

Score for this quiz: 0 out of 73

Submitted Jun 9 at 12:17pm

This attempt took less than 1 minute.

Unanswered

Question 1

0 / 1 pts

Which of the following binary numbers represents 10.12.16.6?

10001001.11010101.11111111.00000000

00010000.00000110.00010000.00000110

Correct Answer

00001010.00001100.00010000.00000110

Unanswered

Question 2

0 / 1 pts

A Class A IP address uses the last ___ octet(s) for the host ID. The host ID is the unique part and identifies the individual user and part of the reason 50% of all IP addresses are Class A?

one

two

Correct Answer

three

none

Unanswered

Question 3

0 / 1 pts

In ARP/RARP Message *OPERATION* field is

Correct Answer

16-bits

6-bits

8-bits

2-bits

Unanswered

Question 4

0 / 1 pts

Which of the following is a Class B address?

193.17.101.27

211.244.212.5

126.15.16.122

Correct Answer

129.16.12.200

Unanswered

Question 5

0 / 1 pts

Which of the following is not done by TCP?

Error checking

Sequencing

Flow control

Correct Answer

Subnetting

Unanswered

Question 6

0 / 1 pts

Using the TCP/IP protocol when is a subnet mask required?

only when connecting outside the LAN

only when using TCP/IP

Correct Answer

for both intranet and internet usage

Unanswered

Question 7

0 / 1 pts

A protocol that functions at the network layer of the OSI model?

TCP

Correct Answer

IP

UDP

SSP

Unanswered

Question 8

0 / 1 pts

In ARP/RARP Message SENDER IP field is

Correct Answer

4-octets

4-bits

32-octets

16-bits

Unanswered

Question 9

0 / 1 pts

The following figure shows two routers. If 1st router has in IP of 192.168.1.1 then what could be the possible IP address of a machine connected to any LAN port of 2nd router?

Correct Answer

192.168.2.X

192.168.1.X

192.172.1.0

None of the above

Unanswered

Question 10

0 / 1 pts

Every active IP address has a corresponding NIC card address

Correct Answer

True

False

Unanswered

Question 11

0 / 1 pts

IP address is ___ bit binary number

8

16

Correct Answer

32

64

Unanswered

Question 12

0 / 1 pts

Which of the following is non routable IP address?

Correct Answer

209.32.242

172.15.42.34

192.168.0.1

10.14.16.12

Unanswered

Question 13

0 / 1 pts

You have a network ID of 172.16.0.0 with eight subnets. You need to allow for the largest possible number of host IDs per subnet. Which subnet mask should you assign?

Correct Answer

255.255.252.0

255.255.248.0

255.255.240.0

255.255.224.0

Unanswered

Question 14

0 / 1 pts

Examine the diagram shown here. What is the most likely reason that user Spencer cannot communicate with user Evan?



User: Evan
IP address: 192.168.1.121
Subnet mask: 255.255.255.0
Default gateway: 192.168.1.1



User: Spencer
IP address: 192.168.1.127
Subnet mask: 255.255.248.0
Default gateway: 192.168.1.1

- There is no problem identifiable by the values given.
- The subnet values should be the same.
- Spencer's IP address is not a loopback address.
- The default gateways should have different values.

Correct Answer

Unanswered

Question 15

0 / 1 pts

You have a network ID of 172.16.0.0 and you need to divide it into multiple subnets. You need 600 host IDs for each subnet. Which subnet mask should you assign that will allow for growth?

Correct Answer

- 255.255.252.0
- 255.255.248.0

255.255.240.0

255.255.224.0

Unanswered

Question 16

0 / 1 pts

Class A IP addresses can accommodate 16 million hosts while a Class B can accommodate ___?

4 million.

Correct Answer

65,534

254

Unanswered

Question 17

0 / 1 pts

Only computers with the same ____ can communicate without a router.

Correct Answer

Network ID

Host IP

Subnet mask

IP address

Unanswered

Question 18

0 / 1 pts

According to RFC 1918 this range of Class A IP addresses are reserved for private intranets and are not supposed to be used on the internet (where x is any number from 1 to 254)?

Correct Answer

10.x.x.x

20.x.x.x

30.x.x.x

30.1.x.x

Unanswered

Question 19

0 / 1 pts

Which of the following is class A IP address?

209.123.32.212

172.15.42.34

127.0.0.1

Correct Answer

10.14.16.12

Unanswered

Question 20

0 / 1 pts

If you have an IP address of 172.16.13.5 with a 255.255.255.128 subnet mask. What is your class of address, subnet address, and broadcast address?

Correct Answer

- Class B, Subnet 172.16.13.0, Broadcast address 172.16.13.127
- Class B, Subnet 172.16.0.0, Broadcast address 172.16.255.255
- Class B, Subnet 172.16.13.0, Broadcast address 172.16.13.255
- Class A, Subnet 172.16.13.0, Broadcast address 172.16.13.127

Unanswered

Question 21

0 / 1 pts

You have been assigned to set up a new network with TCP/IP. For the external interfaces, you decide to obtain registered IP addresses from your ISP, but for the internal network, you choose to configure systems by using one of the private address ranges. Of the following address ranges, which one would you not consider?

Correct Answer

- 172.16.0.0 to 172.31.255.255
- 10.0.0.0 to 10.255.255.255
- 131.16.0.0 to 131.16.255.255
- 192.168.0.0 to 192.168.255.255

Unanswered

Question 22

0 / 1 pts

Which of the following is class B IP address?

209.123.32.212

Correct Answer

172.15.42.34

127.0.0.1

10.14.16.12

Unanswered

Question 23

0 / 1 pts

Given the IP address 126.110.16.7 what class of address is it?

A

B

C

D

Unanswered

Question 24

0 / 1 pts

OSI layer responsible for error checking frames and adding MAC addresses to its tables?

Physical layer

Correct Answer

Data-link

Transport

Presentation

Unanswered

Question 25

0 / 1 pts

You ask your ISP to assign a public IP address for the external interface of your Windows 2008 server, which is running a proxy server application. In the email message you get that contains the information, the ISP tells you that you have been assigned the IP address 203.15.226.12/24. When you fill out the subnet mask field on the IP configuration dialog box on your system, what subnet mask should you use?

255.255.255.240

255.255.240.0

Correct Answer

255.255.255.0

255.255.255.255

Unanswered

Question 26

0 / 1 pts

The TCP/IP protocol used on the internet allows for approximately ___ billion unique IP addresses?

1

Correct Answer

4

10

Unanswered

Question 27

0 / 1 pts

Which of the following is class C IP address?

10.14.12.16

127.0.0.1

Correct Answer

210.24.56.76

124.12.13.44

Unanswered

Question 28

0 / 1 pts

Simple subnetting involves transferring bits from host to network ID in groups of ____.

Two

Four

Six

Correct Answer

Eight

Unanswered

Question 29

0 / 1 pts

Which of the following IP addresses is not from a private address range?

192.168.200.117

172.16.3.204

Correct Answer

127.45.112.16

10.27.100.143

Question 30

0 / 1 pts

What are the network address, broadcast address, and the subnet mask for a host with the IP Address below?

IP Address: 170.197.180.114/ 19

A Network Address:

Broadcast Address:

Subnet Mask:

Answer 1:

You Answered

(You left this blank)

Correct Answer

170.197.160.0

Answer 2:

You Answered

(You left this blank)

Correct Answer

170.197.191.255

Answer 3:

You Answered

(You left this blank)

Correct Answer

255.255.224.0

Unanswered

Question 31

0 / 1 pts

What valid host range is the IP address 172.28.244.59 255.255.255.128 a part of?

172.28.244.1 through to 172.28.244.127

172.28.244.2 through to 172.28.244.126

172.28.244.2 through to 172.28.244.127

Correct Answer

172.28.244.1 through to 172.28.244.126

Question 32

0 / 1 pts

What are the subnet mask, first available host address of subnet one (NOT subnet zero), and the maximum number of hosts per subnet for the network below?

You need to allow for maximum number of hosts. Also, you can use subnet zero and the all-ones subnet.

Network ID: 181.189.0.0

Subnets Required: 27

A Subnet Mask:

1st Available Host Address of Subnet 1:

Max # of hosts/subnet:

Answer 1:

You Answered

(You left this blank)

Correct Answer

255.255.248.0

Answer 2:

You Answered

(You left this blank)

Correct Answer

181.189.8.1

Answer 3:

You Answered

(You left this blank)

Correct Answer

2046

Question 33

0 / 1 pts

What is the last valid host on the subnetwork 172.21.148.32 255.255.255.224?

You Answered

Correct Answers

172.21.148.62

Question 34

0 / 1 pts

Which subnet does host 192.168.139.148/25 belong to?

You Answered

Correct Answers

192.168.139.128

Question 35

0 / 1 pts

What is the broadcast address of the network 10.95.128.0/20?

You Answered

Correct Answers

10.95.143.255

Question 36

0 / 1 pts

What are the network address, broadcast address, and the subnet mask for a host with the IP Address below?

IP Address: 124. 95. 2. 200/ 21

A Network Address:

Broadcast Address:

Sunbet Mask:

Answer 1:

You Answered

(You left this blank)

Correct Answer

124.95.0.0

Answer 2:

You Answered

(You left this blank)

Correct Answer

124.95.7.255

Answer 3:

You Answered

(You left this blank)

Correct Answer

255.255.248.0

Question 37

0 / 1 pts

Which subnet does host 192.168.233.201/29 belong to?

You Answered

Correct Answers

192.168.233.200

Question 38

0 / 1 pts

What are the subnet mask, first available host address of subnet one (NOT subnet zero), and the maximum number of hosts per subnet for the network below?

You need to allow for maximum number of hosts. Also, you can use subnet zero and the all-ones subnet.

Network ID: 133.200.0.0

Subnets Required: 101

A Subnet Mask:

1st Available Host Address of Subnet 1:

Max # of hosts/subnet:

Answer 1:

You Answered

(You left this blank)

Correct Answer

255.255.254.0

Answer 2:

You Answered

(You left this blank)

Correct Answer

133.200.2.1

Answer 3:

You Answered

(You left this blank)

Correct Answer

510

Question 39

0 / 1 pts

What are the subnet mask, first available host address of subnet one (NOT subnet zero), and the maximum number of hosts per subnet for the network below?

You need to allow for maximum number of hosts. Also, you can use subnet zero and the all-ones subnet.

Network ID: 210.105.27.0

Subnets Required: 13

A Subnet Mask:

1st Available Host Address of Subnet 1:

Max # of hosts/subnet:

Answer 1:

You Answered

(You left this blank)

Correct Answer

255.255.255.240

Answer 2:

You Answered

(You left this blank)

Correct Answer

210.105.27.17

Answer 3:

You Answered

(You left this blank)

Correct Answer

14

Question 40

0 / 1 pts

What is the last valid host on the subnetwork 172.16.71.48 255.255.255.240?

You Answered

Correct Answers

172.16.71.62

Question 41

0 / 1 pts

How many hosts per subnet can you get from the network 172.22.0.0/28?

You Answered

Correct Answers

14

Unanswered

Question 42

0 / 1 pts

What valid host range is the IP address 172.22.69.75/22 a part of?

Correct Answer

- 172.22.68.1 through to 172.22.71.254
- 172.22.68.255 through to 172.22.71.254
- 172.22.68.2 through to 172.22.71.254
- 172.22.68.1 through to 172.22.71.255

Unanswered

Question 43

0 / 1 pts

What valid host range is the IP address 172.23.220.6/20 a part of?

Correct Answer

- 172.23.208.1 through to 172.23.223.254
- 172.24.208.1 through to 172.23.223.254
- 172.23.208.2 through to 172.23.223.254
- 172.23.208.1 through to 172.23.223.255

Question 44

0 / 1 pts

What valid start host for IP address 192.168.211.142/27 ?

You Answered

Correct Answers

192.168.211.129

Question 45

0 / 1 pts

How many hosts per subnet can you get from the network 172.20.0.0/27?

You Answered

Correct Answers

30

Question 46

0 / 1 pts

What is the last valid host on the subnetwork 172.17.104.0 255.255.248.0?

You Answered

Correct Answers

172.17.111.254

Question 47

0 / 1 pts

What is the first valid host on the subnetwork that the node 172.23.246.213/28 belongs to?

You Answered

Correct Answers

172.23.246.209

Question 48

0 / 1 pts

What is the broadcast address of the network 172.30.140.0 255.255.254.0?

You Answered

Correct Answers

172.30.141.255

Question 49

0 / 1 pts

What are the network address, broadcast address, and the subnet mask for a host with the IP Address below?

IP Address: 212.231.96.177 / 23

A Network Address:

Broadcast Address:

Subnet Mask:

Answer 1:

You Answered

(You left this blank)

Correct Answer

212.231.96.0

Answer 2:

(You left this blank)

You Answered

Correct Answer

212.231.97.255

Answer 3:

You Answered

(You left this blank)

Correct Answer

255.255.254.0

Unanswered

Question 50

0 / 1 pts

Which subnet does host 172.25.16.243/24 belong to?

Correct Answer

172.25.16.0

172.25.16.1

172.25.16.243

172.25.255.0

Question 51

0 / 1 pts

What is the first valid host on the subnetwork that the node 10.71.14.60 255.255.240.0 belongs to?

You Answered

Correct Answers

10.71.0.1

Question 52

0 / 1 pts

How many subnets can you get from the network 172.20.0.0/27?

You Answered

Correct Answers

2048

Unanswered

Question 53

0 / 1 pts

What valid host range is the IP address 192.168.159.171 255.255.255.248 a part of?

Correct Answer

- 192.168.159.169 through to 192.168.159.174
- 192.168.159.168 through to 192.168.159.175
- 192.168.159.168 through to 192.168.159.174
- 192.168.159.169 through to 192.168.159.175

Unanswered

Question 54

0 / 1 pts

Cyclic Redundancy Check(CRC)

- none of the above
- One of the most powerful error-correction codes
- One of the most powerful error-detecting codes

Correct Answer

Unanswered

Question 55

0 / 1 pts

If the ASCII character G is sent and the character D is received, what type of error is this? Single-bit Multiple-bit Burst Recoverable

- Recoverable
- Burst
- Multiple-bit
- Single-bit

Correct Answer

Question 56

0 / 1 pts

Compute the CRC-4 character for the following message using a "divisor" constant of 10011:1100 0110 1011 01

You Answered

Correct Answers

1001

Unanswered

Question 57

0 / 1 pts

Which error detection method consists of a parity bit for each data unit as well as an entire data unit of parity bits?

- CRC
- Two-dimensional parity check
- Checksum
- Simple parity check

Correct Answer

Unanswered

Question 58

0 / 1 pts

In CRC there is no error if the remainder at the receiver is _____.

- Zero
- Equal to the remainder at the sender
- The quotient at the sender

Correct Answer

Nonzero

Unanswered

Question 59

0 / 1 pts

At the CRC checker, _____ means that the data unit is damaged.

A string of alternating 1s and 0s

Correct Answer

A nonzero remainder

A string of 0's

A string of 1's

Unanswered

Question 60

0 / 1 pts

At the CRC generator, _____ added to the data unit after the division process.

0's are

1's are

Correct Answer

The CRC remainder is

The polynomial is

Unanswered

Question 61

0 / 1 pts

At the CRC generator, _____ added to the data unit before the division process.

A polynomial is

A CRC remainder is

Correct Answer

0's are

1's are

Unanswered

Question 62

0 / 1 pts

Which of the following best describes a single-bit error?

Any of the above

Correct Answer

A single bit is inverted per data unit.

A single bit is inverted per transmission.

- A single bit is inverted.

Question 63

0 / 1 pts

The reference polynomial used in a CRC scheme is $x^4 + x^3 + 1$. A data sequence 1010101010 is to be sent. Determine the actual bit string that is transmitted.

You Answered

Correct Answers

10101010100010

Unanswered

Question 64

0 / 1 pts

Which error detection method uses ones complement arithmetic?

- CRC
- Simple parity check
- Checksum
- Two-dimensional parity check

Correct Answer

Question 65

0 / 1 pts

Suppose that the data frame 1101011011 is to be transmitted. What is the check-summed frame that is actually transmitted, if the divisor is 10011?

You Answered**Correct Answers**

11010110111110

Question 66

0 / 1 pts

If the generator polynomial is $x^4 + x + 1$ and the message is 100100110101, what is the actual bit string sent?

You Answered**Correct Answers**

1001001101011110

Unanswered**Question 67**

0 / 1 pts

If the data unit is 111111 and the divisor 1010, what is the dividend at the transmitter?

 111111010

111111

Correct Answer

111111000

1111110000

Unanswered

Question 68

0 / 1 pts

Which error detection method can detect a burst error?

The parity check

Correct Answer

Two-dimensional parity check

Correct Answer

CRC

Unanswered

Question 69

0 / 1 pts

Given the generator function $G(x) = x^4 + x + 1$ and the message function $M(x) = x^7 + x^6 + x^4 + x^2 + x$: (a) Calculate the transmission function $T(x)$. (b) Consider that the transmission is damaged, such that the receiver receives $R(x) = x^{11} + x^9 + x^8 + x^7 + x^3 + x^2 + x + 1$. Will this error be detected?

Correct Answer

True

False

Unanswered

Question 70

0 / 1 pts

Which error detection method involves the use of parity bits?

Correct Answer

Simple parity check

Correct Answer

Two-dimensional parity check

CRC

Unanswered

Question 71

0 / 1 pts

If the transmitter is transmitting an IRA character G (1110001) and using odd parity, it will append a 1 and transmit 11110001. The receiver examines character and, if the total number of 1's is odd, assumes that no error has occurred. If one bit is erroneously inverted during transmission, then the receiver will _____.

not detect an error.

Correct Answer

detect an error.

detect the error only if the frame length is less than $2L-1$.

Unanswered

Question 72

0 / 1 pts

The Hamming code is a method of _____.

Error encapsulation

Correct Answer

Error correction

Correct Answer

Error detection

Unanswered

Question 73

0 / 1 pts

Which error detection method can detect a single-bit error?

Correct Answer

CRC

Correct Answer

Two-dimensional parity check

Correct Answer

Simple parity check