QUESTION NO: 1
Given the choices below, which address represents a unicast address?
A. 224.1.5.2
B. FFFF. FFFF. FFFF.
C. 192.168.24.59/30
D. 255.255.255.255
E. 172.31.128.255/18

QUESTION NO: 2
Which two of the addresses below are available for host addresses on the subnet 192.168.15.19/28? (Select two answer choices)
A. 192.168.15.17
B. 192.168.15.14
C. 192.168.15.29
D. 192.168.15.16
E. 192.168.15.31
F. None of the above

QUESTION NO: 3
You have a Class C network, and you need ten subnets. You wish to have as many addresses available for hosts as possible. Which one of the following subnet masks should you use?
A. 255.255.255.192
B. 255.255.255.224
C. 255.255.255.240
D. 255.255.255.248
E. None of the above

QUESTION NO: 4
Which of the following is an example of a valid unicast host IP address?
A. 172.31.128.255./18
B. 255.255.255.255
C. 192.168.24.59/30
D. FFFF.FFFF.FFFF
E. 224.1.5.2
F. All of the above

QUESTION NO: 5
How many subnetworks and hosts are available per subnet if you apply a /28 mask to the 210.10.2.0 class C network?

A. 30 networks and 6 hosts.
B. 6 networks and 30 hosts.
C. 8 networks and 32 hosts.
D. 32 networks and 18 hosts.
E. 16 networks and 14 hosts.
F. None of the above

QUESTION NO: 6
The BKCAD network was assigned the Class C network 199.166.131.0 from the ISP. If the administrator at BKCAD were to subnet this class C network using the 255.255.255.224 subnet mask, how may hosts will they be able to support on each subnet?
A. 14
B. 16
C. 30
D. 32
E. 62
F. 64

QUESTION NO: 7
What is the subnet for the host IP address 172.16.210.0/22?
A. 172.16.42.0
B. 172.16.107.0
C. 172.16.208.0
D. 172.16.252.0
E. 172.16.254.0
F. None of the above

QUESTION NO: 8
What is the subnet for the host IP address 201.100.5.68/28?
A. 201.100.5.0
B. 201.100.5.32
C. 201.100.5.64
D. 201.100.5.65
E. 201.100.5.31
F. 201.100.5.1

QUESTION NO: 9
What is the IP address range for the first octet in a class B address, in binary form?

A. 00000111-10001111
B. 00000011-10011111
C. 10000000-10111111
D. 11000000-11011111
E. 11100000-11101111
F. None of the above

QUESTION NO: 10
Which one of the binary bit patterns below denotes a Class B address?
A. 0xxxxxxx
B. 10xxxxxx
C. 110xxxxx
D. 1110xxxx
E. 11110xxx

QUESTION NO: 11
Your network uses the172.12.0.0 class B address. You need to support 459 hosts per subnet, while accommodating the maximum number of subnets. Which mask would you use?
A. 255.255.0.0.
B. 255.255.128.0.
C. 255.255.224.0.
D. 255.255.254.0.

QUESTION NO: 12
Using a subnet mask of 255.255.255.224, which of the IP addresses below can you assign to the hosts on this subnet? (Select all that apply)
A. 16.23.118.63
B. 87.45.16.159
C. 92.11.178.93
D. 134.178.18.56
E. 192.168.16.87
F. 217.168.166.192

QUESTION NO: 13
Your ISP has assigned you the following IP address and subnet mask:
IP address: 199.141.27.0
Subnet mask: 255.255.255.240
Which of the following addresses can be allocated to hosts on the resulting subnet? (Select all that apply)

A. 199.141.27.2
B. 199.141.27.175
C. 199.141.27.13
D. 199.141.27.11
E. 199.141.27.208
F. 199.141.27.112

QUESTION NO: 14
The IP network 210.106.14.0 is subnetted using a /24 mask. How many usable networks and host addresses can be obtained from this?
A. 1 network with 254 hosts
B. 4 networks with 128 hosts
C. 2 networks with 24 hosts
D. 6 networks with 64 hosts
E. 8 networks with 36 hosts

QUESTION NO: 15
Given that you have a class B IP address network range, which of the subnet masks below will allow for 100 subnets with 500 usable host addresses per subnet?
A. 255.255.0.0
B. 255.255.224.0
C. 255.255.254.0
D. 255.255.255.0
E. 255.255.255.224

QUESTION NO: 16
You have a class C network, and you need to design it for 5 usable subnets with each subnet handling a minimum of 18 hosts each. Which of the following network masks should you use?
A. 225.225.224.0.
B. 225.225.240.0.
C. 225.225.255.0.
D. 255.255.255.224
E. 225.225.255.240

QUESTION NO: 17
The 213.115.77.0 network was subnetted using a /28 subnet mask. How many usable subnets and host addresses per subnet were created as a result of this?

A. 2 networks with 62 hosts
B. 6 networks with 30 hosts
C. 16 networks and 16 hosts
D. 62 networks and 2 hosts
E. 14 networks and 14 hosts
F. None of the above

QUESTION NO: 18
The 201.145.32.0 network is subnetted using a /26 mask. How many networks and IP hosts per network exists using this subnet mask?
A. 4 networks with 62 hosts
B. 64 networks and 4 hosts
C. 4 networks and 62 hosts
D. 62 networks and 2 hosts
E. 6 network and 30 hosts

QUESTION NO: 19
You have a class B network with a 255.255.255.0 mask. Which of the statements below are true of this network? (Select all valid answers)
A. There are 254 usable subnets.
B. There are 256 usable hosts per subnet.
C. There are 50 usable subnets.
D. There are 254 usable hosts per subnet.
E. There are 24 usable hosts per subnet.
F. There is one usable network.

QUESTION NO: 20
How many usable IP addresses can you get from a conventional Class C address?
A. 128
B. 192
C. 254
D. 256
E. 510

QUESTION NO: 21
Your ISP assigned you a full class B address space. From this, you need at least 300 sub-networks that can support at least 50 hosts each. Which of the subnet masks below are capable of satisfying your needs? (Select two).

A. 255.255.255.0
B. 255.255.255.128
C. 255.255.252.0
D. 255.255.255.224
E. 255.255.255.192
F. 255.255.248.0

QUESTION NO: 22
A BKCAD PC has the IP address 172.16.209.10 /22. What is the subnet of this address?
A. 172.16.42.0
B. 172.16.107.0
C. 172.16.208.0
D. 172.16.252.0
E. 172.16.254.0

QUESTION NO: 23
You've been assigned the CIDR (classless inter domain routing) block of 115.64.4.0/22 from your ISP. Which of the IP addresses below can you use for a host? (Select all valid answers)
A. 115.64.8.32
B. 115.64.7.64
C. 115.64.6.255
D. 115.64.3.255
E. 115.64.5.128
F. 115.64.12.128

QUESTION NO: 24
Which of the following IP hosts would be valid for PC users, assuming that a /27 network mask was used for all of the networks? (Choose all that apply.)
A. 15.234.118.63
B. 83.121.178.93
C. 134.178.18.56
D. 192.168.19.37
E. 201.45.116.159
F. 217.63.12.192

QUESTION NO: 25

You are the network administrator at BKCAD. BKCAD has been provided with the network address 165.100.27.0/24. The BKCAD CEO wants to know how many subnetworks this address provides, and how many hosts can be supported on each subnet. What would your reply be? (Choose all that apply)

A. One network with 254 hosts.
B. 254 networks with 254 hosts per network.
C. 65,534 networks with 255 hosts per network.
D. 30 networks with 64 hosts per network.
E. 254 networks with 65,534 per network.

QUESTION NO: 26

You are the network administrator at BKCAD. BKCAD has been assigned the class C IP address 189.66.1.0 by its Internet Service Provider. If you divide the network range by using the 255.255.255.224 subnet mask, how many hosts can be supported on each network?

A. 14
B. 16
C. 30
D. 32
E. 62
F. 64

QUESTION NO: 27

Which of the following statements are true regarding a network using a subnet mask of 255.255.248.0? (Choose three)

A. It corresponds to a Class A address with 13 bits borrowed.
B. It corresponds to a Class B address with 4 bits borrowed.
C. The network address of the last subnet will have 248 in the 3rd octet.
D. The first 21 bits make the host portion of the address.
E. This subnet mask allows for 16 total subnets to be created.
F. The subnetwork numbers will be in multiples of 8.

QUESTION NO: 28

Which of the following IP addresses is a private IP address? Select all that apply.

A. 12.0.0.1
B. 168.172.19.39
C. 172.20.14.36
D. 172.33.194.30

E. 192.168.42.34

QUESTION NO: 29
What is the network address for a host with the IP address 201.100.5.68/28?
A. 201.100.5.0
B. 201.100.5.32
C. 201.100.5.64
D. 201.100.5.65
E. 201.100.5.31
F. 201.100.5.1

QUESTION NO: 30
If an Ethernet port on router was assigned an IP address of 172.16.112.1/20, what is the maximum number of hosts allowed on this subnet?
A. 1024
B. 2046
C. 4094
D. 4096
E. 8190

QUESTION NO: 31
You work as network consultant. Your customer, BKCAD Inc, has a class C network license. BKCAD wants you to subnet the network to provide a separate subnet for each of its 5 departments. Each subnet must support at least 24 hosts. Which network mask should you use?
A. 255.255.255.192
B. 255.255.255.224
C. 255.255.255.240
D. 255.255.255.248
E. 255.255.255.252
F. 255.255.255.254

QUESTION NO: 32
Your BKCAD trainee Bob asks you what 11111001 binary is in decimal. What should you tell him?
A. 6
B. 193
C. 225

D. 241
E. 249

QUESTION NO: 33
What is the maximum number of IP addresses that can be assigned to hosts on a local subnet that use the 255.255.255.224 subnet mask?
A. 14
B. 15
C. 16
D. 30
E. 31
F. 32

QUESTION NO: 34
Which of the following IP addresses for the network 27.35.16.32/28 can be assigned to hosts? (Choose three)
A. 27.35.16.32
B. 27.35.16.33
C. 27.35.16.48
D. 27.35.16.47
E. 27.35.16.45
F. 27.35.16.44