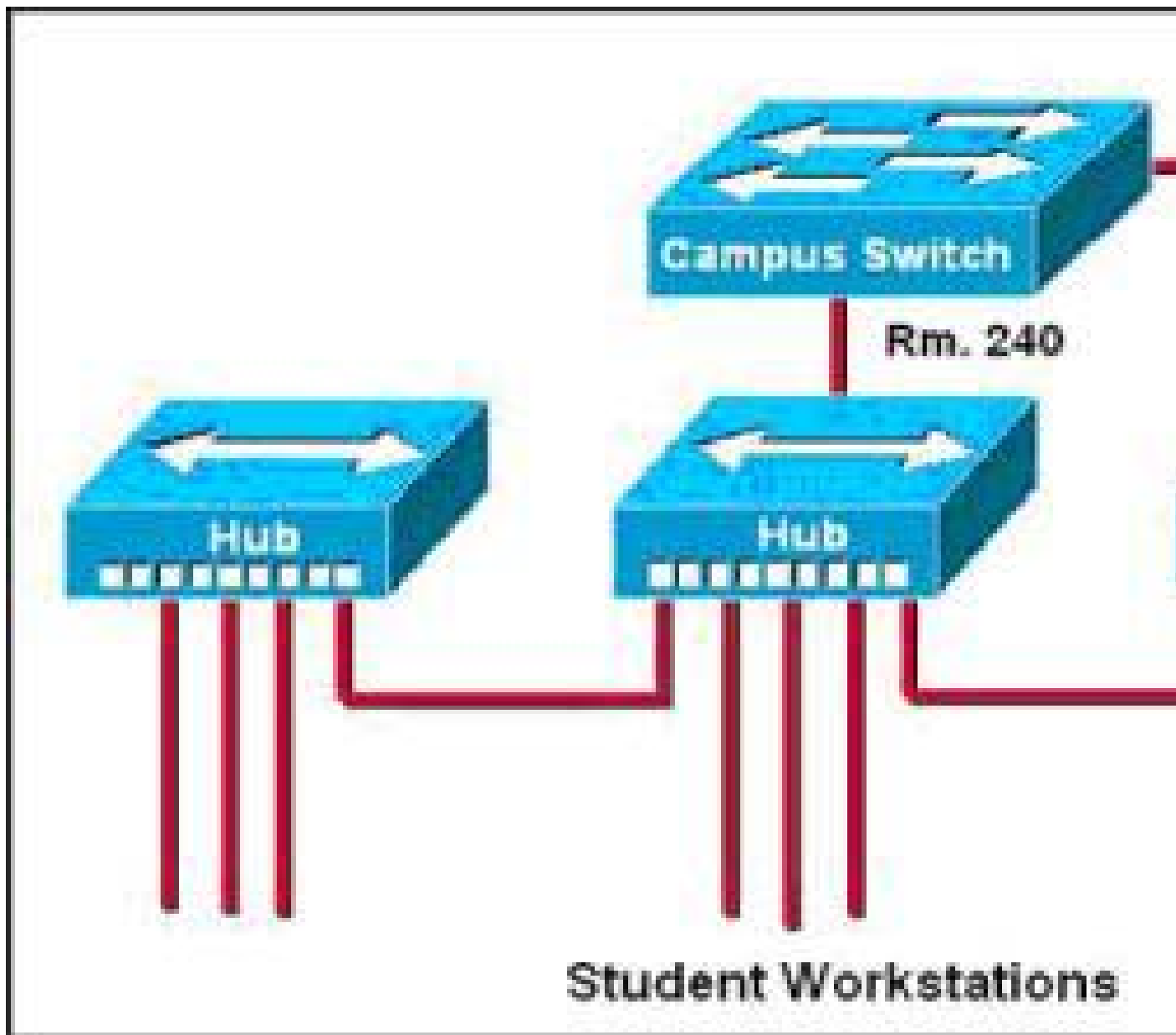
workstation C

workstations B and C

workstations B, C, and the E0 interface of the router

workstations B, C, D, E, F, and the E0 interface of the router

2



Refer to the exhibit. How many broadcast domains exist in classroom 240?

1

2

5

12

13

15

3

Which networking devices use the MAC address to make forwarding decisions? (Choose two.)

NIC

bridge

hub

switch

repeater

4

Which networking device reduces the size of both collision domains and broadcast domains?

hub

Layer 2 switch

router

bridge

repeater

5

A network administrator has a multi-floor LAN to monitor and maintain. Through careful monitoring, the administrator has noticed a large amount of broadcast traffic slowing the network. Which device would you use to best solve this problem?

bridge

hub

router

transceiver

6

What is used to prevent Layer 2 switching loops?

bridging

segmentation

Address Resolution Protocol

Spanning-Tree Protocol

7

Which devices will create multiple collision domains in an Ethernet network? (Choose two.)

NIC

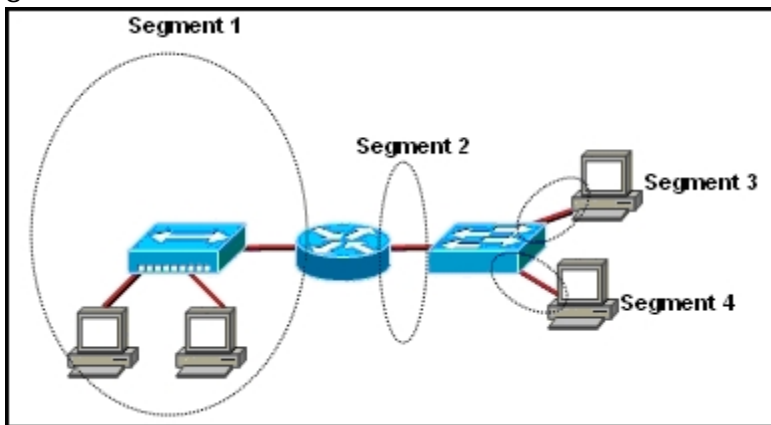
hub

switch

router

repeater

8



Exhibited is a portion of ABC Company internetwork. Which of the connections can be full duplex?

segments 1 and 2

segment 2

segments 3 and 4

segments 2, 3, and 4

segments 1, 2, 3, and 4

9

A PC receives a frame. Which situation will cause the NIC on the receiving host to pass the frame contents up the OSI layers to be processed by the PC?

The frame is a runt frame.

The destination MAC address of the frame is FFFF.FFFF.FFFF.

The transmitting host generated a jam signal during the frame transmission.

The recalculated checksum for the frame does not match the FCS on the frame.

10

Two newly hired technicians are discussing the implementation of a new LAN. One technician proposes installing a hub. The other technician advises installing a switch. Which statements are true about the differences between a hub and a switch? (Choose two.)

A hub operates at Layer 2 of the OSI model.

A hub reduces the number of collisions on a LAN.

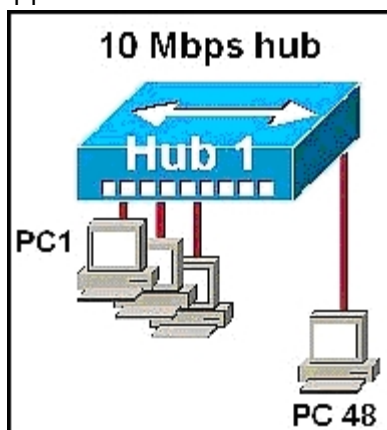
A hub works at a higher OSI model layer than a switch.

A switch provides more throughput to hosts on a LAN.

A switch provides a collision-free environment on a LAN.

The number of collisions on a LAN are the same whether a hub or a switch is used.

11



Refer to the exhibit. Forty-eight workstations are connected to a hub. The users are able to connect to the network, but access is very slow. An entry-level technician replaces the 10 Mbps hub with 100 Mbps hub but the problem still exists. What is the most economical way to correct the problem?

Replace the hub with a switch.

Replace the hub with a router.

Replace the hub with a 1 Gbps hub.

Replace the hub with a 10 Mbps fiber hub.

12

What will a bridge do if it receives a frame with a MAC address that is not within the table?

discard frame

ignore frame

send frame to appropriate port

send frame to all ports except source port

13

What is characteristic of the operation of a Layer 2 switch?

selectively drops packets that represent potential security risks

dynamically learns the interfaces to which all devices are attached based on IP address

during switch initialization, queries the devices on all interfaces to learn the MAC addresses of the attached devices

uses the destination MAC address to determine the specific interface to forward a frame

14

Which devices are primarily used to extend cable segments within a collision domain by regenerating the data signals? (Choose two.)

switch

repeater

router

bridge

hub

15

An administrator would like to connect ten workstations on a 192.168.0.0/24 network. The device selected by the administrator must allow connectivity between hosts without sharing bandwidth. Which device would be appropriate?

hub

router

switch

repeater

Chapter 9 with 100%

1

How many usable hosts are available given a Class C IP address with the default subnet mask?

254

255

256

510

511

512

2

Which three addresses are considered to be private addresses? (Choose three.)

10.45.09.23

15.87.234.87

172.32.45.90

172.17.78.98

192.169.89.56

192.168.45.23

3

Which statement accurately describes public IP addresses?

Public addresses cannot be used within a private network.

Public IP addresses must be unique across the entire Internet.

Public addresses can be duplicated only within a local network.

Public IP addresses are only required to be unique within the local network.

Network administrators are free to select any public addresses to use for network devices that access the Internet.

4

```
C:\Documents and Settings\Cheryl>arp -a
Interface: 192.168.1.94 --- 0x2
Internet Address      Physical Address      Type
192.168.1.97          00-06-25-25-6e-5d    dynamic
192.168.1.254         00-60-0f-2e-14-c6    dynamic
```

Refer to the exhibit. Based on the information shown, which two statements are true? (Choose two.)

An ARP request must be used to obtain an address that is placed in the ARP table.

Frames from other hosts in the network to this host will use a destination address of 00-06-25-25-6e-5d.

The only remote locations that can be reached from this host are 192.168.1.97 and 192.168.1.254.

If a packet is sent to a network device other than 192.168.1.97 and 192.168.1.254, an ARP request must be used.

If the computer with the IP address of 192.168.1.94 sends a packet to the device with the IP address 192.168.1.97, no ARP request is required.

5

Which TCP/IP model layer supports both LAN and WAN technologies?

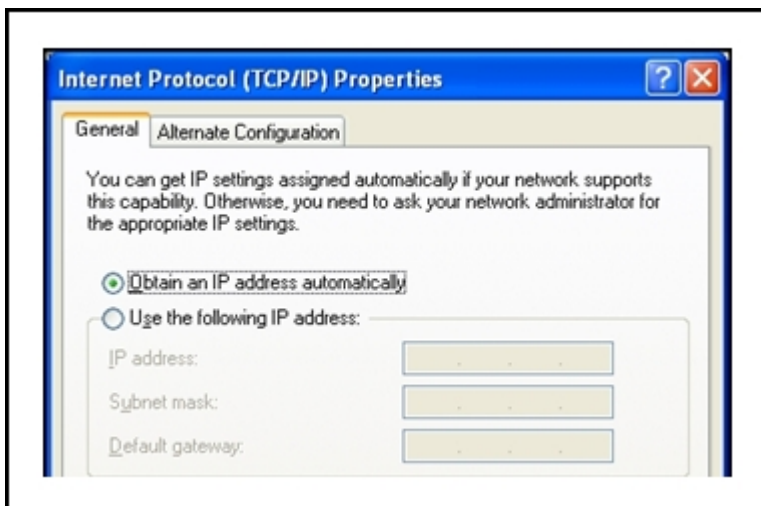
network access layer

internet layer

transport layer

application layer

6



Refer to the exhibit. What is the purpose of the Obtain an IP address automatically option shown in the exhibit?

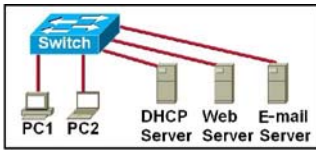
to configure the computer to use ARP

to configure the computer to use DHCP

to configure the computer to use a routing protocol

to configure the computer with a statically assigned IP address

7



Refer to the exhibit. Which devices are recommended to have the IP addresses manually configured?

PC1 and PC2

all servers

only PC2 Laptop

all hosts and all servers

8

```
c:/> ipconfig /all
< output omitted >
Physical Address. . . . . : 00-50-8D-F1-EA-8B
Dhcp Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
IP Address. . . . . : 192.168.1.100
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1
DHCP Server . . . . . : 192.168.1.1
DNS Servers . . . . . : 68.87.64.196
                       : 68.87.66.196
Lease Obtained. . . . . : Tuesday, June 14, 2005 5:28:57 PM
Lease Expires . . . . . : Wednesday, June 15, 2005 5:28:57 PM
```

Refer to the exhibit. Which two statements are correct in reference to the output shown? (Choose two.)

The LAN segment is subnetted to allow 254 subnets.

The DNS server for this host is on the same subnet as the host.

The host automatically obtained the IP addresses 192.168.1.100.

The host received the IP address from the router on the local LAN segment.

The host is assigned an address of 00-50-8D-F1-EA-8D by the administrator.

9

What are two facts about how ARP resolves an IP address to a MAC address? (Choose two.)

The originating host dynamically issues an arp -a command to obtain the destination MAC address.

The originating host broadcasts an ARP request packet and each host in a local network receives this packet.

The originating host dynamically issues an icmp echo request command to obtain the destination MAC address.

The host with the specified destination IP address sends an ARP reply packet containing its MAC address back to the originating host.

The host with the specified destination IP address sends an icmp echo reply packet to the originating host with its MAC address.

10

What is the primary responsibility of the transport layer?

allows access to the network media

provides data representation and encoding

selects paths through the network for data to travel

defines end-to-end connectivity between host applications

11

When a host has an empty ARP cache, what is the next step the host will take to find the destination MAC address of a remote host?

sends an ARP request as a unicast to the server

sends an ARP request as a unicast to the destination

sends an ARP request as a broadcast to all hosts in the local network

sends an ARP request as a unicast to the default gateway

12

Which two statements correctly describe the IP address 127.0.0.1? (Choose two.)

It belongs to the Class A range of addresses.

It belongs to the Class B range of addresses.

It belongs to the Class C range of addresses.

It is reserved for loopback testing.

It is reserved for multicast group testing.

It is reserved for unicast testing.

13

Why is IP considered a best-effort protocol?

IP detects lost packets.

IP validates the content of the packets.

IP does not provide acknowledgment of the data delivery.

IP reorders the packet as they arrive at the destination host.

14

Which subnet mask would be assigned to the network address of 192.168.32.0 to provide 254 useable host addresses per subnetwork?

255.255.0.0

255.255.255.0

255.255.254.0

255.255.248.0

15

What is the purpose of a DHCP server on a network?

to resolve MAC addresses to IP addresses

to resolve IP addresses to MAC addresses

to resolve host names to IP addresses

to assign IP addresses dynamically to hosts

to assign a MAC address to a host

16

What is the network broadcast address for a Class C address of 192.168.32.0 with the

default subnet mask?

192.168.0.0

192.168.0.255

192.168.32.0

192.168.32.254

192.168.32.255

17

Which IPv4 class provides the highest number of host addresses per network?

Class A

Class B

Class C

Class D

Class E

18

Why were private IP addresses developed?

to permit dynamic assignment of IP addresses

to permit the duplication of public IP addresses

to minimize the utilization of reserved IP addresses

to permit public IP addresses to be used in private networks

to address the issue of not enough available public IP addresses

19

Which IPv4 class of addresses provides the most networks?

Class A

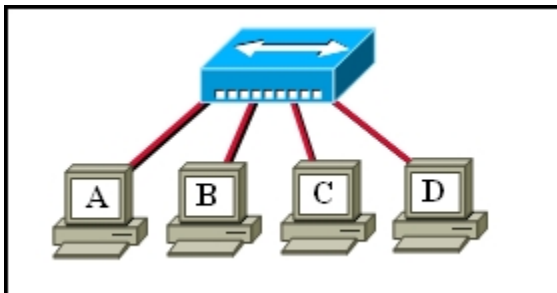
Class B

Class C

Class D

Class E

20



Refer to the exhibit. The small office LAN shown in the exhibit may eventually be connected to the Internet. According to Cisco best practice, which IP network addresses should be used?

12.0.0.0

172.0.0.0

172.168.0.0

192.32.17.0

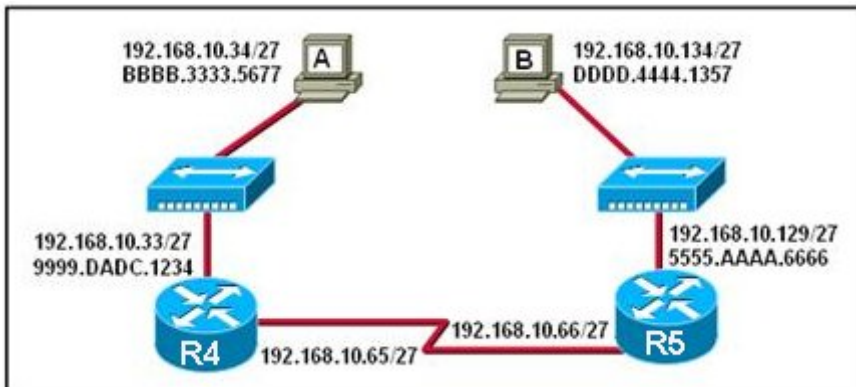
192.168.67.0

225.1.5.0

ENJOY!!! ^^

Chapter 10 with 100%

1



Refer to the exhibit. Host A pings host B. When R4 accepts the ping into the Ethernet interface, what two pieces of header information are included? (Choose two.)

source IP address: 192.168.10.129

source IP address: BBBB.3333.5677

source MAC address: 5555.AAAA.6666

destination IP address: 192.168.10.33

destination IP address: 192.168.10.134

destination MAC address: 9999.DADC.1234

2

What header address information does a router change in the information it receives from an attached Ethernet interface before information is transmitted out another interface?

only the Layer 2 source address

only the Layer 2 destination address

only the Layer 3 source address

only the Layer 3 destination address

the Layer 2 source and destination address

the Layer 3 source and destination address

3

What is the primary purpose of the routing process?

to propagate broadcast messages

to map IP addresses to MAC addresses

to switch traffic to all available interfaces

to map IP addresses to MAC addresses

to find paths from one network or subnet to another

4

How does a router decide where the contents of a received frame should be forwarded?

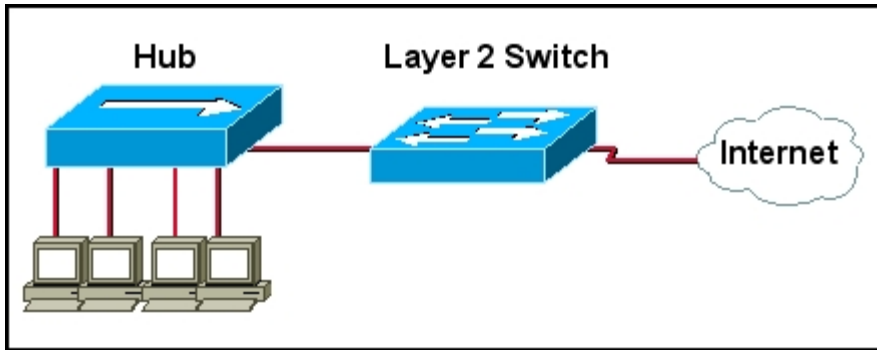
by matching destination IP addresses with networks in the routing table

by matching the destination IP address with IP addresses listed in the ARP table

by matching the destination MAC address with MAC addresses listed in the CAM table

by forwarding the frame to all interfaces except the interface on which the frame was received

5



Refer to the exhibit. A student in the Cisco network class has designed a small office network to enable hosts to access the Internet. What recommendation should the teacher provide to the student in regards to the network design?

Replace the Layer 2 switch with a hub.

Replace the Layer 2 switch with a router.

Replace the Layer 2 switch with a bridge.

Replace the Layer 2 switch with a transceiver.

6

Which device would add security to a network by not forwarding broadcasts?

hub

router

switch

bridge

repeater

7

What do switches and routers use to make forwarding decisions?

Switches and routers both use IP addresses.

Switches and routers use both MAC and IP addresses.

Switches use IP addresses. Routers use MAC addresses.

Switches use MAC addresses. Routers use IP addresses.

Switches use MAC and IP addresses. Routers use IP addresses.

8

At which layer of the OSI model does the device reside that is functioning as the default gateway for hosts on a network?

Layer 1

Layer 2

Layer 3

Layer 4

Layer 5

Layer 7

9

Which type of routing uses manual entry of information and does not scale well in large internetworks?

interior

exterior

static

dynamic

10

Which type of routing allows routers to adapt to network changes?

static routes

dynamic routing

only default routes

No routing is necessary.

11

How does subnetting provide some level of security in a network?

The number of switches must increase.

The collisions prevent the copying of data.

The broadcasts are contained within a subnet.

The number of host IP addresses is increased.

12

What is the purpose of a subnet mask in a network?

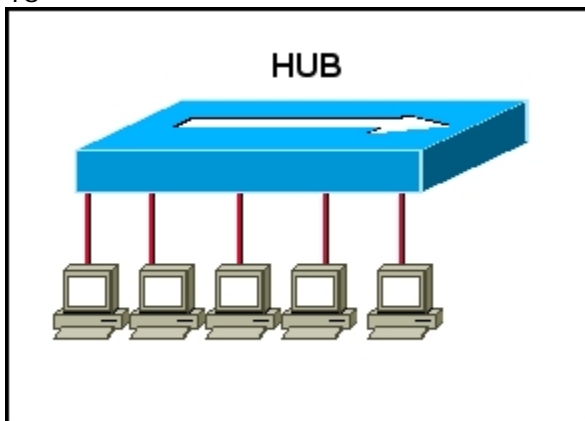
A subnet mask is not necessary when a default gateway is specified.

A subnet mask is required only when bits are borrowed on a network.

A subnet mask is used to determine in which subnet an IP address belongs.

A subnet mask is used to separate the 48-bit address into the OUI and the vendor serial number.

13



Refer to the exhibit. A newly hired technician is testing the connectivity of all hosts by issuing a ping command. The technician notices that a default gateway is not configured on all the hosts, but all hosts have connectivity between hosts, a fact which seems to confuse the technician. How would you explain the connectivity to the technician?

The hosts are detecting the default gateway configured on the hub.

The hosts are all in one LAN, so default gateway information is not needed.

The hosts in the network only require that one host has a gateway configured.

The hosts in the network would only need a gateway if a switch replaces the hub.

The hosts are using broadcast to reach each other since no gateway is configured.

14

A company is using a Class B IP addressing scheme and expects to need as many as 100 networks. What is the correct subnet mask to use with the network configuration?

255.255.0.0

255.255.240.0

255.255.254.0

255.255.255.0

255.255.255.128

255.255.255.192

15

Company XYZ uses a network address of 192.168.4.0. It uses the mask of 255.255.255.224 to create subnets. What is the maximum number of usable hosts in each subnet?

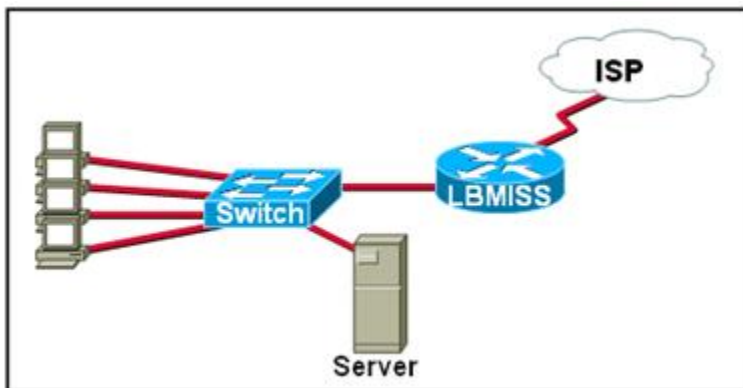
6

14

30

62

16



Refer to the exhibit. The network administrator has assigned the internetwork of LBMISS an address range of 192.168.10.0. This address range has been subnetted using a /29 mask. In order to accommodate a new building, the technician has decided to use the fifth subnet for configuring the new network. By company policies, the router interface is always assigned the first usable host address and the workgroup server is given the last usable host address. Which configuration should be entered into the IP server properties to get connectivity to the network through the router?

IP address: 192.168.10.38 Subnet mask: 255.255.255.240 Default gateway: 192.168.10.39

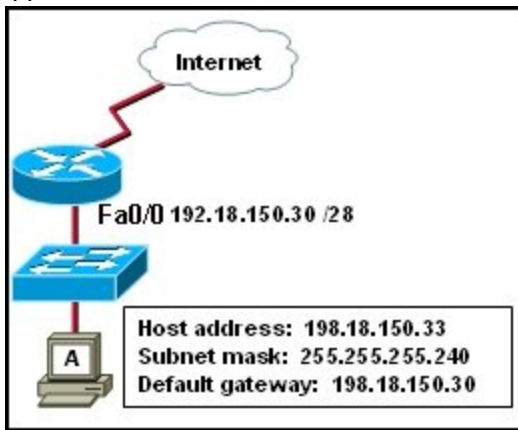
IP address: 192.168.10.38 Subnet mask: 255.255.255.240 Default gateway:
192.168.10.33

**IP address: 192.168.10.38 Subnet mask: 255.255.255.248 Default gateway:
192.168.10.33**

IP address: 192.168.10.39 Subnet mask: 255.255.255.248 Default gateway:
192.168.10.31

IP address: 192.168.10.254 Subnet mask: 255.255.255.0 Default gateway:
192.168.10.1

17



Refer to the exhibit. Host A is connected to the LAN, but it cannot get access to any resources on the Internet. The configuration of the host is shown in the exhibit. What could be the cause of the problem?

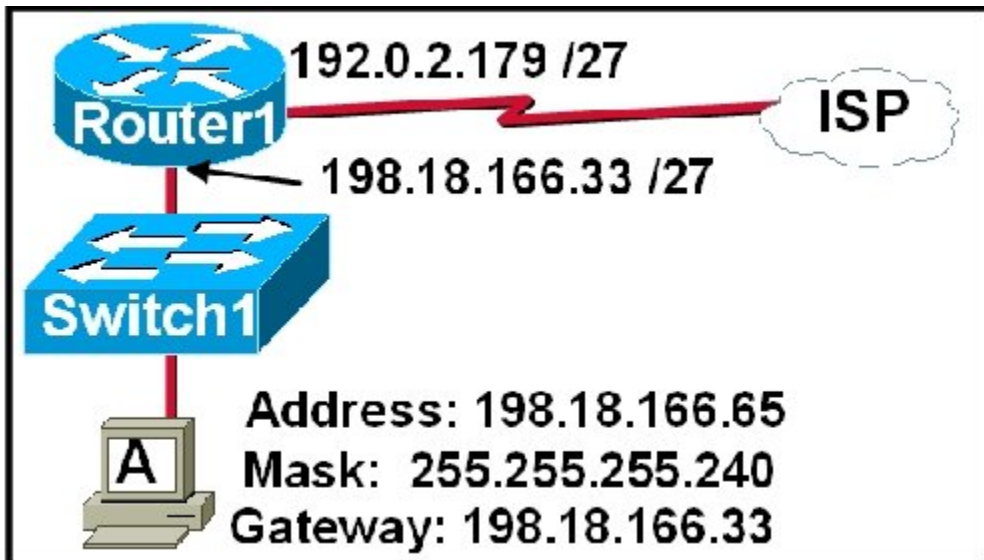
The host subnet mask is incorrect.

The default gateway is a network address.

The default gateway is a broadcast address.

The default gateway is on a different subnet from the host.

18



Host A is connected to the LAN, but it cannot connect to the Internet. The host configuration is shown in the exhibit. What are the two problems with this configuration? (Choose two.)

The host subnet mask is incorrect.

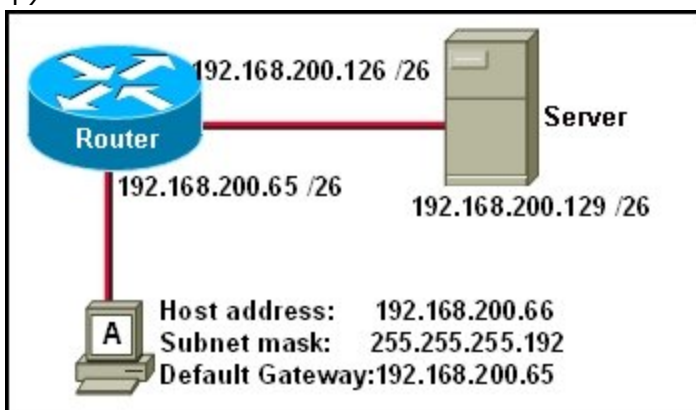
The host is not configured for subnetting.

The default gateway is a network address.

The default gateway is on a different network than the host.

The host IP address is on a different network from the Serial interface of the router.

19



Refer to the exhibit. A technician is planning an addressing scheme for a branch office as shown in the exhibit. What is the status of the intended network?

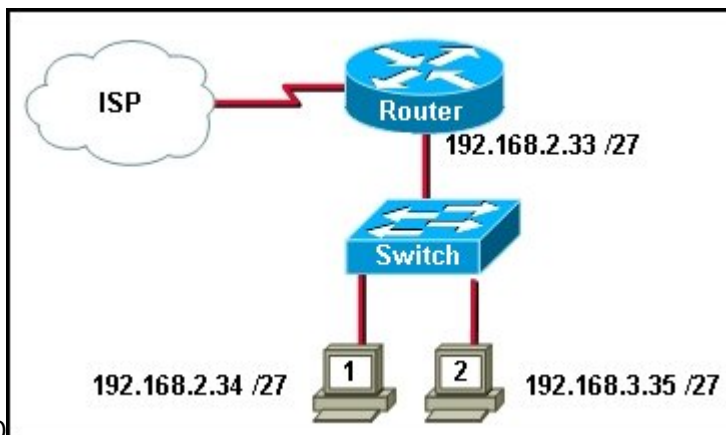
The configuration will work as planned.

The subnetwork mask of host A is incorrect.

The default gateway of host A is a network address.

The addresses on the router LAN interfaces are on the same subnetwork.

The IP address of host A is on a different subnetwork than the subnetwork that the Ethernet router interface is on.



20

Refer to the exhibit. After host 2 is connected to the switch on the LAN, host 2 is unable to communicate with host 1. What is the cause of this problem?

The subnet mask of host 2 is incorrect.

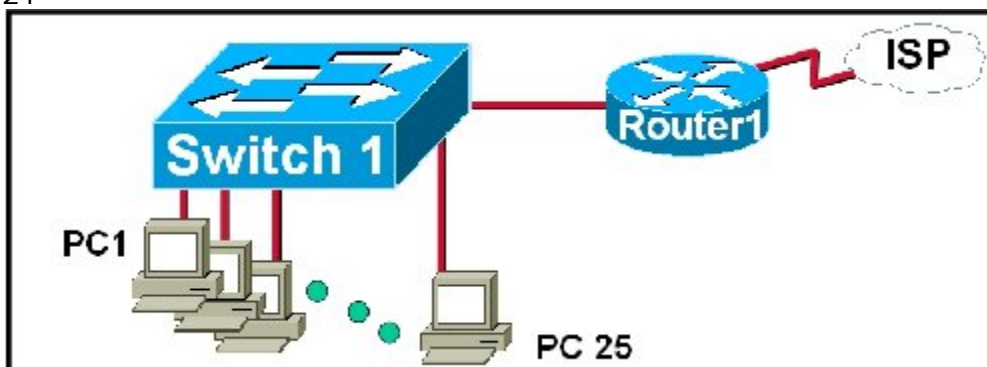
Host 1 and host 2 are on different networks.

The switch needs an IP address that is not configured.

The router LAN interface and host 1 are on different networks.

The IP address of host 1 is on a different network than is the LAN interface of the router.

21



Refer to the exhibit. A network administrator is planning the addressing scheme for the LAN using 172.25.14.0/26. The hosts are to be assigned addresses 172.25.14.1 – 172.25.14.25. The LAN interface of the router is to be configured using 172.25.14.63 as the IP address. What would describe this addressing scheme?

The LAN is being addressed properly.

The subnet that is being assigned is not a usable subnet address.

The router LAN interface is being assigned a broadcast address.

The subnet mask does not allow enough host addresses in a single subnet.

22

An IP network address has been subnetted so that every subnetwork has 14 usable host IP addresses. What is the appropriate subnet mask for the newly created subnetworks?

255.255.255.128

255.255.255.224

255.255.255.240

255.255.255.248

255.255.255.252

23

Which statements describe Layer 2 and Layer 3 packet address changes as the packet traverses from router to router? (Choose two.)

Layer 3 header is removed and replaced at every Layer 3 device.

Layer 2 and Layer 3 addresses do not change when the packet traverse.

Layer 3 source and destination addresses do not change when the packet traverse.

Layer 2 frame header and trailer are removed and replaced at every Layer 3 device.

Layer 2 source and destination addresses do not change when the packet travels.

24

A company is planning to subnet its network for a maximum of 27 hosts. Which subnet mask would provide the needed hosts and leave the fewest unused addresses in each subnet?

255.255.255.0

255.255.255.192

255.255.255.224

255.255.255.240

255.255.255.248

25

Given a host with the IP address 172.32.65.13 and a default subnet mask, to which network does the host belong?

172.32.65.0

172.32.65.32

172.32.0.0

172.32.32.0

Chapter 11 with 100%

1 What three pieces of information does the transport layer use to manage the communication of separate data streams between hosts? (Choose three.)

port numbers

checksum values

authentication keys

sequence numbers

encryption algorithms

acknowledgment numbers

2 TCP is referred to as connection-oriented. What does this mean?

TCP uses only LAN connections.

TCP requires devices to be directly connected.

TCP negotiates a session for data transfer between hosts.

TCP reassembles the data streams in the order that it is received.

3 FTP provides a reliable, connection-oriented service for transferring of files. Which transport layer protocol is used for data transfer when this service is being used?

TFTP

TCP

DNS

IP

UDP

4 An application is using a protocol that exchanges data without using windowing or flow control and must rely on higher layer protocols to transmit data. Which protocol and transfer method are being used?

UDP, connection-oriented

UDP, connectionless

TCP, connection-oriented

TCP, connectionless

5 Which Application layer protocol is widely used to support resolving host names to IP addresses?

FTP

SMTP

SNMP

DNS

HTTP

WWW

6 What does the http portion of the URL <http://www.cisco.com/edu/> communicate to a web browser?

The web browser needs to locate the www server.

The address is located on a site whose name is http.

The web browser is notified as to which protocol to use.

The http portion represents the type of web browser that needs to be used.

7 What is the purpose of TCP/UDP port numbers?

indicate the beginning of a three-way handshake

reassemble the segments into the correct order

identify the number of data packets that may be sent without acknowledgment

track different conversations crossing the network at the same time

8 What are the features of the User Datagram Protocol (UDP). (Choose three.)

no guaranteed delivery of datagrams

connection-oriented

provides reliable full-duplex data transmission

reliability provided by the application layer

connectionless

utilizes sliding windowing techniques

9 Which protocol is used by e-mail servers to communicate with each other?

FTP

HTTP

TFTP

SMTP

POP

SNMP

10 Which application layer protocol allows network devices to exchange management information?

SMTP

SNMP

FTP

TFTP

EIGRP

11 Which protocol is used to transfer files from computer to computer but is considered connectionless?

FTP

TFTP

SNMP

TCP

DHCP

12 Which layer of the OSI model can provide a connection-oriented, reliable data transfer between two hosts?

Application

Presentation

Session

Transport

13 Which of the following are primary duties of the OSI transport layer? (Choose two.)

path determination

end-to-end connectivity

flow control

security control

data representation

encryption of data

14 When the receiving workstation detects an error in the data it has received, it does not acknowledge receipt of the data. The source workstation retransmits the unacknowledged data. Which layer of the OSI model supports this process of retransmission?

network
application
session
transport

15 Which port numbers are commonly assigned for FTP use? (Choose two.)

19
20
21
22

--

Final Practise 100%

1

Which of the following are considered the best electrical conductors for use in data network communications?

(Choose three.)

glass fibers

copper

gold

plastic

silicon

silver

2

Select the necessary information that is required to compute the estimated time it would take to transfer data from one location to another. (Choose two.)

file size

data format

network in use

type of medium

bandwidth of the link

3

During cable testing, which of the following are used to calculate the information carrying capacity of a data cable? (Choose two.)

bit speed

attenuation

wire map

saturation limit

analog bandwidth

4

In a new network installation, the network administrator has decided to use a medium that is not affected by electrical noise. Which cable type will best meet this standard?

coaxial

screened twisted pair

shielded twisted pair

unshielded twisted pair

fiber optic

5

Which part of the URL <http://www.awsb.ca/teacher> gives the name of the domain?

www

http://

/teacher

awsb.ca

6

To make sure timing limitations are not violated when implementing a 10 Mbps Ethernet network involving hubs or repeaters, a technician should adhere to which rule?

the 4-5-3 rule

the 6-4-2 rule

the 3-4-5 rule

the 5-4-3 rule

7

Which protocol functions at the internet layer of the TCP/IP protocol suite?

File Transfer Protocol (FTP)

Trivial File Transfer Protocol (TFTP)

Transmission Control Protocol (TCP)

Internet Protocol (IP)

User Datagram Protocol (UDP)

Simple Mail Transport Protocol (SMTP)

8

John has been hired as the network administrator of a local company and has

decided to add more hubs to the company's existing network. Which of the following has been caused by John's inexperience?

collision domain extended

an increased number of collision domains

increased network performance

increased bandwidth

extended bandwidth

9

What is established during a connection-oriented file transfer between computers?
(Choose two.)

a temporary connection to establish authentication of hosts

a connection used for ASCII or binary mode data transfer

a connection used to provide the tunnel through which file headers are transported

a command connection which allows the transfer of multiple commands directly to the remote server system

a control connection between the client and server

10

The accumulation of traffic from which of the following can cause a network condition called broadcast radiation?

(Choose three.)

anonymous FTP servers

telnet sessions

video over IP applications

NAS services

ARP requests

RIP updates

11

Which layer of the OSI model covers physical media?

Layer 1

Layer 2

Layer 3

Layer 4

Layer 5

Layer 6

12

Which combinations of charges will be repelled by electric force? (Choose two.)

neutral and neutral

neutral and positive

neutral and negative

positive and positive

positive and negative

negative and negative

13

What is the maximum distance that 10BASE-T will transmit data before signal attenuation affects the data delivery?

100 meters

185 meters

300 meters

500 meters

14

Which of these workstation installation and setup tasks are concerned with network

access layer functions? (Choose two.)

configuring the e-mail client

installing NIC drivers

configuring IP network settings

connecting the network cable

using FTP to download application software updates

15

For which of the following is Ethernet considered the standard? (Choose three.)

inter-building connection

mid-length voice

video conferencing

vertical wiring

horizontal wiring

diagonal wiring

16

What is the recommended maximum number of workstations configured on a peer-to-peer network?

25

15

10

5

2

17

The highest capacity Ethernet technologies should be implemented in which areas of a network? (Choose three.)

between workstation and backbone switch

between individual workstations

between backbone switches

between enterprise server and switch

on aggregate access links

18

When a network administrator applies the subnet mask 255.255.255.248 to a Class A address, for any given subnet, how many IP addresses are available to be assigned to devices?

1022

510

254

126

30

6

19

Which of the following will test the internal loopback of a node?

ping 10.10.10.1

ping 192.168.1.1

ping 127.0.0.1

ping 223.223.223.223

ping 255.255.255.255

20

Which of the following is a term associated with replacing hubs with switches to increase the number of collision domains?

encapsulation

latency

segmentation

layered model

broadcast domain

extended

21

Which part of an IP address identifies a specific device on a network?

first two octets

third and fourth octets

network portion

host portion

only the fourth octet

22

Which of the following protocols are used for e-mail transfer between clients and servers? (Choose three.)

TFTP

SNMP

POP3

SMTP

IMAP4

postoffice

23

Which of the following is the Layer 4 PDU?

bit

frame

packet

segment

24

Using the data transfer calculation $T=S/BW$, how long would it take a 4MB file to be sent over a 1.5Mbps connection?

52.2 seconds

21.3 seconds

6.4 seconds

2 seconds

0.075 seconds

0.0375 seconds

25

If a network administrator needed to download files from a remote server, which protocols could the administrator use to remotely access those files? (Choose two.)

ASCII

TFTP

IMAP

FTP

UDP

26

What is important to remember about the data link layer of the OSI model when considering Peer to Peer communication? (Choose three.)

It links data to the transport layer.

It encapsulates frames into packets.

It provides a service to the network layer.

It encapsulates the network layer information into a frame.

Its header contains a physical address which is required to complete the data link functions.

It encodes the data link frame into a pattern of 1s and 0s (bits) for transmission on the medium.

27

Which OSI layer defines the functions of a router?

physical

data link

network

transport

session

28

How is a MAC address represented?

four groups of eight binary digits separated by a decimal point

four Base10 digits separated by a decimal point

six hexadecimal digits

twelve hexadecimal digits

twenty-four Base10 digits

29

Which of the following are useable Class A IP addresses with a default subnet mask?
(Choose three.)

127.0.39.1

111.9.28.30

123.1.2.132

128.50.38.2

105.1.34.1

0.23.92.3

30

Which of the following are features of the Internet Protocol (IP)? (Choose two.)

It is the most widely implemented global addressing scheme.

It allows two hosts to share a single address on a local area network.

It is a hierarchical addressing scheme allowing addresses to be grouped.

It is only locally significant, used primarily on local area networks.

31

Which term describes an ARP response by a router on behalf of a requesting host?

ARP

RARP

Proxy ARP

Proxy RARP

32

A small company has a class C network license and needs to create five usable subnets, each subnet capable of accommodating at least 20 hosts. Which of the following is the appropriate subnet mask?

255.255.255.0

255.255.255.192

255.255.255.224

255.255.255.240

33

Which OSI layer encapsulates data into packets?

session

transport

network

data link

34

Which of the following services is used to translate a web address into an IP address?

DNS

WINS

DHCP

Telnet

35

What type of network cable is used between a terminal and a console port?

cross-over

straight-through

rollover

patch cable

36

Which of the following items are common to all 100BASE technologies? (Choose three.)

frame format

media

connectors

timing

multi-part encoding

37

"CompA" is trying to locate a new computer named "CompB" on the network. Which of the following does "CompA" broadcast to find the MAC address of "CompB"?

MAC request

ARP request

ping

Telnet

proxy ARP

38

Which of the following wireless standards increased transmission capabilities to 11 Mbps?

802.11a

802.11b

802.11c

802.11d

39

Which of the following describes the use of Spanning Tree Protocol (STP)?

resolve routing loops

eliminate Split Horizon errors

limit collisions

resolve switching loops

40

Convert the Hexadecimal number A2 into its Base 10 equivalent. Select the correct answer from the list below.

156

158

160

162

164

166

41

Which of the following does 1000BASE-T use to accomplish gigabit speeds on Cat 5e cable?

the use of four conductors in full-duplex mode

the use of two multiplexed pairs of wires, simultaneously

the use of three pairs of wires for data and the fourth for stabilization and forward error correction

the use of all four pairs of wires in full-duplex mode, simultaneously

42

What does the "10" in 10Base2 indicate about this version of Ethernet?

The version uses Base10 numbering within the frames.

The version operates at a transmission rate of 10 Mbps.

Frames can travel 10 meters unrepeated.

The maximum frame length is 10 octets.

43

An ISDN Basic Rate Interface (BRI) is composed of how many signaling channels?

1

2

3

4

44

What are features of the TCP/IP Transport layer? (Choose two.)

path determination

handles representation, encoding and dialog control

uses TCP and UDP protocols

packet switching

reliability, flow control and error correction

45

A company with a Class B license needs to have a minimum of 1,000 subnets with each subnet capable of accommodating 50 hosts. Which mask below is the appropriate one?

255.255.0.0

255.255.240.0

255.255.255.0

255.255.255.192

255.255.255.224

46

Which of the following are small, discrete components found within a personal computer? (Choose three.)

transistor

microprocessor

power supply

capacitor

light emitting diode

hard disk

47

What device must be used between an AUI port of a networking device and the media to which it is being connected?

a transducer

a transmitter

a transceiver

a transponder

a port replicator

48

Convert the binary number 10111010 into its hexadecimal equivalent. Select the correct answer from the list below.

85

90

BA

A1

B3

1C

49

Which type of institution does the domain suffix .org represent?

government

education

network

non-profit

50

What type of wiring problem is depicted in this sample of a cable tester?

a fault

a short

an open

a split

a good map