CCNA Interviews questions Papers:

Routers can learn about destinations through static routes, default, or dynamic routing. By default, a router will use information derived from \_\_\_\_\_\_\_\_\_\_.

\* IGRP

\* RIP

\* IP

\* TCP

Correct answer: A

The quality of information is rated:

Connected interface 0

Static route 1

IGRP 100

RIP 120

Unknown 255

The lower the value, the more reliable the source with 255 signifying information that the router will ignore. So, the router will use IGRP, rated at 100, before RIP, rated at 120.

You are logged into a router, what command would show you the IP addresses of routers connected to you?

\* show cdp neighbors detail

\* show run

\* show neighbors

\* show cdp

Correct answer: A

As a system administrator, you perform an extended ping at the privileged EXEC prompt. As part of the display, you see “Set DF bit in IP header? [yes] :” What would happen if you answered no at the prompt.

\* This lets the router fragment the packet.

\* It tells the router not to fragment the packet.

\* This lets the router direct the packet to the destination it finds in its routing table.

\* It tell the router to send the packet to the next hop router

Correct answer: A

“Set DF bit in IP header?” is a response to an extended ping at the router. If you answer yes (the default) the router will not fragment the packet. If you answer no, the router will fragment the packet.

You have typed “ping” 172.16.101.1 and get the following display: Type escape sequence to abort. Sending 5, 100-byte ICMP Echoes to 172.16.101.1, timeout is 2 seconds:

.!!!!

What does the “.” signify?

\* That one message timed out.

\* That all messages were successful.

\* That one message was successful.

\* That one message completed in under the allotted timeframe.

Correct answer: A

The possible responses from the ping command are: ! Successful receipt of an echo reply. Timed out waiting for a reply U Destination unreachable C Congestion-experienced packet I Ping interrupted ? Packet type unknown & Packet TTL exceeded

Which command, that is used to test address configuration, uses Time-To-Live (TTL) values to generate messages from each router.

\* trace

\* ping

\* telnet

\* bootp

Correct answer: A

The Cisco IOS EXEC command “trace [protocol] [destination]” is used to discover routes that packets will travel to their destination hosts. Trace uses TTL (Time to Live) values to report destination route information.

What does the command “IP name-server 255.255.255.255″ accomplish?

\* It sets the domain name lookup to be a local broadcast.

\* This is an illegal command.

\* It disables domain name lookup.

\* The command is now defunct and has been replaced by “IP server-name ip any”

Correct answer: A

By default DNS is enabled on a router with a server address of 255.255.255.255, which provides for a local broadcast.

As a system administrator, you need to provide your routers with a Domain Name System (DNS) server. How many DNS servers can you specify with one command?

\* 6

\* 1

\* 2

\* 4

Correct answer: A

You can only specify six name servers in one command. The syntax is “IP name-server server-address1 [[ server-address2 ]…server-address6]. You must also enable

DNS.

How would you configure one host name that points to two IP addresses?

\* IP host jacob 1.0.0.5 2.0.0.8

\* IP jacob 1.0.0.5 2.0.0.8

\* IP host jacob 1.0.0.5

\* IP host duplicate “all”

Correct answer: A

The correct syntax is IP host name [ TCP-port-number ] address [ address ]….. So, “IP host P1R1 1.0.0.5 2.0.0.8″ is the correct choice. “IP host jacob 1.0.0.5″ only points the host name jacob to one IP address–1.0.0.5.

The following selections show the command prompt and the configuration of the IP network mask. Which two are correct?

\* Router#term IP netmask-format { bitcount | decimal | hexadecimal }

\* Router(config-if)#IP netmask-format { bitcount | decimal | hexadecimal }

\* Router(config-if)#netmask-format { bitcount | decimal | hexadecimal }

\* Router#ip netmask-format { bitcount | decimal | hexadecimal }

Correct answer: A & B

Router#term IP netmask-format { bitcount | decimal | hexadecimal } and Router(config-if)#IP netmask-format { bitcount | decimal | hexadecimal } are correct. You can configure the mask for the current session and you can configure it for a specific line.

When configuring the subnet mask for an IP address, which formats can be used?

\* dotted-decimal.

\* Hexadecimal

\* Bit-count

\* Octal

\* Binary

Correct answer: A, B &C

You are given the following address: 153.50.6.27/25. Determine the subnet mask, address class, subnet address, and broadcast address.

\* 255.255.255.128, B,153.50.6.0, 153.50.6.127

\* 255.255.255.128, C,153.50.6.0, 153.50.6.127

\* 255.255.255.128, C,153.50.6.127, 153.50.6.0

\* 255.255.255.224, C,153.50.6.0, 153.50.6.127

Correct answer: A

You are given the following address: 128.16.32.13/30. Determine the subnet mask, address class, subnet address,

and broadcast address.

\* 255.255.255.252, B,128.16.32.12, 128.16.32.15

\* 255.255.255.252, C,128.16.32.12, 128.16.32.15

\* 255.255.255.252, B,128.16.32.15, 128.16.32.12

\* 255.255.255.248, B,128.16.32.12, 128.16.32.15

Correct answer: A

You are given the following address: 15.16.193.6/21. Determine the subnet mask, address class, subnet address,

and broadcast address.

\* 255.255.248.0, A, 15.16.192.0, 15.16.199.255

\* 255.255.248.0, B, 15.16.192.0, 15.16.199.255

\* 255.255.248.0, A, 15.16.199.255, 14.15.192.0

\* 255.255.242.0, A, 15.16.192.0, 15.16.199.255

Correct answer: A

You have an IP host address of 201.222.5.121 and a subnet mask of 255.255.255.248. What is the broadcast address?

\* 201.222.5.127

\* 201.222.5.120

\* 201.222.5.121

\* 201.222.5.122

Correct answer: A

The easiest way to calculate this is to subtract 255.255.255.248 (subnet mask) from 255.255.255.255, this

equals 7. Convert the address 201.222.5.121 to binary–11001001 11011110 00000101 01111001. Convert the

mask 255.255.255.248 to binary–11111111 11111111 11111111 11111000. AND them together to get: 11001001 11011110

01111000 or 201.222.5.120. 201.222.5.120 is the subnet address, add 7 to this address for 201.222.5.127 or

the broadcast address. 201.222.5.121 through 201.222.5.126 are the valid host addresses.

Given the address 172.16.2.120 and the subnet mask of 255.255.255.0. How many hosts are available?

\* 254

\* 510

\* 126

\* 16,372

Correct answer: A

172.16.2 120 is a standard Class B address with a subnet mask that allows 254 hosts. You are a network administrator and have been assigned the IP address of 201.222.5.0. You need to have 20 subnets with 5 hosts per subnet. The subnet mask is 255.255.255.248.

Which addresses are valid host addresses?

\* 201.222.5.17

\* 201.222.5.18

\* 201.222.5.16

\* 201.222.5.19

\* 201.222.5.31

Correct answer: A,B & D

Subnet addresses in this situation are all in multiples of 8. In this example, 201.222.5.16 is the subnet, 201.22.5.31 is the broadcast address. The rest are valid host IDs on subnet 201.222.5.16.

You are a network administrator and have been assigned the IP address of 201.222.5.0. You need to have 20 subnets with

hosts per subnet. What subnet mask will you use?

\* 255.255.255.248

\* 255.255.255.128

\* 255.255.255.192

\* 255.255.255.240

Correct answer: A

By borrowing 5 bits from the last octet, you can. have 30 subnets. If you borrowed only 4 bits you could only have 14 subnets. The formula is (2 to the power of n)-2. By borrowing 4 bits, you have (2×2x2×2)-2=14. By borrowing 5 bits, you have (2×2x2×2x2)-2=30. To get 20 subnets, you would need to borrow 5 bits so the subnet mask would be 255.255.255.248.

You are given the IP address of 172.16.2.160 with a subnet mask of 255.255.0.0. What is the network address in binary?

\* 10101100 00010000

\* 00000010 10100000

\* 10101100 00000000

\* 11100000 11110000

Correct answer: A

To find the network address, convert the IP address to binary–10101100 000100000 00000010 10100000–then ANDed it with the subnet mask–11111111 11111111 00000000 00000000. The rest is 10101100 00010000 00000000 00000000, which is 172.16.0.0 in decimal.

The first octet rule states that the class of an address can be determined by the numerical value of the first octet.

Which addresses are INCORRECTLY paired with their class?

\* 128 to 191, Class B

\* 192 to 223 Class B

\* 128 to 191, Class C

\* 192 to 223, Class C

Correct answer: B & C

Address classes are: 1 to 126, Class A; 128 to 191, Class B, 192 to 223, Class C; 224 to 239, Class D; and

to 255, Class E. The first octet rule states that the class of an address can be determined by the numerical value of the first octet.

Which addresses are INCORRECTLY paired with their class?

\* 1 to 126, Class A

\* 128 to 191, Class A

\* 1 to 126, Class B

\* 128 to 191, Class B

Correct answer: B & C.

Address classes are: 1 to 126, Class A; 128 to 191, Class B, 192 to 223, Class C; 224 to 239, Class D; and

to 255, Class E. The first octet rule states that the class of an address can be determined by the numerical value of the first octet.

Which addresses are INCORRECTLY paired with their class?

\* 240 - 255, Class D

\* 240 - 255, Class E

\* 224 - 239, Class D

\* 224 - 239, Class E

Correct answer: A & D

Address classes are: 1 to 126, Class A; 128 to 191, Class B, 192 to 223, Class C; 224 to 239, Class D; and 240 to 255, Class E.

Which IP Address Class is INCORRECTLY paired with its range of network numbers?

\* Class A addresses include 192.0.0.0 through 223.255.255.0

\* Class A addresses include 1.0.0.0 through 126.0.0.0

\* Class B addresses include 128.0.0.0 through 191.255.0.0

\* Class C addresses include 192.0.0.0 through 223.255.255.0

\* Class D addresses include 224.0.0.0 through 239.255.255.0

Correct answer: A

Class A addresses include 1.0.0.0 through 126.0.0.0

Class B addresses include 128.0.0.0 through 191.255.0.0

Class C addresses include 192.0.0.0 through 223.255.255.0

Class D addresses include 224.0.0.0 through 239.255.255.0

Which IP Address Class can have 16 million subnets but support 254 hosts?

\* Class C

\* Class A

\* Class B

\* Class D

Correct answer: A

Possible Subnets IP Address Class Possible Hosts

A 16M.

64K B 64K

16M C 254

Which IP Address Class can have 64,000 subnets with 64,000 hosts per subnet?

\* Class B

\* Class A

\* Class C

\* Class D

Correct answer: A

IP Address Class Possible Subnets Possible Hosts

A 16M

64K B 64K

16M C 254