Quiz 1: Networking

1. Which of the following is an example of a class C network address?

A. 10.254.90.135

B. 172.16.98.42

C. 255.255.255.255

D. 192.168.90.131

2. The \_\_\_\_\_\_\_\_\_\_\_\_\_ is used to separate the network ID from the host ID in a

TCP/IP address.

3. How many available network IDs are provided by 12 binary bits?

A. 254

B. 4,094

C. 4,096

D. 65,534

4. Which protocol provides connection-oriented delivery of packets using

sessions?

A. IP

B. ARP

C. TCP

D. UDP

5. By default, SMTP operates on which port?

A. 21

B. 23

C. 25

D. 119

6. The \_\_\_\_\_\_\_\_\_\_\_ protocol provides IP address–to–hardware address

translation.

7. Which command is used to upload a file from the local machine to a remote

FTP server?

A. put

B. cp

C. mv

D. place

8. Which utility allows you to view the domain name of the specified IP address?

A. hostname

B. domainname

C. dnsdomainname

D. host

9. The \_\_\_\_\_\_\_\_\_\_\_\_\_ utility provides information about the path of data

between a local and remote host.

10. Which utility provides contact and name server information about the speci-

fied domain?

A. finger

B. host

C. nameserver

D. whois

11. A Linux machine can provide DHCP configuration information to other hosts

when running which application?

A. dhcpd

B. dhcpcd

C. bootproto

D. dhcp

12. Which utility is used to change the IP address of a network interface?

A. ipconfig

B. ifconfig

C. hostname

D. netstat

13. Which two utilities can be used to view the routing table?

A. netstat

B. traceroute

C. route

D. ifconfig

14. On a Debian system, which file contains the hostname of the local machine?

A. /etc/hosts

B. /etc/HOSTS

C. /etc/hostname

D. /etc/HOSTNAME

15. Which file contains the name servers to be used by the local machine for

hostname resolution?

A. /etc/hosts

B. /etc/resolv.conf

C. /etc/services/

D. /etc/network/interfaces

16. Which of the following is a correct entry in the /etc/hosts file?

A. deedee 10.254.90.135/ip

B. nameserver 10.254.90.131

C. search the-nashes.net

D. 10.254.90.135 deedee.the-nashes.net

17. Chat scripts are used to perform which of the following functions?

A. Specify connection device

B. Configure a PPP connection

C. Establish a PPP connection

D. Specify idle timeout of a PPP connection

18. The pppd application must receive its IP address via DHCP.

A. True

B. False

19. Which of the following is NOT a valid option of the pppd command?

A. reconnect

B. connect

C. disconnect

D. holdoff

20. Which of the following utilities is used to stop a network interface?

A. ifconfig

B. netstat

C. down

D. stop

Answers

1. D. The address 192.168.90.131 is a class C address between the ranges of

192.0.0.0 and 223.0.0.0.

2. subnet mask. The subnet mask is anded with the IP address to provide the

network ID and the host ID.

3. B. There are 4,094 available network IDs provided by 12 bits. The formula for

calculation is 2

4. C. The TCP protocol is connection-oriented, using sessions to provide reliable

transfer of packets.

5. C. By default, SMTP operates on port 25.

6. ARP. ARP provides hardware address–to–IP address mapping and translation.

See the “Address Resolution Protocol” section for more information.

7. A. The put command is used to upload files to an FTP server.

8. D. The host utility allows you to view the host and domain name when an IP

address is entered.

9. traceroute. The traceroute utility displays every hop between the local

and remote hosts.

10. D. The whois utility provides information about the registration, name

servers, and contacts for the specified domain.

11. A. The dhcpd daemon allows a Linux server to provide DHCP information to

clients. See the “DHCP” section for more information.

12. B. The ifconfig utility is used to change the IP address of a network inter-

face. The ipconfig utility is used by Windows-based systems.

13. A and C. The routing table can be viewed using the route command and

using netstat -r. See the “route” and “netstat” sections for more

information.

14. D. Debian systems use the /etc/HOSTNAME file to store the hostname of the

local machine. The /etc/hostname file is used by Red Hat.

15. B. The /etc/resolv.conf file contains the domain search listing and the

name servers to use for hostname resolution.

16. D. Entries in the /etc/hosts file contain an IP address followed by the corre-

sponding hostname. See the “/etc/hosts” section for more information.

17. C. Chat scripts are used to establish a PPP connection; pppd is used to config-

ure the connection.

18. B. pppd can utilize either static or dynamic IP addresses. See the “pppd” sec-

tion for more information.

19. A. reconnect is not a valid option of pppd. 20. A. The ifconfig utility is used to stop a network interface.