TEST PAPER-1

1. Which TCP/IP layer is best represented by the following description?:
User accessed application programs and network services. Examples at this layer would include FTP, telnet, and SMTP.

a. Application Layer
b. Transport Layer
c. Internet Layer
d. Network Interface Layer
e. Hardware Layer

Answer: a

2. Which TCP/IP layer is best represented by the following description?:
Connection-oriented TCP and connectionless UDP data transfer occur here. Flow control, sequencing, and acknowledgements are the means by which this occurs.

a. Application Layer
b. Transport Layer
c. Internet Layer
d. Network Interface Layer
e. Hardware Layer

Answer: b

3. Which TCP/IP layer is best represented by the following description?:
Here data is fragmented, addressed and routed. Also, encapsulation of packets happens at this layer.

a. Application Layer
b. Transport Layer
c. Internet Layer
d. Network Interface Layer
e. Hardware Layer

Answer: c

4. Which TCP/IP layer is best represented by the following description?:
Handles error detection and packet framing. Standards like 802.3 and 802.5 arrange bits into understandable data using fields that describe destination and source addresses, data, and error correction.

a. Application Layer
b. Transport Layer
c. Internet Layer
d. Network Interface Layer
e. Hardware Layer

Answer: d

5. Which TCP/IP layer is best represented by the following description?:
Electrical signals that move raw bits through the ether. Today, twisted pair and fiber optic cabling is the most common transmission medium for network data.

a. Application Layer
b. Transport Layer
c. Internet Layer
d. Network Interface Layer
e. Hardware Layer

Answer: e

6. Which network protocol is best represented by the following description?:
Connection-oriented. The hallmark of this protocol is the acknowledgements between systems that ensure all of the sent data was received. Can operate two-way (full-duplex).

a. TCP
b. UDP
c. IP
d. ICMP
e. IGMP

Answer: a

7. Which network protocol is best represented by the following description?:
Connectionless. Packets traverse the network by themselves when they leave the sender. The receiver and sender do not communicate about the status of the packets. Faster and easier to implement than TCP.

a. TCP
b. UDP
c. IP
d. ICMP
e. IGMP

Answer: b

8. Which network protocol is best represented by the following description?:
Determines a packets path based on the listed destination IP.

a. TCP
b. UDP
c. IP
d. ICMP
e. IGMP

Answer: c

9. Which network protocol is best represented by the following description?:
Communicates system status and error messages using IP datagrams.

a. TCP b. UDP c. IP d. ICMP e. IGMP

Answer: d

10. _____ is the term used to describe the communication between corresponding network layers on source and destination hosts. At each layer, data is encapsulated and passed on to the next layer. From the source, data is encapsulated in the 'downward' direction. At the receiving end, data is passed 'upward' through the layers as it is un-encapsulated.

a. IP
b. ICMP
c. Client-server
d. Peer-to-peer

Answer: d

11. A _____ is a link layer device that connects two or more network segments.

a. bridge
b. repeater
c. router
d. switch
e. gateway

Answer: a

12. A _____ is a simple device that regenerates the signal on a lengthy wire.

a. bridge b. repeater
c. router d. switch
e. gateway

Answer: b

13. A _____ is a device that examines addresses and selects optimal paths.

a. bridge
b. repeater
c. router
d. switch
e. gateway

Answer: c

14. A _____ is a link layer device that dedicates traffic between two senders.

a. bridge
b. repeater
c. router
d. switch
e. gateway

Answer: d

15. A _____ interconnects two disparate networks.

a. bridge
b. repeater
c. router
d. switch
e. gateway

Answer: e

16. What network topology is defined as: one central device, usually a hub, which connects cabling between other machines. The signals they send are shared with every node on the network.

a. bus
b. star
c. ring

Answer: b

17. What network topology is defined as: a central hub with a segment of cable running between it and each client and other network hubs. The advantage is that there are never more than 2 hops between any two nodes.

a. bus
b. star
c. ring

Answer: b

18. What network topology is defined as: each node's output is connected 'serially' to the next node's input. A 'token' must be passed around to allow each device to communicate. Intelligent systems can increase reliability over that of other network topology configurations.

a. bus b. star c. ring
Answer: c

19. A(n) _____ is a 48-bit unique identifier for each network device.

a. IP address
b. Ethernet address
c. host name
d. NVRAM setting

Answer: b

20. The first _____ octets of an ethernet address are vendor-specific.

a. 1
b. 2
c. 3
d. 4

Answer: c

21. 00:10:A4:EB:AD:87 represents a(n) _____.

a. IP address
b. Ethernet address
c. host name
d. NVRAM setting

Answer: b
An Ethernet address is a host's unique hardware address. It is 48 bits long and is displayed as 12 hexadecimal digits (six groups of 2 digits) separated by colons.
For example: 08:00:20:1e:56:7d
Unique Ethernet addresses are administered by IEEE. The first three octets are vendor
specific and are designated by IEEE. Sun systems usually begin with the sequence 8:0:20.

22. The _____ command can get and set network driver configurations.

a. dig
b. prtconf
c. setenv
d. ndd

Answer: d
Example: "ndd /dev/hme adv_100fdx_cap 1"

23. The command "ndd /dev/hme adv_100fdx_cap 1" will accomplish what?

a. It sets the /dev/hme adapters to 100 Mbit full-duplex.
b. It sets the /dev/hme adapters to 100 Mbit half-duplex.
c. It sets the adaptor /dev/hme to 100 Mbit full-duplex.
d. It accomplishes nothing because the command as written does not work.

Answer: a

24. ARP maps a (1) _____ bit IP to a (2) _____ bit MAC (Ethernet) address.

a. (1) 16 (2) 32
b. (1) 32 (2) 64
c. (1) 32 (2) 48
d. (1) 48 (2) 32

Answer: c

25. A collision rate for a host is calculated as:

a. The number of input collisions divided by the number of input packets.
b. The number of output collisions divided by the number of output packets.
c. The number of output collisions divided by the number of input collisions.
d. The number of output collisions divided by the number of input packets.

Answer: b
The collision rate is defined as output collisions divided by total output packets multiplied by 100. Here is an example :
73176 / 1590861 * 100 = 4.6 percent collision rate.

Collision rates higher than 5 percent on a 10 Mbps Ethernet network are considered to be the first indication of network loading. Collision rates higher than 10 percent signify an overloaded network that should be considered for segmentation.

26. The command _____ will show the IPv4 ARP table:

a. netstat -a
b. netstat -arp
c. ifconfig -a
d. arp -a
e. arp -d

Answer: d

27. During initialization, the startup script /etc/rcS.d/S30network.sh looks for the file _____ to contain the correct information about the host's IP addresses so that it can configure the interface.

a. /etc/hostname.hme0
b. /etc/hostname/hme
c. /etc/hme0
d. /etc/hme

Answer: a

28. Each IP datagram is limited to a certain number of bytes, the _____, by the transmission medium it crosses.

a. MAXLIMIT
b. TCP_SEND_SZ
c. MTU
d. BYTELM

Answer: c

29. _____ occurs when data must fit into multiple Ethernet frames.

a. Separation
b. Discarding
c. Fragmentation
d. Collision

Answer: c

30. The _____ is a reserved address that will relay any packets it receives to every host on the network segment. Hosts are grouped on similar subnets using a netmask.

a. netmask
b. ethernet address
c. loopback
d. broadcast address

Answer: d

31. The _____ is used in a logical AND operation with a destination IP to determine if a router must assist with the resolution and routing.

a. netmask
b. ethernet address
c. loopback
d. broadcast address

Answer: a

32. CIDR is _____.

a. similar to TCP
b. a routing protocol
c. fragmenting
d. classless

Answer: d

33. The Value: 10.2.48.130/26 would indicate a host address on network with subnet mask _____.

a. 255.255.255.0
b. 255.255.255.64
c. 255.255.255.192
d. 255.255.255.252

Answer: c

34. The file _____ is used to store netmask information.

a. /etc/netmasks
b. /etc/inet/netmasks
c. /etc/hosts
d. /etc/inet/hme0

Answer: b

35. An interface is enabled using the command: ifconfig hme0 _____.

a. unplumb
b. up
c. enable
d. plumb

Answer: d

36. An interface is disabled using the command: ifconfig hme0 _____.

a. unplumb
b. up
c. enable
d. plumb

Answer: a

37. Solaris handles dynamic routing using _____ or _____ protocols.

a. BGP
b. RIP
c. ICMP
d. RDISC

Answer: b,d

38. The daemons that implement routing protocols in Solaris are _____ and _____.

a. in.routing
b. in.routed
c. in.bgp
d. in.rdisc
e. in.icmp

Answer: b,d

39. _____ is the script that checks for the existence of certain files in order to make decisions on how to start routing daemons.

a. /etc/defaultrouter
b. /etc/init.d/inetinit
c. /etc/init.d/gateways
d. /etc/system

Answer: b

40. If the _____ file is found, the system creates static routes in the route table and prevents the starting of in.routed or in.rdisc.

a. /etc/defaultrouter
b. /etc/init.d/inetinit
c. /etc/init.d/gateways
d. /etc/system

Answer: a

41. If there are two IP addresses, or entries in the /etc/gateways file, _____ is enabled and the in.routed (RIP) or in.rdisc (RDISC) processes start.

a. ip_fw
b. ip_forwarding
c. IP_FWD
d. no_ip_forwarding

Answer: b

42. _____ is a file that contains hostname or IP addresses of one or more routes on the network.

a. /etc/defaultrouter
b. /etc/inet/networks
c. /etc/gateways
d. /etc/hosts

Answer: a

43. _____ is a file similar to hosts, that assigns names to network numbers.

a. /etc/defaultrouter
b. /etc/inet/networks
c. /etc/gateways
d. /etc/hosts

Answer: b

44. _____ is an optional file that defines additional passive routes alongside the default routes. Read by in.routed.

a. /etc/defaultrouter
b. /etc/inet/networks
c. /etc/gateways
d. /etc/hosts

Answer: c

45. The following is an example of the output of what command?

<img src="../Samples/Samples/netstat.gif">

a. netstat -a
b. netstat -ri
c. netstat -rn
d. ifconfig -a

Answer: c

46. The _____ command may be used to add or remove routes from the routing table.

a. netstat
b. rdisc
c. rip
d. route

Answer: d
Syntax: route [-fn] add|delete [host|net] destination [gateway [metric]]

47. Connection-oriented protocols are implemented using _____.

a. UDP
b. TCP
c. IP
d. ICMP

Answer: b

48. Connectionless protocols are implemented using _____.

a. UDP
b. TCP
c. IP
d. ICMP

Answer: a

49. _____ means that the client and server communicate about the information they send and the quality of the data they receive.

a. Connection-oriented
b. Stateful
c. Stateless
d. Connectionless

Answer: b

50. _____ means that no communication about the quality of the data sent or received occurs, and the client and server operate independent of each other or the current network condition.

a. Connection-oriented
b. Stateful
c. Stateless
d. Connectionless

Answer: c

51. A _____ is a virtual address that the kernel associates with any service it provides.

a. service number
b. port number
c. RPC registration
d. IP address

Answer: b

52. A daemon running on the server, _____, listens for incoming requests, and then contacts the program responsible for the service and instructs it to respond.

a. daemond
b. init
c. inetd
d. netstat

Answer: c

53. (1) _____ needing information establish a connection to a known (2) _____ on a server.

a. (1) Clients (2) application
b. (1) Ports (2) client
c. (1) Clients (2) service
d. (1) Services (2) client

Answer: c

54. _____ is started by the script /etc/init.d/inetsvc.

a. init
b. netstat
c. inetd
d. ftpd

Answer: c

55. The inet configuration file is _____.

a. /etc/inetd.conf
b. /etc/inet/inetd.conf
c. /etc/init.d/inetsvc
d. /etc/networks/inetd.conf

Answer: b

56. The following is an example of the contents of what file?

ftp-data   20/tcp
ftp   21/tcp
telnet   23/tcp
smtp   25/tcp
pop3   110/tcp

a. /etc/hosts
b. /etc/system
c. /etc/services
d. /etc/bootparams

Answer: c

57. _____ services are a service / port numbering scheme that eliminate the dedicated port requirements of inetd.

a. NFS
b. DNS
c. DHCP
d. RPC

Answer: d

58. RPC services are registered by the _____ process.

a. rpcmake
b. rpcinit
c. rpcinfo
d. rpcbind

Answer: d

59. True or false: Some RPC services are started at boot time, others only at client request.

a. True
b. False

Answer: a

60. The command _____ may be used to monitor and manipulate the activities of RPC.

a. rpcbind
b. rpcmake
c. rpcinfo
d. rpcmv

Answer: c

TEST-II
This test covers: DHCP, DNS, Routing, Network Troubleshooting, and general network exam topics.
Degree of Difficulty: Moderate

TEST PAPER 2

1. In the Sun TCP/IP model, the layer responsible for name resolution is:

a. Network b. Application
c. Transport d. Internet

Answer: d

2. A frame greater than the MTU is known as:

a. runt
b. overhead
c. jabber
d. fragment

Answer: c

3. Which command is used to print the "dhcp_network" file?

a. dhtadm -P
b. pntadm -P
c. pntadm --print
d. dhtadm -p
e. dhtadm --print

Answer: b

4. Which OSI layer is responsible of re-establishing interrupted connections?

a. Transport b. Presentation
c. Network d. Datalink
e. Application f. Session

Answer: f
Session layer controls the interruptions in connections and if exist, they are re-established.

5. Which of the following is a correct way of adding a new network route?

a. route add net 192.168.2.0 192.168.1.1.1
b. route add -n 192.168.2.0 192.168.1.1
c. route add 192.168.2.0/24 192.168.1.1
d. route add -net 192.168.2.0 192.168.1.1

Answer: a
With route command you issue an "add" option, in order to describe the destination as a network you add "net" argument and then the destination network; the gateway.

6. Changing /etc/nsswitch.conf can effect the behavior of which command?

a. /usr/sbin/ifconfig
b. /sbin/ifconfig

Answer: a
Be aware that there are two ifconfig commands. The two versions
differ in how they use name services. The /sbin/ifconfig is called
by the /etc/rc2.d/S30sysid.net startup script. This version is not
affected by the configuration of the /etc/nsswitch.conf file.
The /usr/sbin/ifconfig is called by the /etc/rc2.d/S69inet and
the /etc/rc2.d/S72inetsvc startup scripts. This version of the
ifconfig command is affected by the name service settings in the
/etc/nsswitch.conf file.

7. What is dynamic routing?

a. localhost contains a list that defines the available devices to forward packets
b. route forwarding to other devices is defined explicity until next reboot
c. there is an entry that defines to route all the traffic
d. routes and clients listen to broadcasts and try to determine the best paths
e. None of the above

Answer: e

8. What is a valid statement about a "port"?

a. Solaris does not use ports but sockets
b. There may be ports without associated processes
c. It is an upper-layer process
d. Every process need a port for proper functioning

Answer: c

9. The Command "netstat -i" displays the collisions and errors

a. True
b. False

Answer: a

10. True or False: In order to have name resolution applied in "netstat" outputs, you need "-n" option.

a. True
b. False

Answer: b
netstat's -n option displays the results in IP address not using name resolution.

11. A Class C network with 8 subnets - You want to use largest number of effective hosts per network. Which subnet mask do you use?

a. 255.255.255.240
b. 255.255.255.248
c. 255.255.255.252
d. 255.255.255.224
e. 255.255.255.192

Answer: a

12. What will happen, if you put an entry as "nameserver 0.0.0.0" in /etc/resolv.conf?

a. DNS queries will fail
b. The local subnet will be queried for a Domain Name Server first
c. This line identifies the server itself
d. Nothing, it will just skip that line

Answer: c

13. Which services use UDP?

a. name b. bootpc
c. netstat d. biff
e. imap

Answer: a,b,d

14. Which of the following are link layer devices?

a. Hubs b. Routers
c. Gateways d. Bridges
e. Switches

Answer: d,e

15. Which command creates a "dhcp_network" file?

a. pntadmn -C
b. pntadm -c
c. dhcpadm -C
d. dhtadm -C
e. dhtadm -c

Answer: a

16. What is the hop-count limit of RIP?

a. 15
b. 10
c. 8
d. 16

Answer: a

17. Which netstat option displays a similar outpout to "arp -a"?

a. -l
b. -n
c. -nr
d. -p
e. -r

Answer: d

18. Which file contains private "mail aliases" of a user?

a. .maliases
b. /etc/mail/aliases
c. .forward
d. .mailrc

Answer: d

19. Which process looks for /etc/gateways?

a. in.routed
b. inetd
c. S72routed
d. in.gated

Answer: a

20. Looking at the "snoop" output below, which is/are not true?

"host1.acme.com ---> host2.acme.com DNS R
57.184.12.64.in-addr.arpa. Internet PTR
ads.web.aol.com"

a. This is a lookup for ads.web.aol.com
b. This is a reverse lookup request
c. Host1 looks up for 57.184.12.64
d. This is a request from host1 to host2
e. This is a reverse lookup by host2.acme.com

Answer: a,c,d

21. A broadcast has a destination address of

a. All Zeros
b. All Ones
c. Zeros for the bits representing the network and ones for rest
d. Ones for the bits representing the network and zeros for rest
e. None of the above

Answer: b
A broadcast address is 255.255.255.255

22. ifconfig output "ffff0000" corresponds to?

a. 255.255.255.0
b. 255.255.0.0
c. 255.255.255.255
d. 255.0.0.0

Answer: b

23. Which startup option will cause in.routed to act as a router?

a. -R
b. -r
c. -q
d. -g
e. -s
f. -q

Answer: e

24. In a "snoop" output, what can be found together with "ARP R" string?

a. broadcast
b. A MAC address in xx:xx:xx:xx:xx:xx form
c. ?
d. who is xxx.xxx.xxx.xxx

Answer: b
First goes an ARP C asking for who is xxx.xxx.xxx.xxx? And reply comes in ARP R desired_IP, responding host's IP and the desired MAC address.

25. If you subnet a Class C network with subnet mask 255.255.255.252, how many effective subnets do you get?

a. 30
b. 2
c. 14
d. 6
e. 62

Answer: e

26. Sun's TCP/IP Network Model Application Layer is a combined form of which 3 OSI layers?

a. Session
b. Transport
c. Application
d. Data Link
e. Presentation
f. Network

Answer: a,c,e

27. If the NIC (considering devic name as hme0) is operating at 100Mbps, what would be the output of "ndd /dev/hme link_speed" command?

a. high
b. 1
c. 100
d. 0

Answer: b

28. Which protocol is responsible for fragmenting data?

a. UDP
b. ARP
c. IP
d. ICMP
e. TCP

Answer: c

29. Which scripts starts "in.rdisc"?

a. S99rdisc
b. S72inetvc
c. S68inet
d. S71inetsvc

Answer: c

30. Which of the following prevents in.routed or in.rdisc from starting?

a. /etc/defaultrouter exists and not empty
b. System is configured for DHCP
c. /etc/notrouter exists
d. /etc/gateway exists

Answer: a

31. Largest amount of data that can be transmitted within a packet is called?

a. MTU
b. a payload
c. a runt
d. MSS
e. CSMA/CD
f. a jabber

Answer: a

32. Your network ID is 201.11.10.0 with 8 subnets. You want to use largest number of hosts per network. Which subnet mask do you use?

a. 255.255.255.192
b. 255.255.255.248
c. 255.255.255.224
d. 255.255.255.252
e. 255.255.255.240

Answer: e

33. What does "@" mean in a DNS configuration file?

a. Comment
b. Continuation of line
c. used for e-mail address of SOA administrator
d. zone or origin

Answer: d

34. Which is a pseudo device driver that provides an interface between ipd and ipdptp and link manager?

a. none
b. /dev/ipdptp
c. /dev/ipdcm
d. /dev/ipd

Answer: c

35. Which of the following is among the benefits of a LAN by Management point-of-view?

a. Resource Accessibility
b. Workgroup Sharing
c. Centralized Clients
d. Centralized Resources

Answer: d

36. Looking at the following command and results, which is true?

host1# ping 10.12.10.1
ICMP Net Unreachable from gatewat host1
(192.168.1.10) for icmp from host1 (192.168.1.10)

a. Default gateway is not defined
b. ICMP is not allowed at the network
c. NIC is down
d. NIC is not configured properly

Answer: a,c

37. Which file is used by the runtime daemon and administrative utilities to determine which name service to contact?

a. /etc/dhcpconfig
b. /etc/dhcp/default
c. /etc/dhcp.config
d. /etc/default/dhcp

Answer: d

38. What file is shown below?

<img src="../Samples/Samples/networks.gif">

a. /etc/defaultrouter
b. /etc/netmasks
c. /etc/inet/hosts
d. /etc/inet/networks

Answer: d
The purpose of /etc/inet/networks file is to associate a network name to a network number. It looks similar to /etc/inet/hosts, except for the IP address has only 3 octets; identifying the network number.

39. Which is not included in "sendmail.cf"?

a. Rule Sets
b. MDA Listing
c. Options
d. Macros
e. Aliases

Answer: e

40. Which holds priority in the routing algorithm?

a. Query is sent to default router
b. Routing table is checked for Network Number
c. The destination is checked for existence in the local LAN
d. Routing table is checked for IP number

Answer: c

41. What is the size of "preamble"?

a. 64 bits
b. 32 bits
c. 16 bits
d. 128 bits

Answer: a

42. What is a ONC+?

a. Solaris Open Source Windows Manager
b. Sun Microsystem's distributed services
c. Built-in Network Administration Tool
d. A name service very close to FNS

Answer: b

43. Which of the following are Distance Vector Protocols?

a. RIP
b. IS-IS
c. IGRP
d. OSPF

Answer: a,c

44. In order to see all RPC services running on a host, one can issue:

a. rpcinfo -u <server>
b. rpcinfo -p <server>
c. rpcinfo -a <server>
d. netat -a

Answer: b

45. Which command is used to manipulate NIS+ aliases maps?

a. aliasadm
b. nisbladm
c. nisaliases
d. nispladm

Answer: a

46. In order to "enable" an interface (open it with streams), which parameter is passed with "ifconfig"?

a. enable
b. active
c. start
d. plumb

Answer: d

47. In order to troubleshoot DHCP, which command is appropriate?

a. snoop -o /tmp/dhcplog DHCPACK
b. snoop -o /tmp/dhcpsnoop dhcp dhcp
c. snoop -o /tmp/dhcplog
d. snoop -d /tmp/dhcplog

Answer: b

48. Which are not valid class types for DNS resource records?

a. ZONE
b. MKS
c. TST
d. ACL
e. SOA

Answer: a,b,d

49. Which file is used to determine network number and host number for a given IP?

a. /etc/inet/netmasks
b. /etc/hosts
c. /etc/inet/networks
d. /etc/iptable

Answer: a

50. dhcptab is managed by:

a. dhtadm
b. pntadm
c. dtadm
d. dhcpadm

Answer: a

51. In order to turn on TCP connection-tracing in inetd, which parameter is used?

a. -r
b. -c
c. -t
d. -d
e. -s

Answer: c

52. What is the term used for a LAN component that describes a device that serves as the center of a star-topology network?

a. Gateway
b. Concentrator
c. Hub
d. Repeater
e. Switch

Answer: c

53. The method of sending a collision signal to put nodes into a wait mode is known as:

a. back-off
b. back-out
c. token
d. back-alert
e. alert

Answer: a

54. How is lease negotiation performed by DHCP?

a. None
b. By dhcp_negotiate command
c. By static timeouts
d. By LeaseNeg Variable

Answer: d

55. Which of the following statements is/are not true about RPC?

a. Can be used with TCP
b. Ensures transport quality
c. RPC services use port 111
d. Can be used with UDP

Answer: b

56. What is the class reserved for multicasting?

a. A b. B c. C d. D

Answer: d

57. What does a "!" mean in "traceroute" output?

a. The TTL value in received packet is <= 1
b. There is no response within 5 sec
c. The TTL value in received packet is <= 60

Answer: a

58. Which command clears the routing table?

a. route -f -f
b. route flush
c. route delete
d. route clear

Answer: b

59. In order to trace domain name lookups, which option should be passed to in.named?

a. –q b. –d c. –a d. -t

Answer: a

60. Which RPC options provide statistics?

a. –a b. –m c. –s d. -p

Answer: b,c

TEST PAPER 3

This test covers mainly SNMP, network troubleshooting, DNS, and DHCP.
Degree of Difficulty: Hard

1. If the received packet is less than 46 bytes, the packet is too short and discarded. What is this known as?

a. Snoops
b. Jabbers
c. Runts
d. Bad CRC

Answer: c

2. True or False: IPv6 uses a 128-bit address scheme as defined in RFC 2460.

a. True
b. False

Answer: a

3. Why is overall network performance adversely affected by a high number of broadcast messages?

a. Because the broadcase messages are too large for the network to handle
b. Because of the number of users on the network
c. Because every computer on the network doesn't know what to do with the broadcast messages
d. Because every computer on the network must process each broadcast message

Answer: d

4. You test your RG-58A/U (10Base2) cable and get the following resistance readings:

Cable = 0 to infinity
T-connector = infinity
Terminator = 50

What do you need to do?

a. Check the tester
b. Replace the network card
c. Replace the terminator
d. Replace the cable

Answer: d

5. True or False: A RARP request is a broadcast packet that is generated by a booting diskless client.

a. True b. False

Answer: b

6. What device works at the MAC sub-layer of Data Link layer of the OSI Model?

a. Bridge b. Repeater
c. Multiplexer d. Switch

Answer: a

7. A transport protocol does what?

a. How the information is transported from on adapter to another
b. Translates system names into addresses. Responsible for addressing, determining routes for sending, managing network traffic items, packet switching,routing, data congestion, and reassembling data.
c. It defines how data should be presented to the next receiving layer, packages the data accordingly, and then passes data to the application through the session layer interface
d. It passes the data to the application

Answer: c

8. All computers on one segment of the network are having problems communicating. You suspect that it is caused by a broadcast storm. You have determined that it is not a hardware problem. What is your first action to resolve the problem?

a. Time-Domain Reflectors (TDRs)
b. Oscillosope
c. Digital Volt Meters (DVM)
d. Use a Network/Protocol analyzer to determine the source of the storm

Answer: d

9. DNS servers consist of?

a. Primary Servers
b. Caching only Server
c. Second Primary Servers
d. Forwarding Servers
e. Secondary Servers

Answer: a,b,d,e

10. Kevin has been assigned a registered class C network address of 193.43.9.0. Six subnets are required. He wants to use the same subnet mask for each router's local interface. Which subnet mask should he use to maximize the number of available nodes at each site?

a. 255.255.255.252
b. 255.255.255.248
c. 255.255.255.254
d. 255.255.248.0

Answer: c

11. If you measure a thinnet cable via the T connector, what reading should you get?

a. 25 ohms
b. 50 ohms
c. 75 ohms
d. 100 ohms

Answer: a

12. Sun systems would recognize 128.50.0.0 as?

a. Nothing
b. An IP broadcast address
c. An ethernet translation address
d. A class C address
e. A valid host address

Answer: b

13. You are using an ohmmeter to measure the resistance on a coax cable. You receive a reading of 75 ohms. What should you do?

a. Change the terminator
b. Change the T connector
c. Change the cable
d. Change all the cables

Answer: a

14. By default, each IP address managed by DHCP has a lease time of _____.

a. 24 hours
b. 10 hours
c. 2 days
d. 3 days

Answer: d

15. The following are utilities that can be used to query NTP:

a. xntpdc
b. who
c. pers
d. ntpq
e. ntpwhich

Answer: a,d

16. To help manage your network by checking hubs, routers and bridges, what type of software would you use?

a. RIP
b. Network Analyzer
c. Protocol Analyzer
d. SNMP

Answer: d
SNMP is an open protocol used to read information from and manage network devices.

17. SNMP is used to:

a. Provide network management information
b. Transfer mail
c. Carry ICMP error messages
d. Manage Multiple routing protocols

Answer: a

18. What network transport does SNMP use?

a. IP UDP
b. TCP/IP
c. IP
d. ICMP

Answer: a

19. Select the invalid workstation IP Address:

a. 205.111.256.1
b. 255.200.200.200
c. 127.66.79.111
d. 194.200.50.111

Answer: a,c
256 is invalid and 127.x.x.x is reserved for loopback.

20. An ethernet fragment is a _____ frame.

a. retransmitted
b. damaged
c. broadcast
d. network

Answer: b

21. True or False: On Sun systems, by default, the Ethernet address is read from PROM's (read only memory) in the system hardware.

a. True b. False

Answer: a

22. What is IP responsible for?

a. Assisting routing and bridging
b. fragmenting and routing data
c. establishing a connection-oriented circuit
d. performing error detection and correction

Answer: b

23. Which files are required for DNS client-side configuration?

a. /etc/named.boot b. /etc/resolv.conf
c. /etc/hosts d. /etc/nsswitch.conf
e. /etc/named.conf

Answer: b,d

24. A Router works at what OSI level?

a. Data Link Layer b. Network Layer
c. Application Layer d. Session Layer

Answer: b

25. Which portion of IP address configuration determines a computer's network?

a. DNS configuration
b. Binding
c. Gateway
d. Subnet Mask

Answer:d

26. Which command shows if a specific server is running on a host?

a. rpcinfo -p server
b. rpcinfo -u server process
c. rpcinfo -b process
d. rpcinfo -d

Answer: b
The command "rpcinfo -b process" will broadcast to the network. However, note, the question asked about a specific host.

27. The DHCP configuration file that allows administrators to tune some RFC parameters is?

a. /etc/default/dhcp.conf
b. /etc/default/dhcpagent
c. /etc/default/dhcp_inittab

Answer: b

28. The file dhcptab contains _____.

a. the lease information for every DHCP client
b. RFC tunable parameters
c. the macro table used for DHCP clients
d. nothing, if the DHCP server is in use

Answer: c

29. _____ creates a dhcptab file.

a. dhtadm –C b. dhtadm -create
c. pntadm –c d. rpcinfo -d

Answer: a

30. _____ prints the dhcp_network file.

a. dhtadm –P b. pntadm -P
c. rpcinfo –P d. dhcpmgr -P

Answer: b

31. Solaris includes a GUI program called _____ which is a graphical interface to the older dhcpconfig program.

a. dhtadm b. pntadm
c. dhcpagent d. dhcpmgr

Answer: d

32. Which of the following commands will setup a DHCP client on interface hme0?

a. netstat hme0 -dhcp
b. ifconfig hme0 DHCP
c. touch /etc/dhcp.hme0
d. dhcpmgr hme0 -dhcp

Answer: b,c

33. Which of the following commands will start DHCP in troubleshooting mode?

a. /sbin/dhcpagent -d3
b. /sbin/dhcpagent -debug
c. /usr/sadm/admin/bin/dhcpmgr -d3
d. /usr/sadm/admin/bin/dhcpmgr -debug

Answer: a

34. Which of the following is NOT a standard SNMP call?

a. get b. set
c. trap d. put

Answer: d

35. The following defines which type of SNMP call? Management consoles will poll all of their SNMP-managed devices in the field to obtain status information. The _____ update a graphic or table.

a. puts b. sets
c. gets d. traps

Answer: c

36. The following defines which type of SNMP call? When a managed device has a failure or needs to communicate with the management station, it sends a _____.

a. put b. set
c. get d. trap

Answer: d

37. SNMP obects are stored in a(n) _____.

a. SMI b. OBJ
c. MIB d. ASN

Answer: c

38. In Solaris, the first source checked for name resolution is _____.

a. /etc/hosts
b. /etc/nsswitch.conf
c. DNS server
d. NIS server

Answer: b
The file nsswitch.conf tells the system the order and type of name resolution to be used.

39. A(n) _____ DNS request is one that must be satisfied by a nameserver. When a resolver sends this type of request, the queried nameserver is obliged to return a valid **answer**. It can't just turn the query to another name server.

a. iterative b. definite
c. recursive d. implied

Answer: c
Queries come in two flavors, recursive and iterative, also called nonrecursive. Recursive queries place most of the burden of resolution on a single name server. Recursion, or recursive resolution, is just a name for the resolution process used by a name server when it receives recursive queries. In recursion a resolver sends a recursive query to a name server for information about a particular domain name. The queried name server is then obliged to respond with the requested data or with an error stating that data of the requested type don't exist or that the domain name specified doesn't exist. The name server can't just refer the querier to a different name server, because the query was recursive

40. A(n) _____ DNS request attempts to locate a server that has the best information. When a resolver sends this type of request, the queried nameserver returns its best **answer**, which may be from its non-authoritative cache or the name of a server it believes may have more information.

a. iterative b. definite
c. recursive d. implied

Answer: a
Iteration, or iterative resolution, refers to the resolution process used by a name server when it receives iterative queries. In iterative resolution, a name server simply gives the best **answer** it already knows back to the querier. No additional querying is required. The queried name server consults its local data (including its cache, which we're about to talk about), looking for the data requested. If it doesn't find the data there, it makes its best attempt to give the querier data that will help it continue the resolution process. Usually these are the domain names and addresses of the closest known name servers.

41. Entries in the name server database are called _____.

a. time to live
b. resource records
c. classes
d. record types

Answer: b

42. Given the below /var/named/domain-info example:

What would be the FQDN for a host called "rhino" on the domain?

a. rhino.horse.zoo.edu.
b. rhino.zoo.edu.
c. rhino.zoo.edu
d. This cannot be determined

Answer: b
Most host names in the /var/named/domain-info file are not fully qualified. Those that are not, have the domain name origin (the value of the @ in the SOA record by default) appended to them. Also, remember that
a FQDN ends in a period.

43. In DNS configuration, _____ represents aliases for a host name.

a. TTL b. SOA
c. NS d. CNAME

Answer: d

44. In DNS configuration, _____ records IP to hostname information.

a. A b. PTR
c. MX d. NS

Answer: b

45. In DNS configuration, _____ records hostname to IP address information.

a. A b. PTR
c. MX d. NS

Answer: a

46. The main configuration file for DNS is _____.

a. /etc/nsswitch.dns
b. /etc/resolv.conf
c. /etc/named.conf
d. /etc/dns.zone

Answer: c

47. The file that specifies the manner and servers to resolve DNS queries is _____.

a. /etc/nsswitch.dns
b. /etc/resolv.conf
c. /etc/named.conf
d. /etc/dns.zone

Answer: b

48. The following is an example of the contents of what file?

search subdomain.mydomain.com mydomain.com
nameserver 10.10.15.31
nameserver 10.1.15.10

a. /etc/system
b. /etc/resolv.conf
c. /etc/named.conf
d. /etc/dns.zone

Answer: b

49. Solaris supports a maximum of _____ name server entries in resolv.conf.

a. 1 b. 2 c. 3 d. 4

Answer: c

50. The main configuration file for NTP is _____.

a. /etc/ntp.conf b. /etc/inet/ntp.conf
c. /etc/ntpconf.inf d. /etc/inet/ntpsys.conf

Answer: b

51. In an NTP environment, a drift file, _____, should exist.

a. /var/adm/ntp.drift
b. /var/ntp/drift
c. /etc/inet/ntp.drift
d. /tmp/ntp.drift

Answer: c

52. What 2 commands will yeild the following output below?

a. arp –a b. ifconfig -a
c. netstat –pn d. ifconfig -pn

Answer: a,c

53. The _____ command may be used to view the content of network traffic for troubleshooting purposes.

a. ifconfig b. ping
c. arp d. ndd
e. snoop

Answer: e

54. Which of the following best defines window advertisement (or the sliding window principle)?

a. The sliding window size is adjusted according to the number of lost packets.
b. Before transmission can start, both the sending and receiving applications must have open windows.
c. A slow-start process increases the congestion window size by one segment each time an ACK is received.
d. The receiving host informs the sending host of how much data it is prepared to receive.

Answer: d

55. Which connector type is used to connect Thinnet to a NIC?

a. AUI
b. BNC T
c. RJ-45
d. BNC Barrel

Answer: b

56. You need to connect 2 network segements that are 1,000 meters apart. Which of the following cable types can transmit data over 1,000 meters without using a repeater?

a. Fiber Optic b. RG-58 A/U
c. Cat5 UTP d. Cat3 UTP

Answer: a

57. To send a message from a Unix user to a VMS user, you use a _____.

a. Mail host b. Mail server
c. Gateway d. Relay host

Answer: c

58. True or False: The Solaris 8 environment considers any machine with mutiple network interfaces to be a router.

a. True b. False

Answer: a
This is true. You can also change a router into a multihomed host.

59. You run a 10Base5 network that has 3 segments, each separated by a repeater. The trunk ends are terminated by 50-ohm terminators, and there are 6 in all. How many terminators should be grounded?

a. none b. two
c. three d. six

Answer: c

60. Which of the following cable types can span distances greater than 100 meters, but not more than 185 meters?

a. 10BaseT b. 10Base2
c. 10Base5 d. Fiber Optic

Answer: b

TEST PAPER 4

This test focuses on *DHCP, DNS, *SNMP, NTP, and *IPv6
Degree of Difficulty: Very Hard

1. The allocation of an IP address by a DHCP server is based on:

a. Hostname
b. Hardware address of the ethernet card
c. Physical connection to a particular subnet
d. host ID

Answer: b,c
Answers "a" and "d" are incorrect, but can be used to form a client identification string which would be a correct **answer**.

2. True or False: IPv6 systems configure their IP addresses automatically.

a. True b. False

Answer: a

3. Which file must exist on a client that wishes to use DHCP on an ethernet interface?

a. /etc/dhcp.ge0 b. /etc/dhcp.hme0
c. /etc/hme0.dhcp d. /etc/ge0.dhcp

Answer: b

4. DHCP options are stored in the DHCP information repository that is located in the _____ file.

a. /etc/dhcp/inittab
b. /etc/dhcp/dhcptab
c. /var/dhcp/dhcptab
d. /var/dhcp/dhcp_network

Answer: a

5. The DHCP client uses _____ to supply addition parameters to system/application level software.

a. dhcpagent b. dhcpinfo
c. dhcpack d. dhcpconfig

Answer: b

6. True or False: Multiple primary DHCP servers cannot exist on the same network.

a. true b. false

Answer: b
Multiple primary servers can exist on the same network as long as each is responsible for a different IP range.

7. Which file below would be used to map a DHCP client ID to an IP address and the associated configuration parameters of that address?

a. /etc/dhcp/inittab
b. /var/dhcp/dhcptab
c. /var/dhcp/128_16_30_0
d. /etc/dhcp/config

Answer: c
This is an example of the dhcp_network database for a system with a network IP of 128.16.30.0
The file name is based on information from the /etc/netmasks file of the system.

8. What is true about the below /var/dhcp/dhcp_network file?

a. The address is not in use
b. The address lease is permanent
c. The address is in use
d. The address lease is dynamic

Answer: a,d

9. What file would you expect to find the below entry?
Some IMAGE here

a. /var/dhcp/dhcp_network
b. /etc/dhcp/inittab
c. /var/dhcp/dhcptab
d. /etc/dhcp/dhcp.conf

Answer: c

10. What is true about the below /var/dhcp/dhcp_network file?

<img src="../Samples/Samples/dhcp_network2.gif">

a. The address is in use
b. The address lease is permanent
c. The address is not in use
d. The address lease is dynamic

Answer: a,b

11. A _____ enables network administrators to define vendor- and site-specific options in the dhcptab file.

a. symbol b. macro
c. code d. ID

Answer: a

12. Which option would be used to imbed a macro into another macro within the dhcptab file?

a. Imbed b. Add
c. Include d. This cannot be done

Answer: c

13. Which utilities can be used to configure the DHCP server service?

a. dhcpmgr b. vi
c. pntadm d. dhcpconfig
e. dhtadm

Answer: a,d
dhcpconfig is a korn shell front end to the DHCP table administration utilities pntadm and dhtadm. It supports and configures DHCP server services.
The dhcpmgr is a GUI that functions as the dhcpconfig, dhtadm, and pntadm command line utilities.

14. Which software packages must be installed on a machine to configure it as a DHCP server?

a. SUNWdhcsu
b. SUNWdhcp
c. SUNWdhcpserv
d. SUNWdhcsr

Answer: a,d

15. Network management stations often poll managed devices and perform an SNMP _____ in order to update a graphic display.

a. set b. get
c. query d. trap

Answer: b

16. Which file would you search to find what port numbers are being used by DHCP services?

a. /etc/dhcp/dhcptab b. /etc/dhcp/inittab
c. /etc/rpc d. /etc/services

Answer: d

17. A(n) _____ is often used by network devices to report on network link failures or device reboots.

a. trap b. email
c. poll d. set

Answer: a

18. What file is this an example of?

<img src="../Samples/Samples/named.root.gif">

a. /etc/named.boot
b. /etc/resolv.conf
c. /var/named/named.root
d. /etc/nsswitch.conf
e. /etc/named.conf

Answer: c

19. Which of the following are examples of SNMP-based management applications?

a. Sun Management Center
b. HP OpenView
c. Solstice Site Manager
d. Solstice DiskSuite
e. Microsoft Outlook

Answer: a,b,c

20. True or False: A stratum-1 time server is less accurate than a stratum-10 time server.

a. True b. False

Answer: b

21. What is the purpose of the SOA resource record?

a. To define an alias host name
b. To identify who has authoritative responsibility for the domain
c. To specify hosts who are configured to receive mail sent to the domain
d. To relate an IP address with a host name

Answer: b

22. What is the purpose of the "nameserver" keyword in the /etc/resolv.conf file?

a. To specify the DHCP servers to query by IP address
b. To specify domain names to append to names which were not specified in FQDN format and what order to append them
c. To specify the DNS servers to query by IP address
d. To specify the DNS servers to query by host name

Answer: c

23. What file is this an example of?

<img src="../Samples/Samples/named.conf.gif">

a. /etc/named.boot b. /etc/resolv.conf
c. /etc/hosts d. /etc/nsswitch.conf
e. /etc/named.conf

Answer: e

24. The daemon that starts NTP is _____.

a. /etc/init.d/xntpd b. /etc/init.d/ntp
c. /etc/init.d/Sxntpd

Answer: a

25. True or False: The below macro definition has another macro imbedded within it.

<img src="../Samples/Samples/macro.gif">

a. True
b. False

Answer: a
This is true because of the "Include=SUNW" statement

26. What file determines whether a system will start as an NTP server or NTP client?

a. /etc/hosts b. /etc/inet/ntp.conf
c. /etc/inet/ntp.server d. /etc/inet/ntp.client

Answer: b
The /etc/rc2.d/S74xntpd startup script checks for the existence of the /etc/inet/ntp.conf file
and starts the NTP daemon in either server or client mode depending on the contents of the file.

27. What command would you use to stop an NTP client or server?

a. make time stop b. stop time
c. /etc/init.d/ntpd stop d. /etc/init.d/xntp stop

Answer: d

28. Which of the following examples do NOT represent a Relative Domain name (RDN)?

a. pgserver10
b. pgserver10.corp.sun.com.
c. sun.com.
d. pgserver10.corp.sun.com

Answer: b,c
a Fully Qualified Domain Name (FQDN) will include the trailing dot. Relative Domain Names (RDN) do not end in a dot.

29. What is the purpose of the in-addr.arpa. domain?

a. So that applications that have a known IP address can look up a DNS domain name of a host
b. To provide a mechanism of representing an IP address in domain name form
c. To provide a mechanism of representing a domain name in IP address form
d. So that applications that have a known DNS domain name can look up an IP address of a host
Answer: a,b

30. Which two types of DNS servers are authoritive for the domains they serve?

a. caching-only server b. secondary server
c. forwarding server d. primary server

Answer: b,d
authoritive means that the information is sourced from a disk-based file, which a primary and secondary DNS server are. Non-authoritive servers source information from a server cache.

31. During the DNS client name resolution process, which file is read first?

a. /etc/inet/hosts
b. /etc/nsswitch.conf
c. /etc/resolv.conf
d. /etc/named.conf

Answer: b

32. True or False: The DNS reduces server/network load by having servers cache information taken from other DNS servers

a. True
b. False

Answer: a

33. The most frequently used implementation of the DNS in the Unix environment is _____.

a. bind
b. WINS
c. dnsd
d. vfind

Answer: a
Solaris 8 implements Bind version 8.1.2

34. True or False: The top of the DNS tree contains a nameless root domain, which is used as a placeholder and contains naming information.

a. True
b. False

Answer: b
The root domain contains no naming information

35. The _____ level domain is typically the first place the NIC delegates authority for the domain
to some other local organization.

a.root
b.top
c.second
d.FQDN

Answer: c

36. A stub resolver sends _____ DNS queries to local name servers.

a. authorative
b. iterative
c. non-authorative
d. recursive

Answer: d
In BIND, the resolver is just a set of library routines that is linked into programs such as telnet and ftp. It's not even a separate process. It has the smarts to put together a query, to send it and wait for an **answer**, and to resend the query if it isn't **answer**ed, but that's about all. Most of the burden of finding an **answer** to the query is placed on the name server. The DNS specs call this kind of resolver a stub resolver. Why couldn't the local name server simply have referred the resolver to another name server? Because a stub resolver wouldn't have had the intelligence to follow a referral. And how did the name server know not to **answer** with a referral? Because the stub resolver
issued a recursive query. The queried name server is obliged to respond with the requested data or with an error stating that data of the requested type don't exist or that the domain name specified doesn't exist. The name server can't just refer the stub resolver to a different name server, because the query was recursive.

37. True or False: All DNS servers cache information for remote domains over which they are non-authorative.

a. True
b. False

Answer: a

38. Why is an authorative **answer** from a DNS server better than a non-authorative **answer**?

a. authorative **answer**s are sourced from disk, and are more likely to be correct
b. authorative **answer**s are sourced from cache, and are returned quicker to the resolver
c. non-authorative **answer**s are sourced from cache, and are more likely to be correct
d. non-authorative **answer**s may be incorrect due to the updating of domain data after they are cached

Answer: a,d

39. Given the following /etc/resolv.conf file:

search corp.hp.com   paloalto.hp.com   acct.hp.com   hp.com
nameserver 15.32.17.2
nameserver 15.32.17.4

Choose the default domain.

a. acct.hp.com
b. hp.com
c. corp.hp.com
d. paloalto.hp.com

Answer: c
The keyword "search" starts the line in column one, followed by from one to six domain names, in the order you want them searched. The first domain in the list is interpreted as the default domain.

40. Which file below contains the mappings of names to IP addresses for all systems in the domain
being served by the name server?

a. /var/named/domain-info
b. /var/named/named.root
c. /var/named/inverse-domain-info
d. /etc/named.conf

Answer: a

41. Given the below /var/named/domain-info file, what field determines if a secondary master
server should perform a zone transfer of the zone data?

<img src="../Samples/Samples/domain-info.gif">

a. Serial number
b. Refresh timer
c. Retry timer
d. Expire timer

Answer: a
The Serial number is used by secondary master servers to see if they need to perform a zone
transfer. Anytime you make changes to this file you must remember to update the serial number
in such a manner that it gets larger. (It is always safe to start at one and add one with each change.)
The refresh timer field is a time interval, in seconds, after which the secondary master servers
should check to see if the serial number has changed and, hence, a new zone transfer needs to occur.

42. Using the nslookup utility, which command below would you use to change the DNS server to server16.sun.com?

a. > set server=server16.sun.com
b. > server server16.sun.com
c. > set type=server16.sun.com
d. > server=server16.sun.com

Answer: b

43. The /etc/named.conf file accepts a _____ to begin comment lines in the file, while /var/named/root, /var/named/domain-info, and /etc/resolv.conf accept _____ to begin comment lines.

a. <img src="../Samples/Samples/nettest4_a.gif">
b. <img src="../Samples/Samples/nettest4_b.gif">
c. <img src="../Samples/Samples/nettest4_c.gif">
d. <img src="../Samples/Samples/nettest4_d.gif">

Answer: a

44. There is a _____ character limit (including the dots) per FQDN and a _____ character limit per domain label.

a. 256,   64
b. 255,   63
c. 63,   255
d. 64,   256

Answer: b

45. Using the below ping command, you attempt to communicate with a host on the other side of your router and receive an error message.

<img src="../Samples/Samples/link-local-ping.gif">

Why was the error message generated?

a. The destination host is down
b. link-local addresses will not be routed
c. You need to configure the router to allow routing
d. site-local addresses will not be routed

Answer: b
The address starts with FE8, which is link-local and will not be routed.

46. IPv6 routing will only be started if the _____ file exists.

a. /etc/hostname6.<INT>
b. /etc/default/ipv6
c. /etc/inet/ndpd.conf
d. /etc/inet/ripngd

Answer: c
The /etc/hostname6.<INT> file needs to exist for IPv6 to be running on that interface. **Answer**s "b" and "d" are bogus files. The only routing daemon for Solaris is in.ripngd, but no configuration file is required. The neighbor discovery protocol daemon, in.ndpd, is started by /etc/init.d/inetinit if the /etc/inet/ndpd.conf file exists. The file can be created by using the touch command and then rebooting the system.

47. From the selection below, which terms once identified with IPv4 are no longer associated with IPv6?

a. ARP
b. ICMP
c. netmask configuration
d. RARP
e. IGMP
f. multicasting
g. duplicate IP addresses

Answer: a,c,d,g

48. Which of the following is NOT a feature of Neighbor Discovery protocol for IPv6?

a. Discover the presence of other systems
b. Discover routers
c. Obtain ethernet addresses similar to how ARP was used in IPv4
d. configure a subnet mask similar to IPv4
e. Gather reachability information about paths to active neighbors

Answer: d

49. Hosts belonging to multicast groups use _____ to report their memberships to local mulicast routers

a. RDISC
b. ICMPv6
c. IGMP
d. RIP
Answer: c

50. True or False: A single interface may have multiple IPv6 addresses, including multicast addresses.

a. True
b. False

Answer: a

51. What is a unicast address?

a. packets are delivered to all interfaces
b. Packets are delivered to exactly one interface
c. Packets are delivered to the nearest interface

Answer: b
Unicast was called point-to-point in IPv4

52. In IPv6, _____ autoconfiguration is the prefered method for autoconfiguring a host
with an IP address.

a. stateless
b. stateful
c. classless
d. class

Answer: a
Stateful autoconfiguration requires additional setup of a configuration server, such as a DHCP server and therefore is not as attractive a solution as stateless autoconfiguration is. With Stateless autoconfiguration, hosts generate their own link-local addresses by using a combination of locally available information and information advertised by routers.

53. Which of the following IPv6 addresses are reserved for special use?

a. 1:0:0:0:0:0:0:0
b. 1:1:1:1:0:0:0:0
c. 0:0:0:0:0:0:0:0
d. 1:1:1:1:1:1:1:1
e. 0:0:0:0:0:0:0:1

Answer: c,e
IPv6 address 0:0:0:0:0:0:0:0 is used by a system that has not yet been assigned an IP address.
IPv6 address 0:0:0:0:0:0:0:1 is used as a loopback address, similar to 127.0.0.1 in IPv4.

54. True or False: Packets routed using IPv6 can be routed much faster than IPv4 due to simplified headers.

a. True
b. False

Answer: a

55. The system _____ is used in generating an IPv6 global address.

a. IP address
b. MAC address
c. Host ID

Answer: b

 <img src="../Samples/Samples/autoconfig.gif">

56. Which of the following are valid Format Prefixes (FP) in IPv6?

a. FE8
b. EEC
c. FEC
d. FF
e. CC

Answer: a,c,d
FE8 is link-local.
 FEC is site-local.
 FF is multicast.

57. Solaris 8 supports IPv6 in _____ mode.

a. combined b. bridged
c. dual-stack d. exclusive

Answer: c
This means that the kernel can understand traffic for both IPv4 and IPv6. The operating system cannot support an IPv6-only network scheme at this time.

58. To configure a Solaris 8 system to use IPv6, create a _____ file and restart.

a. /etc/IPv6.hme0 b. /etc/hostname6.hme0
c. /etc/hosts.hme0

Answer: b
This can also be done using the ifconfig command.
Example:
ifconfig hme0:1 inet6 plumb up

59. The IPv6 equivalent of /etc/hosts is _____.

a. /etc/hosts b. /etc/inet/IPv6hosts
c. /etc/inet/ipnodes d. /etc/IPv6hosts

Answer: c
Note that this affects name resolution too. Example: the entry an IPv6 system looks for in the /etc/nsswitch.conf file is "ipnodes: files dns nisplus", not "hosts: files dns nisplus".

60. Because of IPv6, a new DNS record type, _____, has been created.

a. AA b. AAAA
c. IPv6 d. LONGIP

Answer: b
This is also known as Quad A

TEST PAPER V

1. A company is installing an Internet web server and is concerned with how quickly data images can be read from the server and sent to potential clients. What disk-management system would you want to deploy for maximum performance? The company is not as concerned with losing the data as it is with the speed at which the data can be read.

RAID level 5
Disk mirroring
Disk striping without parity
RAID level 2

2. Your company has two LANs, each of which uses a different protocol. You need to interconnect both LANs but do not want to configure additional protocols for either network. What kind of device could perform this task?

Router
Bridge
Gateway

3. At each layer, the data or message is encapsulated.

False
True

4. What occurs when the number of network broadcast messages is greater than the amount of available network bandwidth?

Attenuation
Beaconing
Broadcast storm
Crosstalk

5. Which of the following can gather performance information from a router's MIB?

Protocol analyzer
SNMP
Network monitor
Time-domain reflectometer

6. How does a router reduce broadcast storms on a network?

By using multiple routes to transmit broadcast messages
By blocking forwarding of broadcast messages
By only transmitting TCP/IP broadcast messages
By only transmitting SNMP broadcast messages

7. Of the following cable types, which is the most susceptible to crosstalk?

CAT5 UTP
STP
Coaxial
Fiber Optic

8. The Data Link layer __.

manages the delivery.
manages the data addressing.
makes sure messages reach destination.
describes the hardware.

9. Switched ethernet reduces the number of collisions.

False
True

10. A broadcast address could be represented by __.

1010101010
111111
0:1:0:1:0:1

11. When sending data to another node on the network, what is added to the front of the data during encapsulation?

Header
Index
Trailer
Error

12. Which of the following protocols are connection-oriented?

UDP
ICMP
TCP
IP

13. Which layer of the OSI Reference Model translates data formats?

Application
Network
Data Link
Presentation

14. Which of the following statements describes a star topology?

It is more difficult to troubleshoot than a ring topology.
It requires more cabling than a bus topology.
All network computers get equal network access through the use of CSMA/CD.
It is less reliable than a ring topology.

15. Which of the following commands can assign or change an interface address or parameter?

snoop
ifconfig
netstat
ipconfig

16. The maximum transfer unit for data according to the 802.3 standard is?

1500 bytes
46 bytes
36 MB
1 TB

17. You run a 10Base5 network that has three segments, each seperated by a repeater. The trunk ends are terminated by 50-ohm terminators, and there are six in all. How many terminators should be grounded?

None
Six
Three
Two

18. At the Network layer, messages reach their destination via an optimal route, thus using routing at this layer.

True
False

19. Which connector type is used to connect Thinnet to a NIC?

AUI
BNC T
BNC Barrel
RJ-45

20. At the Data Link layer, transmission is assured by a checksum which permits error detection and elimination.

True
False

21. Which command displays the netmask value that is applied to all network interfaces?

netstat -i
vmstat -s
iostat -c
ifconfig -a

22. At the Sessions layer data will normally not go in both directions at the same time.

True
False

23. A true ring configuration has two ports on every node.

False
True

24. What is IP responsible for?

Fragmenting and routing data
Establishing a connection-oriented circuit
Assisting routing and bridging
Performing error detection and correction

25. Which of the following cable types can span distances greater than 100 meters, but no more than 185 meters?

10BaseT
10Base2
10Base5
Fiber Optic

26. The maximum transfer unit for data according to the 802.3 standard is?

46 bytes
1500 bytes
1 TB
36 MB

27. At the Network layer, messages reach their destination via an optimal route, thus using routing at this layer.

False
True

28. What does the "type" field of an Ethernet frame contain?

The type of system that sent the frame
The type of the destination network
The type of data encapsulated in the frame
The type of the source network

29. Using the "snoop" command with the summary option provides a display of only the data pertaining to the highest level protocol.
True
False

30. Which of the following commands can assign or change an interface address or parameter?

snoop
ifconfig
ipconfig
netstat

31. When sending data to another node on the network, what is added to the front of the data during encapsulation?

Error
Header
Trailer
Index

32. At the Presentation layer, XDR is used to balance the interpretation differences.

True
False

33. How does a router reduce broadcast storms on a network?

By using multiple routes to transmit broadcast messages
By only transmitting TCP/IP broadcast messages
By only transmitting SNMP broadcast messages
By blocking forwarding of broadcast messages

34. The correct syntax to put the output of snoop in a file is?

snoop -d /tmp/snooper
snoop -i /tmp/snooper
snoop -o /tmp/snooper

35. At the Data Link layer, transmission is assured by a checksum which permits error detection and elimination.

True
False

36. Which of these hardware devices can be used to boost broadband signal strength across a long cable?

Multiplexers
Amplifiers
Time-domain reflectometers
Repeaters

37. The Data Link layer __.

manages the delivery.
makes sure messages reach destination.
manages the data addressing.
describes the hardware.

38. Switched ethernet reduces the number of collisions.

False
True

39. Which one of the WAN technologies listed below can provide users with bandwidth on demand?

Frame Relay
T1
X.25
ISDN

40. A company is installing an Internet web server and is concerned with how quickly data images can be read from the server and sent to potential clients. What disk-management system would you want to deploy for maximum performance? The company is not as concerned with losing the data as it is with the speed at which the data can be read.

Disk mirroring
Disk striping without parity
RAID level 5
RAID level 2

41. The correct syntax to put the output of snoop in a file is?

snoop -d /tmp/snooper
snoop -o /tmp/snooper
snoop -i /tmp/snooper

42. Which RAID level creates a stripe set, but with no data redundancy?

RAID 0
RAID 2
RAID 1
RAID 3

43. Which layer of the TCP/IP stack is responsible for acknowledgements?

Internet
Network
Transport
Application

44. Which of the following statements describes a star topology?

It is more difficult to troubleshoot than a ring topology.
It requires more cabling than a bus topology.
All network computers get equal network access through the use of CSMA/CD.
It is less reliable than a ring topology.

45. How does a router reduce broadcast storms on a network?

By only transmitting TCP/IP broadcast messages
By blocking forwarding of broadcast messages
By using multiple routes to transmit broadcast messages
By only transmitting SNMP broadcast messages

46. Which layer of the ISO model is responsible for error detection and packet framing?

Application
Transport
Data Link
Physical

47. Which layer of the OSI Reference Model establishes a route between sending and receiving computers?

Session
Physical
Network
Transport

48. 100BaseFX designates ___.

two strands of multimode fiber-optic cable
10MB on CAT3,4,5
100MB on two-pair CAT 5
100MB on four-pair CAT3,4,5

49. Which of the following can gather performance information from a router's MIB?

Time-domain reflectometer
SNMP
Network monitor
Protocol analyzer

50. A single unit of data is called what?

encapsulation
frame
preamble
packet

51. What occurs when the number of network broadcast messages is greater than the amount of available network bandwidth?

Attenuation
Broadcast storm
Beaconing
Crosstalk

52. Which of these hardware devices can be used to boost broadband signal strength across a long cable?

Multiplexers
Amplifiers
Time-domain reflectometers
Repeaters

53. Which command displays the netmask value that is applied to all network interfaces?

iostat -c
netstat -i
vmstat -s
ifconfig -a

54. Security, speed & immune to electrical interference are attributes of __?

FDDI
Token Ring
Router
Hub

55. Which layer of the OSI Reference Model translates data formats?

Application
Data Link
Presentation
Network

56. A true ring configuration has two ports on every node.

True
False

57. Which device is usually considered a LAN component?

bridge
computer
printer
disk drive

58. At each layer, the data or message is encapsulated.

False
True

59. Which of the following defines Token bus standards?

IEEE 802.4
IEEE 802.6
IEEE 802.7
IEEE 802.3

60. Which of the following defines the term "target hardware address"?

The information requested by an ARP request packet.
The kernel resource used to store frequently accessed Ethernet addresses.
The protocol that translates an IP address into the corresponding Ethernet (hardware) address.
The protocol that translates an Ethernet (hardware) address into its corresponding IP address.

61. When sending data to another node on the network, what is added to the front of the data during encapsulation?

Header
Error
Index
Trailer

62. A device that connects two or more segments of the same physical media is a __?

repeater
gateway
router
bridge

63. Which of the following defines Token bus standards?

IEEE 802.3
IEEE 802.4
IEEE 802.7
IEEE 802.6

64. Which layer of the OSI Reference Model translates data formats?

Network
Data Link
Application
Presentation

65. At the Presentation layer, XDR is used to balance the interpretation differences.

False
True

66. How does a router reduce broadcast storms on a network?

By only transmitting TCP/IP broadcast messages
By only transmitting SNMP broadcast messages
By using multiple routes to transmit broadcast messages
By blocking forwarding of broadcast messages

67. To read a snoop file that resides in the /tmp directory, you would use which of the following?

cat /tmp/snooper
more /tmp/snooper
snoop -r /tmp/snooper
snoop -i /tmp/snooper

68. Switched ethernet reduces the number of collisions.

True
False

69. At the Sessions layer data will normally not go in both directions at the same time.

True
False

70. Which of the following cable types can span distances greater than 100 meters, but no more than 185 meters?

10Base2
10Base5
10BaseT
Fiber Optic

71. Which of the following network devices amplifies and regenerates network data for extending the distance of a transmission?

A switch
A router
A hub
A bridge
A repeater

72. What default netmask value is applied to mask a Class B IP address which defines the network number and host number?

255.255.255.255
255.255.255.0
255.0.0.0
255.255.0.0

73. Which of the following describes the Session layer?

Provides presentation
Administers communication relationships
Manages applications
Manages addressing

74. Which layer of the OSI Reference Model establishes a route between sending and receiving computers?

Network
Physical
Session
Transport

75. Which device is usually considered a LAN component?

bridge
disk drive
computer
printer

76. At the Transport layer either UDP or TCP is selected.

True
False

77. The Data Link layer __.

describes the hardware.
manages the delivery.
manages the data addressing.
makes sure messages reach destination.

78. At each layer, the data or message is encapsulated.

True
False

79. Which IP address class is a destination address for one or more hosts?

Class B
Class C

Class D
Class A

80. To execute snoop in a summary verbose mode, you would use which of the following?

snoop -s broadcast
snoop -i /tmp/snoop
snoop broadcast
snoop -V cherries

81. Which of the following cable types can span distances greater than 100 meters, but no more than 185 meters?

10Base2
10BaseT
10Base5
Fiber Optic

82. A broadcast address could be represented by __.

111111
0:1:0:1:0:1
1010101010

83. Which of the following statements most accurately describes an Ethernet broadcast address?

A broadcast address is never used in a WAN
A broadcase address is 0x bb.bb.bb.bb.bb.bb
A broadcast address is 0x ff.ff.ff.ff.ff.ff
A broadcast address is never used in a LAN

84. Which of the following tools permits you to determine what particular devices may be causing network problems without requiring that these devices be turned off?

Volt-ohm meter
Time-domain reflectometer
Transceiver
Protocol analyzer

85. Coaxial, twisted-pair and fibre-optical are examples of?

Software/Firmware
Part of the protocol for the tcp stack.
A physical network medium

86. A device that connects two or more segments of the same physical media is a __?

bridge
router
repeater
gateway

87. At the Transport layer either UDP or TCP is selected.

False
True

88. Which of the following can gather performance information from a router's MIB?

Protocol analyzer
Time-domain reflectometer
SNMP
Network monitor

89. At each layer, the data or message is encapsulated.

False
True

90. Of the following cable types, which is the most susceptible to crosstalk?

STP
CAT5 UTP
Coaxial
Fiber Optic

91. Which of these hardware devices can be used to boost broadband signal strength across a long cable?

Time-domain reflectometers
Amplifiers
Repeaters
Multiplexers

92. Which IP address class is a destination address for one or more hosts?

Class A
Class B
Class D
Class C

93. The maximum transfer unit for data according to the 802.3 standard is?

46 bytes
1500 bytes
1 TB
36 MB

94. Which of the following describes the Session layer?

Manages addressing
Administers communication relationships
Manages applications
Provides presentation

95. A true ring configuration has two ports on every node.

False
True

96. You run a 10Base5 network that has three segments, each seperated by a repeater. The trunk ends are terminated by 50-ohm terminators, and there are six in all. How many terminators should be grounded?

None
Two
Three
Six

97. At the Data Link layer, transmission is assured by a checksum which permits error detection and elimination.

False
True

98. How does a router reduce broadcast storms on a network?

By blocking forwarding of broadcast messages
By only transmitting TCP/IP broadcast messages
By only transmitting SNMP broadcast messages
By using multiple routes to transmit broadcast messages

99. Which of the following statements describes a star topology?

It is more difficult to troubleshoot than a ring topology.
It is less reliable than a ring topology.
It requires more cabling than a bus topology.
All network computers get equal network access through the use of CSMA/CD.

100. What is IP responsible for?

Performing error detection and correction
Fragmenting and routing data
Assisting routing and bridging
Establishing a connection-oriented circuit

101. Which IP address class is a destination address for one or more hosts?

Class B Class D
Class A Class C

102. Which connector type is used to connect Thinnet to a NIC?

RJ-45 AUI
BNC T BNC Barrel

103. Which command is used to display the current contents of the ARP cache of your host?

arp -f
arp -s
arp -d
arp -a

104. Which layer of the ISO model is responsible for error detection and packet framing?

Application
Data Link
Transport
Physical

105. What occurs when the number of network broadcast messages is greater than the amount of available network bandwidth?

Attenuation
Beaconing
Broadcast storm
Crosstalk

106. What does the "type" field of an Ethernet frame contain?

The type of the source network
The type of data encapsulated in the frame
The type of system that sent the frame
The type of the destination network

107. Which of the following cable types can span distances greater than 100 meters, but no more than 185 meters?

10Base2
10Base5
Fiber Optic

10BaseT

108. You need to connect two network segments that are 1,000 meters apart.
Which of the following cable types can transmit data over 1,000 meters without using a repeater?

CAT3 UTP
Fiber optic
RG-58 A/U
CAT5 UTP

109. A true ring configuration has two ports on every node.

False
True

110. The TCP/IP model consists of?

layers.
settings.

111. How does a router reduce broadcast storms on a network?

By only transmitting SNMP broadcast messages
By using multiple routes to transmit broadcast messages
By only transmitting TCP/IP broadcast messages
By blocking forwarding of broadcast messages

112. Which of the following protocols are connection-oriented?

TCP
IP
ICMP
UDP

113. At the Data Link layer, transmission is assured by a checksum which permits error detection and elimination.

True
False

114. Your company has two LANs, each of which uses a different protocol. You need to interconnect both LANs but do not want to configure additional protocols for either network. What kind of device could perform this task?

Router
Gateway
Bridge

115. To execute snoop in a summary verbose mode, you would use which of the following?

snoop broadcast
snoop -s broadcast
snoop -i /tmp/snoop
snoop -V cherries

116. At the Network layer, messages reach their destination via an optimal route, thus using routing at this layer.

True
False

117. 100BaseFX designates ___.

10MB on CAT3,4,5
100MB on two-pair CAT 5
two strands of multimode fiber-optic cable
100MB on four-pair CAT3,4,5

118. Which of the following defines Token bus standards?

IEEE 802.3
IEEE 802.7
IEEE 802.4
IEEE 802.6

119. Which layer of the OSI Reference Model translates data formats?

Network
Data Link
Application
Presentation

120. A broadcast address could be represented by __.

101010101010
0:1:0:1:0:1
111111

TEST PAPER 6

1. After installing a second network interface card to your system, which file would you need to create so that the system performs a re-configure at next boot up.

a) /.reconfigure
b) /etc/.reconfigure
c) /reconfigure
d) /etc/reconfigure

2. What command(s) would you use to show the RPC services' program numbers, version, and protocol?

a) rpcinfo
b) netstat -a
c) rpcinfo -p
c) netstat -rn

3. What information can ICMP provide?

a) Multiple routes
b) Detection circular or excessively long routes
c) Network unreachable
d) Number of collisions.

4. Which type of DNS nameserver provides only local cache of looked up DNS names?

a) primary server
b) secondary server
c) forwarding server
d) caching-only server

5. What is an SOA record?

6. What is a PTR record?

7. Given the following

; formerly NS.INTERNIC.NET
. 3600000 IN NS A.ROOT-SERVERS.NET.

A.ROOT-SERVERS.NET. 3600000 A 198.41.0.4

which file would you most likely find the above information to reside?

a) DNS.root
b) bind.root
c) named.root
d) domain.root

8. What flag would you use for in.routed when setting up a machine that is not a router?

a) -r
b) -s
c) -q
d) -l

9. Given the following output:

le0:
flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST> mtu 1500
inet 128.50.1.2 netmask ffffff00 broadcast 128.50.1.255
ether 8:0:20:75:6e:6f

type the command that you would enter in /etc/netmasks.

10. Regarding the Internet layer, what is a packet?

11. What option would you use for snoop to display packets in verbose summary mode?

a) -v
b) -i
c) -V
d) -o

12. Which file maps an ip address to an interface?

a) /etc/hostname.interface_name
b) /etc/inet/services
c) /etc/inet/hosts
d) /etc/inetd.conf

13. What file(s) would you need to modify to configure an interface?

a) /etc/inet/hosts
b) /etc/inet/services
c) /etc/hostname.interface_name
d) /etc/inetd.conf

14. Given the following output from a dhcp_network file, select the statement(s) that is true:

01080011043B65 03 129.146.86.206 129.146.86.181 -1 inet17

a) Lease for this IP address is negotiable.
b) inet17 is the hostname assigned for the DHCP client
c) Lease for this IP address is permanent.
d) The ip address for this client is 129.146.86.181.

15. Give the command that manages the DHCP client tables.

a) dhcpconfig
b) dhtadm
c) pntadm
d) dhcpmanage
e) dhcpagent

16. What is true about the FORWARD file?

a) It consists of user-defined aliases.
b) It exists on the local system.
c) It exists on the user's $HOME directory of the sender.
d) It consists of addresses to which you want you're mail forwarded to.

17. Given the following entry in /etc/dfs/dfstab,

share -F nfs /var/mail

which of the following command(s) would you need to run to set up the mail server.

a) exportfs -a
b) shareall -F nfs /var/mail
c) shareall
d) share -F nfs /var/mail

18. Which file holds the process id for BIND?

a) /etc/named.pid
b) /var/named/named.pid
c) /named.pid
d) /etc/bind.pid

19. What does the DIRECTORY keyword reference to in the
DNS server configuration file?

a) the directory for DNS configuration files
b) the directory for DNS caching server files
c) the directory for secondary DNS server files
d) the directory for DNS configuration log files
e) the directory for DNS client configuration files

20. What is the name of BIND's configuration file?
a) named.conf
b) named.config
c) bind.conf
d) named.boot

21. What is the name of the BIND daemon on Solaris?

a) in.routed
b) inetd
c) in.named
d) in.rdisc

22. Given the following output, which file would you most
likely find it in?

search zoo.edu
nameserver 128.50.1.1
nameserver 128.50.2.1

a) /etc/named.conf
b) /etc/resolv.conf
c) /etc/services
d) /etc/inetd.conf

23. What is the OSI equivalent for the Application layer in the TCP/IP model?

a) Application
b) Presentation
c) Session
d) Transport
e) Network

24. Sendmail is a

a) mail user agent
b) mail transfer agent
c) mail host
d) mail delivery agent

25. What is true about CSMA/CD?

a) It allows more than one device to transmit at the same time.
b) The acronym stands for Collision Sense Multiple Access/ Carrier Detect
c) The acronym stands for Carrier Sense Multiple Access/ Collision Detect
d) It ensures that only one device transmit at a time.

26. Which of the following can NOT run over Cat 5 cabling?

a) ATM
b) 10-BASE-T
c) 100-BASE-TX
d) 100-BASE-T4

27. Which standard is Ethernet specifed?

a) IEEE 802.3

b) IEEE 802.4
c) IEEE 802.5
d) RFC 950

28. Which statement refers to jabbers?

a) If the received packets less than 46 bytes, the packet is too short and is discarded.
b) If the received packet fails the CRC, the packet is corrupted and therefore discarded
c) If the received packet is greater than 1500 bytes (MTU), the packet is too long and is discarded.

29. Which of the following are considered LAN components?

a) router
b) gateway
c) computer
d) router Operating system
e) disk drive

30. Which statement most accurately describes Class-A IP addresses?

a) The first bit is 0, the next 7 bits are the network number, and the remaining 24 bits are the host number.
b) The first two bits are 10, the next 14 bits are the network number, and the remaining 16 bits are the host number.
c) The first three bits are 110, the next 21 bits are the network number, and the remaining 8 bits are the host number.
d) The first four bits are 1110, and the remaining 28 bits consist of an Identification for a specific multicast group.

31. Which file associates an RPC program with its unique RPC program number?

a) /etc/rpc
b) /etc/rc2.d/S69inet
c) /etc/inet/inetd.conf
d) /etc/rc2.d/S72inetsvc

1. What protocol would you include to manage your network ?
a. SNMP
b. NetBEUI
c. CHAP
d. IPX

Answer: A

2. Why does a high number of broadcast messages adversely affect overall network performance?
a. Each broadcast message requires an acknowledgement packet from every computer on the network
b. No computer on the network can transmit data until each broadcast message has been acknowledged by every computer on the network
c. Broadcast messages are automatically routed to every segment of a LAN
d. Every computer on the network must process each broadcast message

Ans: D

3. What is the IP of the loopback interface ?

Ans: 127.0.0.1

4. Which protocol does "ping" use ?

Ans: ICMP

5. Which freeware tool uses ICMP to send packets with small TTL to determine route ?

Ans: traceroute

6. Which solaris command is used to troubleshoot DNS problems ?

Ans: nslookup

7. In nslookup, how do you set DNS server to be some other machine than the system default ?

Ans: Type "server ip_address" (e.g. server 128.252.1.1)

8. How do you search for MX records under nslookup ?

Ans: set q=mx

9. Which 2 protocols does Solaris use in the Transport layer ?

Ans: TCP and UDP

10. Which one of TCP and UDP is connectionless ?

Ans: UDP

11. Which standar does IEE 802.4 define ?

Ans: Token Bus

12. Which standard does IEEE 802.5 define ?

Ans: Token Ring standards

13. _____ layer handles the transport of messages between communication partners, controls the flow of data, and defines the transport quality.

Ans: Transport

14. _____ layer performs basic functions such as file transfer, virtual terminal and job transfer are realized (SMTP, FTP, telnet, NFS, SNMP).

Ans: Application

15. _____ layer regulates transmission of unstructured bit streams over a transmission medium with regards to transmission speed, representation of signals and connection technique.

Ans: Physical

16. _____ layer enables users on different machines to establish sessions between them.

Ans: Session

17. _____ layer ensures messages reach their destination system via an optimal route (done by planning the route).

Ans: Network

18. _____ layer stipulates a transfer syntax (represents a coiling agreement).

Ans: Presentation

19. a _____ is a series of bits with a well-defined beginning and ending.

Ans: Frame

20. IEEE 802.3 defines _____ standards.

Ans: Ethernet

21. Which one of TCP and UDP is faster than the other ?

Ans: UDP

22. UDP is a _____ connection.

Ans: stateless

23. Name 4 Application Layer Protocols :

Ans: Telnet, FTP, SMTP, SNMP

24. True/false: If you can telnet between 2 Solaris machines, all 7 OSI layers are working.

Ans: True

25. Which protocol in Solaris machines makes distributed file systems possible ?

Ans: NFS

26. _____ is set of rules governing the exchange of data between entities.

Ans: Protocol

27. At which layer does DHCP work at ?

Ans: Application

28. Which protocol translates IPs to MAC addresses ?

Ans: arp

29. Internet layer is the same _____ layer in OSI ?

Ans: Network

30. At which TCP/IP layer does arp work ?

Ans: Internet

31. Which protocol encapsulates IP datagrams on a serial line ?

Ans: SLIP

32. Which protocol is an improvement over SLIP and is supported by Solaris ?

Ans: PPP

33. Which protocol translates MAC addresses to IP addresses ?

Ans: RARP

34. What does ICMP stand for ?

Ans: Internet Control Message Protocol

35. Which protocol translates host names to IP addresses ?

Ans: DNS

36. What does DNS stand for ?

Ans: Domain Name Service

37. Name 3 commands will let you logon to another machine ?

Ans: telnet, rlogin, ftp

38. It is advisable not to use telnet because of security problems. Which program should you use instead ?

Ans: ssh

39. Which freeware program will let you have fine-grain control over which machines can or can not telnet/rlogin into your machine ?

Ans: tcpwrappers

40. You have an account in your machine with user id of 0, but it is not root. Will this user have superuser previleges ?

Ans: yes

41. A _____ is a set of physically connected computers in relatively small physical area.

Ans: LAN

42. In _____ topology one large coaxial cable joins all the computers.

Ans: BUS

43. _____ topology, uses centralized hub from which a number of signals carrying cables goes out to individual devices on the branch.

Ans: Star

44. _____ topology is like the star topology except output node connects to the input of the next node.

Ans: Ring

45. _____ is a device that amplifies and regenerates the data signal bit by bit.

Ans: Repeater

46. repeator, bridge, switch, router, gateway, or hub are examples of _____ .

Ans: concentrators

47. ATM uses _____ bytes long cells.

Ans: 53

48. Which option of the snoop command tells it to be verbose ?

Ans: -v option

49. Which option of the snoop command tells it to display from a host ?

Ans: -V

50. Which command tells the state of the Ethernet interfaces ?

Ans: netstat –I

Note: small case of I

51. Your Ultra 1 has a 100Mbps Fast Ethernet Card. What is the name of the interface ?

Ans: hme0

52. Which command displays information about network interface hme0 ?

Ans: ifconfig hme0

53. Can a user without superuser previlege run "ifconfig hme0" ?

Ans: Yes

54. Which command will display the entire RAP table ?

Ans: arp –s

55. How long does an entry stay in the arp table by default ?

Ans: 5 minutes

56. Cached ethernet addresses are stored for about 5 minutes and is used to avoid a rebroadcast. This is called _____ .

Ans: Arp Reply Caching

57. In the "Flags" column of the arp table, "S" means _____ .

Ans: Static Entry

58. In the "Flags" column of the arp table, "P" means _____ .

Ans: published

59. Which command would add a static entry to the arp table for the host server1 whose MAC address is 00:00:0c:07:ac:90 ?

Ans: arp –s server1 00:00:0c:07:ac:90

60. Which process responds to the RARP requests ?

Ans: in.rarpd

61. IP is built into the system's _____ .

Ans: kernel

62. _____ Internet Control Message Protocol (ICMP) - allows routers to send control or error messages to other machines.

Ans: Internet Control Message Protocol (ICMP)

63. The process of units of data being broken into smaller units is called _____ .

Ans: Fragmentation

64. The first octet of the IP address of a Class A host must be between ____
ans _____ .

Ans: 1,127

65. Maximum number of hosts in a Class A network is :

Ans: 16 Million

66. The destination address used while sending a packet to all hosts in the network is called _____ .

Ans: Broadcast Address

67. The last octet of the broadcast address of a Class C network is :

Ans: 255

68. The last octet of the broadcast address of a Class B network is :

Ans: 255

69. What determines what the network address is of the network a Solaris machine belongs to ?

Ans: netmask (subnet mask)

70. What is the advantage of subnetting ?

Ans: isolate traffic and limit access

71. What is the name of the routing daemon in Solaris ?

Ans. in.routed

72. Which option is run default with in.routed ?

Ans: -q

73. Which protocol does in.routed use ?

Ans: RIP

74. VLSM stands for _____ ?

Ans: Variable Length Subnet Masks.

75. _____ allows a network to be assigned more than one netmask.

Ans: VLSM

76. 2 routing protocols that enable the deployment of VLSM by providing the extended network number length or mask along with route advertisement.

Ans: Open Shortest Path First (OSPF) and Intra-Domain Intermediate System to Intermediate System (IS-IS)

77. Which file holds the netmask number ?

Ans: /etc/inet/netmask

78. If you wanted to run a Solaris Machine as a router, which steps have to be taken ?

1. /etc/hostname.xxx(interface) file
2. add the new IP to the /etc/hosts file
3. Add the netmask to the /etc/inet/netmasks
4. Reboot the machine.

79. You have just added a new interface to your Solaris Machine. Which command would you run to confirm that the new interface has been configured?

Ans: ifconfig -a.

80. What do you have to do add changes to the NIS database after adding/modifying the appropriate map ?

Ans: cd into the /var/yp and then run the make command.

81. Which script reads the /etc/hostname.xxx(interface) to bring up interfaces ?

Ans: /etc/rcS.d/S30rootuser.sh

82. Which command will list the status of the hme0 interface ?

Ans: ifconfig hme0

83. Which command will eanble the hme0 interface to send and receive packets ?

Ans: ifconfig hme0 up

84. When a host is attached to the same physical network as the source host, the routing process is called _____ .

Ans: Direct Routing

85. When packets are routed according to a routing table, the process is called _____ ?

Ans: Table Driven Routing

86. Which command shows the routing table of a Solaris Machine ?

Ans: netstat –r

87. If a route to a host is fixed and does not change by the changing conditions of the network, route is called a _____ route.

Ans: statis

88. Dynamic routing is started by the _____ script .

Ans: /etc/rc2.c/S69inet

89. /etc/rc2.d/S69inet starts which 2 daemons are related to routing ?

Ans: in.routed (RIP) and the in.rdisc (RDISC) daemons

90. Which request does ICMP make when a ping command is entered ?

Ans: echo

91. You try "ping server1" and you get "unknown host server1" . Why ?

Ans: your machine could not resolve the name server1 (hosts file / DNS problem)

92. You try "ping server1" and you get "no **answer** from server1". Why ?
(assume that your machine resolved the name correctly).

Ans: server1 server is either not on or not connected to the network.

93. You try "ping server1" and you get "host not reachable ….." . Why ?

Ans: your machine could find a route to server1

94. If a default router is used, then which 2 daemons need to started ?

Ans: in.routed and in.rdisc

95. When would you use a default route ?

Ans: when 1 router connects your machine to all indirectly connected hosts

96. _____ is a collection of networks and routers under a single administrative control.

Ans: Autonomous System (AS)

97. _____ protocol is used typically within an AS ?

Ans: Interior Gateway (IGP)

98. _____ Protocol is used typically among Autonomous Systems.

Ans: Exterior Gateway (EGP)

99. Name 2 routing protocols that are used among relatively small networks:

Ans: RIP and IGRP

100. _____ Protocol was developed to overcome limitations of EGP.

Ans: Border Gateway (BGP)

101. What id the disadvantage of BGP ?

Ans: BGP packets are larger, requiring systems involved to consume more memory.

102. What does CIDR stand for ?

Ans: Classless Inter-Domain Routing (CIDR)

103. What does CIDR use to reduce the size of the routing tables ?

Ans: route aggregation

104. What does OSPF stand for ?

Ans: Open Shortest Path First

105. True/False: OSPF supports multiple metrics.

Ans: True

106. What algorithm does RIP use to determine the best route ?

Ans: distance-vector

107. What is the metric RIP uses to determine the best route ?

Ans: Hops

108. Host A has two routes to host B. First route has 2 hops, but the bandwidth is 56K. The second route has 3 hops, but the bandwidth is 100Mbps. If you use RIP, which route will be taken ?

Ans: First route (56K)

109. What are the advantages of RIP ?

Ans: easily implemented
commonplace
frequent update of routing table

110. How frequently is the routing table updated in RIP ?

Ans: every 30 seconds

111. How many metrics can you use with RIP ?

Ans: 1

112. What is the maximum number of hops allowed in RIP ?

Ans: 15

113. Host A is connected to Router B. Router B is connected to Router C. Router is connected to Host D. How many hops away is Host D from Host A ?

Ans: 2

114. In improved Distance Vector Protcols, there is a rule that no router will send a routing update via the interface it learnt of the route in the first place. This is called _____ ?

Ans: Split Horizon

115. Which is the RIP daemon in Solaris ?

Ans: /usr/sbin/in.routed

116. Which file associates network name with number ?

Ans: /etc/inet/networks

117. Which command will manipulate the routing table ?

Ans: route

118. Command to add a route to server1 via router1 with 3 hops :

Ans: route add host server1 router1 3

119. Which command 9and options) will show the routing table, but will bypass hostname lookup ?

Ans: netstat –nr

120. Which command (and options) will show the state of all sockets ?

Ans: netstat –a

121. Which command will increase the TCP transmit and receive buffers ?

Ans: ndd

122. Which command will add a route to the network 128.251.0.0 via 128.144.1.254 with 2 hops ?

Ans: route add net 128.251.0.0 128.144.1.254 2

123. Which command would delete a route to host server1 via router1 ?

Ans: route delete host server1 router1

124. Which command will delete the route to the network 128.251.0.0 via 128.144.1.254 ?

Ans: route delete net 128.251.0.0 128.144.1.254

125. Which command will remove all entries from the routing table ?

Ans: route flush

126. Which command will watch all packets on device pcelx0 ?

Ans: snoop –d pcelx0

127. Which command will saves all packets from device pcelx0 to file /home/adm/packets ?

Ans: snoop –a /home/adm/packets pcelx0

128. Which command will packets between server1 and server2 from logfile /home/adm/packets?

Ans: snoop –I /home/adm/packets server1 server2

Note: small case of I

129. Which command will show all info on packet#220 from file /home/adm/packets ?

Ans: snoop –I /home/adm/packets –v –p220

Note: small case of i

130. Which command will extract all server1 packets from the /home/adm/packets and write them to the file /home/adm/ps2 ?

Ans: snoop –I /home/adm/pakcets –o /home/adm/ps2 server1

Ans: small case of I

131. You want to know how your Solaris Machine intends to route packets to a host with IP 128.251.5.5 . Which command should you run ?

Ans: route get 128.251.5.5

132. Can you run "route get" commands without superuser previlege ?

Ans: No

133. Which command allows you to monitor the routing requests that are not getting resolved from the routing table ?

ans: route monitor

134. Which command balnks out the routing table ?

Ans: route flush

135. Solaris will run routed if the file _____ exists.

Ans: /etc/gateways

136. Solaris will run routed if the default route is not defined in the _____ file .

Ans: /etc/defaultrouter

137. The _____ file identifies gateways for the routed daemon.

Ans: /etc/gateways

138. What would you put in the /etc/gateways file such that a route
is defined to network called net2 via router called host4? Assume that net2 is 3 hops away. Also, assume that the gateway is not expected to exchange RIP information.

ans: net net2 gateway host4 metric 3 passive

139. Which three types of gateways can be defined in the /etc/gateways file ?

Ans: active, passive, external

140. Which kind of gateways is expected to exchange RIP information ?

Ans: active

141. What entry in the /etc/gateways file would define a route to the host
called host2 via the gateway called host4? Assume that host2 is 2 hops away and that the gateway is NOT expected to exchange RIP information.

Ans: host host2 gateway host4 metric 2 passive

142. What entry in the /etc/gateways file would define a route to the host
called host9 via the gateway whose IP address is 192.100.100.5? Assume that host9 is 2 hops away and that the gateway IS expected to exchange RIP information.

Ans: host host9 gateway 192.100.100.5 metric 2 active

143. What entry should put in the /etc/gateways file to specify a route to a network called net5 through an external gateway called host9 ? Assume that net5 is 3 hops away.

ans: net net5 gateway host9 metric 3 external

144. _____ layer transports data to and from application level, includes the destination port number, and also handles error detection and recovery.

Ans: transport

145. In _____ protocol, connection must be established before exchanging data. This is a reliable and requires more processing.

Ans: Connection-Oriented

146. In _____ Protocol, message are just delivered. It is not reliable, and requires that transmission quality be augmented. It is fast, however.

Ans: Connectionless

147. In _____ protocol, data is sent from client to server to tell their state.

Ans: stateful

148. In _____ protocol, server doesn't keep track of client state.

Ans: stateless

149. User Datagram Protocol (UDP) is _____ and _____.

a. connectionless, stateless
b. connection-orineted, stateless
c. connection-oriented, stateful
d. connectionless, stateful

Ans: a

150. TCP stands for _____ ?

Ans: Transmission Control Protocol

151. TCP is _____ and _____ ?

a. connectionless, stateless
b. connection-orineted, stateless
c. connection-oriented, stateful
d. connectionless, stateful

ans: C

152. Full Duplex Connection consists of ___ independent streams of data.

Ans: 2

153. Receiving host informs header of how much it is ready to receive. This is called _____ ?

Ans: Window Advertisement

154. True:False: TI RPC is supported in Solaris environment.

Ans: True

155. TI RPC stands for _____ ?

Ans: Transport - Independent Remote Procedure Call (TI-RPC)

156. _____ resolves the differences in data byte ordering, data type size, representation and alignment between architecture.

Ans: XDR

157. XDR stands for _____ ?

Ans: External Data Representation

158. _____ provides application program interface between OSI transport session layers.

Ans: TLI

159. Which protocol is used to share file systems between solaris machines ?

Ans: NFS

160. Which file is used to identify and register the reserved port numbers, services, and protocols for the Internet. (well know ports)

Ans: /etc/inet/services

161. Which port is reserved for telnet ?

Ans: 23

162. Which port is reserved for FTP ?

Ans: 23

163. Which port is reserved for HTTP ?

Ans: 80

164. Which init script starts the inetd daemon ?

Ans: /etc/init.d/inetsvc

165. Which command would you use to kill a process by name ?

Ans: pkill

166. Which file dictates what inetd will listen for ?

Ans: /etc/inet/inetd.conf

167. Which command will make the inetd reread the inetd.conf file ?

Ans: pkill –HUP inetd

168. What does the file /etc/rpc contain ?

Ans: A list of network services

169. What does the rpcbind program do ?

Ans: it provides a port number for a given network service name

170. Which is the startup script for rpc ?

Ans: /etc/init.d/rpc

171. Which program displays program number, version, protocol, port number, service, and owner of RPC service (root) ?
Ans: rpcinfo

172. Which command identifies all RPC services on a host called server ?

Ans: rpcinfo –p server

173. Which command lists versions and states of the nfs service running on a host called machine ?

Ans: rpcinfo –u machine nfs

174. Which command lists versions and states of the mountd service running on a host called unix1 ?

ans: rpcinfo –u unix1 mountd

175. Which protcol allows automation of the IP assignment process ?

Ans: DHCP

176. DHCP stands for _____ ?

Ans: Dynamic Host Configuration Protocol

177. You have a team of 3 network administrators. They work independently. Often, they end up assigning same IP to multiple machine. Would using DHCP solve this problem ?

Ans: Yes

178. How many DHCP IP address pools are supported ?

Ans: 21

179. True/Flase: Same DHCP server can support multiple subnets .

Ans: True

180. which command releases and removed DHCP leases ?

Ans: dhcpagent

181. Which command displays value of parameters received through DHCP ?

Ans: dhcpinfo

182. What does a secondary dhcp server do when the primary server is unable to respond ?
Ans: confirms existing configuration supplied by primary

183. Which command will initialize the dhcptab ?

Ans: dhcpconfig

184. where does dhcptab reside ?

Ans: /var/dhcp/dhcptab

185. Where would you find DHCP information about supported network 128.251.144.0 ?

Ans: /var/dhcp/128_251_144_0

186. Which file contains information related to client (dhcp) configuration ?

Ans: dhcptab

187. Which 2 commands modifies the dhcptab file ?

Ans: pntadm and dhtadm

188. which value of "Flags" in the DHCP network database denotes a permanent lease ?

Ans: 1

189. What are entries in the DHCP network database ?

Ans: Client ID , Flags, Client IP, Server IP, Lease, Macro, Comments

190. Which value in the "flags" field in the DHCP network database denotes that the evaluation of the DHCP lease is turned on ?

Ans: 0

191. True/False: Each record in the DHCP network database has an associated DHCP server's IP address .

Ans: True

192. What does the "Lease" field hold in the dhcp network database ?

a. how long the client has the lease for (length)
b. how long remains of the lease
c. absolute time when the lease expires

Ans: C

193. Which comamnd will yield the current dhcp information on the DHCP server ?

Ans: dhtadm –P

194. which file tells the dhcp daemon where to find its configuration?

Ans: /etc/default/dhcp

195. which command will show you the entry for the host fred from the "hosts" administrative database ?

Ans: getent hosts fred

196. Which command will show the device/system being used for the printer fred ?
Ans: lpstat –v fred

197. What will the command "lpstat –lp fred" do ?

Ans: show detailed configuration report on printer fred.

198. How to you start the DHCP daemon ?

Ans: /etc/init.d/dhcp start

199. How do you shutdown the DHCP daemon ?

Ans: /etc/init.d/dhcp stop

200. Which option of the dhtadm command creates the DHCP service configuration table, dhcptab ?

Ans: -C

201. Which option of the dhtadm command adds a symbol or macro definition to dhcptab ?

Ans: -A

202. Which option of the dhtadm command modifies an entry in the dhcptab table ?

Ans: -M

203. Which option of the dhtadm command removes symbol or macro definition from dhcptab ?

Ans: -D

204. Which option of the dhtadm command deletes the dhcptab table entirely ?

Ans: -R

205. SNMP is ____-based .

Ans: IP

206. SNMP uses _____ protocol ?

Ans: User Datagram (UDP)

207. What does SNMP use to set or change data on the managed device ?

Ans: agent

208. What does SNMP use to send unsolicited messages to the managing host ?

Ans: trap

209. The rules used to define the objects that can be accessed via a network management protocol is called _____ ?

Ans: Structure of Management Information (SMI)

210. Which RFC defines the SMI ?

Ans: RFC 1155

211. Name 4 SNMP based applications :

Ans: Solstice Site Manager, Solstice Domain Manager, Solstice Enterprise Manager, and Solstice Enterprise Agents

212. FQDN stands for _____ ?

Ans: Fully Qualified Name of Domain

213. Which of the following is FQDN ?

a. www.mydomain.com
b. mydomain.com
c. www.mydomain.com.

Ans: C (the dot at the end is essential for FQDN)

214. True/Flase: Relative domain name (RDN) ends with the dot.

Ans: False

215. What is the maximum number of characters you can have in a FQDN ?

Ans: 255

Note: We think, NIC just did away with this rule couple of months back !!

216. True or Flase: domain names can contain the symbol "*" ?

Ans: False

Note: Only alpha numerics and dashes

217. _____ servers maintain the top-level zones (com, net, edu).

Ans: root

218. _____ servers are authoritative for domains they serve.

Ans: Primary (Master)

219. The DNS server configuration file is:

Ans: /etc/named.conf

220. True/Flase: Secondary DNS servers can not be authoritative for any domains .

Ans: False

Note: They can be authoritative for the domains they server

221. True/False: Secondary DNS Servers can help in load sharing with the primary servers .

Ans: True

222. Secondary servers are defined the type _____ in the named.conf file .

Ans: slave

223. Name 4 kinds of DNS servers ?

Ans: Primary, Secondary, Caching-only, Forwarding

224. Which 2 kinds of DNS servers can never be authoritative over any domain ?

Ans: Caching-only and Forwarding

225. You have a few machine on remore location. Uplink bandwidth is premium. You want to reduce name lookup traffic as much as possible. Which should you do ?

Ans: setup a forwrading server

226. 2 kinds of **answer**s a client can get from any DNS server are:

Ans: Authoritative and Non-Authoritative

227. Non-authoritative **answer**s can be incorrect mostly due to :

Ans: changes that have not been propagated via updates

228. Which script starts the in.named daemon ?

Ans: /etc/init.d/inetsvc

229. What does the /var/named/named.root file specify ?
Ans: specifies name of address mapping of root servers

230. How does a DNS server find the actual root servers ?

Ans: by querying the servers listed in the file /var/named/named.root

231. Which file has name and IP for all systems in the domain (on a DNS server) ?

Ans: /var/named/domain.info

232. Which file on a DNS server has IP to name resolution ?

Ans: /var/named/inverse-domain.info

233. What does the /var/named/loopback-domain.info file specify ?

Ans: inverse loopback domain address

234. Which file does a workstation consult to find out which DNS servers shiuld be consulted to resolve names ?

Ans: /etc/resolv.conf

235. Which command causes in.named to take a snapshot of its in-memory cached data.

Ans: pkill –INT in.named

236. You you ran pkill –INT in.named, where will it write the snapshot of its in-memory cached data ?
Ans: /var/named/named_dump.db

237. Which command causes in.named to increase its debug level by 1 ?

Ans: pkill –USR1 in.named

238. Which command causes name daemon to return to level 0 (debug) ?

Ans: pkill –USR2 in.named

239. Which command will cause the in.namded daemon to reread it's configuration files ?

Ans: pkill –HUP in.named

240. True/False: DNS gives you the ability to restrict queries from machines in a particular zone.

Ans: True

241. True/False: DNS gives you the ability to prevent unauthorized transfers.

Ans: True

242. Which tool converts /etc/hosts files to DNS zone files ?

Ans: h2n

243. Which DNS debugging tool allows in-depth debugging of DNS problems ?

Ans: dig

244. _____ agent acts as an interface between the user and mail transfer agent.
Ans: Mail user

245. _____ agent accepts messages from mail user agent. resolves destinations addresses, selects proper mailer to deliver mail, and receives incoming mail from other mail transfers agents.

Ans: Mail transfer

246. _____ agents are responsible for putting messages in inbox of the recipient.

Ans: Mail delivery

247. The programs that will deliver various kinds of mail is called the _____.

Ans: Mailer

248. SMTP stands for _____ .

Ans: Simple Mail Transfer Protocol

249. True/False: Solaris supports SMTP, ESMTP, and POP3.

Ans: True

250. Host A is giving some email to Host B to deliver to Host C. Host A, B, and C are all in different domains. Host B is _____-ing .

Ans: relay

251. _____ host decodes any address and reroutes the mail within the domain.

Ans: Mail

252. _____ host - delivers mail between domains.

Ans: Relay

253. System used to deliver mail between domains running different mail protocols is called a _____ ?

Ans: gateway

254. System that stores mailboxes in local /var/mail is called _____ server ?

Ans: mailbox

255. List 3 types of email addresses (for the mailer):
Ans: unqualified, qualified, fully qualified

256. You mail server belongs to mydomain.com . An email is destined for user@host2 . The destination domain name is not known. This type of email address is _____ .

Ans: unqualified

257. You mail server belongs to mydomain.com . An email is destined for user@host3 . Host3 belongs mydomain.com. This type of email address is _____ .

Ans: qualified

258. You mail server belongs to mydomain.com . An email destined for user@host4.mydomain.com . This type of email address is _____ .

Ans: fully qualified

259. Which file can a user use for private aliases ?

Ans: $HOME/.mailrc

260. Which file is used to define host-wide aliases ?

Ans: /etc/aliases

261. You just added a new alias in the /etc/aliases file. What command should you run to activate the change ?

Ans: newaliases

262. What file can a user create in his/her home directory to forward his/her email ?

Ans: .forward

263. Which alias must exist for a mail system to run properly ?

Ans: postmaster

264. Which file serves as the configuration file for sendmail ?

Ans: sendmail.cf

265. To configure “Local mail in Local Mode”, how many sendmail.cf files are requried ?

Ans: 1 for each host (each host will have its own sendmail.cf)

266. To configure "Local Mail in Local Mode", who provides /var/mail ?

Ans: each client has its own /var/mail

267. To configure "Local Mail in RemoteMode", who provides /var/mail ?

Ans: 1 designated server has /var/mail and each client mounts /var/mail from the server.

268. 3 types of mail access supported by IMAP4 are:

Ans: Off-line, On-line, and Disconnected

269. Mail messages remain on the server while being manipulated by client. This is the _____ type mail access supported by IMAP4.

Ans: On-line

270. Remote user downloads mail messages to a client where messages are cached. This is the _____ type mail access supported by IMAP4.

Ans: Disconnected

271. Which two packages contain sendmail ?

Ans: SUNWsndmr, and SUNWsndmu

272. Which script will find unsafe permissions (sendmail related) ?

Ans: /etc/lib/mail/sh/check-permissions

273. Which program will check if sendmail can determine the system's fully-qualified host name ?

Ans: /usr/lib/mail/check-hostname

274. Which subdirectory of /usr/lib/mail contains the configuration files for sendmail ?

Ans: /usr/lib/mail/cf

275. Which directory contains files that describe different mailers ?

Ans: /usr/lib/mail/mailer

276. Which macro defines optional features that are included in the sendmail.cf file ?

Ans: Feature Macro

277. Which is the main sendmail configuaryion file ?

Ans: /etc/sendmail.cf

278. Which machines use the /etc/main.cf file ?

Ans: mail hosts, relay hosts and gateway hosts

279. A machine that is not a mail host, relay host, or gateway would use _____ file ?

Ans: subsidary.cf

280. You want to make your own configuration file for sendmail. After editing the appropriate files, which program would you run to compile your new configuration file ?

Ans: /usr/ccs/bin/make

281. Which command would shutdown the sendmail daemon ?

Ans: /etc/init.d/sendmail stop

282. Which options of the sendmail daemon causes it to listen on SMTPport ?

Ans: -bd

283. You want sendmail to attempt to re-deliver previously undelivered mail (e.g. the receving mail server was down) every 30 minutes. Which option and value would you use with the sendmail deamon ?

Ans: -q 30m

284. You just simply want to kill the sendail deamon. What's the easiest way ?

Ans: pkill sendmail

285. Which layers of the OSI model are managed by a network protocol such as TCP/IP? (check all that apply)

a. Transport
b. Physical
c. Network
d. Presentation

Answer: A, C

286. Which file holds the IP address of the default gateway ?

Ans: /etc/defaultrouter

287. On what layer does SMB protocol reside?
a. application
b. presentation
c. session
d. transport

Answer: C

288. Which layer of the OSI model defines how cable is attached to a network adapter card?

Answer: the Physical layer

289. What connectivity device typically work at the Application layer of the OSI model?

Answer: gateways

290. The Project 802 model defines standards for which layers of the OSI model?

Answer: the Physical layer and the Data Link layer

291. Which layer of the OSI model is responsible for data compression?

Answer: Presentation

292. Which layer of the OSI model provides synchronization between user tasks by placing checkpoints in the data stream?

Answer: the Session layer

293. What OSI level does a router work at?

a. Application Layer
b. Presentation Layer
c. Session Layer
d. Transport Layer
e. Network Layer
f. Data Link Layer
g. Physical Layer

Ans: E

294. What OSI level does a bridge work at?

a. Application Layer
b. Presentation Layer
c. Session Layer
d. Transport Layer
e. Network Layer
f. Data Link Layer
g. Physical Layer

Ans: F

295. What connectivity device works at the physical layer of the OSI model?

a. repeater
b. bridge
c. router
d. gateway
e. brouter

Ans: A

296. Which OSI layer defines QuickTime standard?

a. Application
b. Presentation
c. Session
d. Transport

ans: B

297. Which OSI layer uses segments?

a. Application
b. Presentation
c. Session
d. Transport

ans: D

298. Which layer uses datagrams?

a. physical
b. data-link
c. network
d. transport

ans: C

299. Which OSI layer uses ports and sockets ?

a. Application
b. Presentation
c. Session
d. Transport

ans: D

300. Which layer packages data into frames?

Ans: Data Link Layer

301. Which layer begins the process of creating packets?

Ans: Application Layer

302. TCP/IP has _____ layers?

a. 2
b. 3
c. 4
d. 5

ans: C

303. Which 3 layers are missing in TCP/IP ?

a. Physical
b. data link
c. network
d. transport
e. session
f. presentation
g. application

ans: B,E,F

304. Which layer deals with Data Formats, Syntax, Encryption?

a. application
b. presentation
c. session
d. transport

ans: B

305. Which layer does "timing" ?

a. Physical
b. MAC sublayer
c. LLC sublayer
d. Network Layer
e. transport layer

ans: C

306. Which sublayer builds frames?

a. LLC
b. MAC
c. none
d. both

ans: B

307. How does the MAC sublayer assure that nothing was damaged in transit?

a. CRC
b. it can't
c. ackwoledgement

ans: A

CRC= Cyclic Redundancy Checksum (CRC)

308. Which of the following are Layer2 protocols ?

a. ICMP
b. SDLC
c. LAPB
d. SLIP
e. SMTP

ans: B,C,D

309. Which of the following are Layer2 protocols ?

a. ICMP
b. SDLC
c. LAPB
d. SLIP
e. SMTP

ans: B,C,D

310. Which layer does data transfer syntax ?

a. Presentation
b. Session
c. Transport
d. Network

ans: A

311. Which layer is responsible coordinating communications b/w segments ?

a. presentation
b. Session
c. transport
d. network

ans: B

312. What does the LLC sublayer of the Data Link Layer do ?

a. Error Checking
b. Gets data on and off the wire
c. Decides which machines gets to go next on the wire
d. Provides clocking signals

ans: A

313. List 4 layer-3 protocols ?

a. ICMP
b. SNMP
c. IP
d. ARP
e. SMTP
f. RARP

ans: A,C,D,F

314. X windows maps to which OSI layer ?

a. application
b. presentation
c. session
d. transport
e. network

ans: C

315. Which layer is responsible coordinating communications b/w segments ?

a. physical
b. data-link
c. network
d. session
e. application

ans: D

316. Can ATM allocate bandwidth on demand ?

a. Yes
b. NO
c. Only if you are running LANE
d. Only if you are running layer 3 switches

ans: A

317. Which frame type use DSAPs and SSAPS to identify the upper layer protocols ?

a. 802.1d
b. 802.2
c. 802.3
d. 802.3u

ans: B

318. UDP runs its own _____ ?

a. data-link layer protocols
b. CRC
c. routing
d. Acknowledgements

ans: B

NOTE: UDP does not have to rely on lower layers

319. Which of the follwoing are Layer2 protocols ? Choose all that apply.

a. HDLC
b. IP
c. UDP
d. SLIP
e. PPP

ans: A,D,E

320. Which layer does error notification ?

a. Physical
b. Data Link
c. Network
d. Transport

ans: B

321. which layer converts user input into data ?

a. application
b. presentation
c. session
d. transport

ans: A

322. Which layer deals converts formats (unix-dos, EBCDIC-ASCII etc.) ?

a. session
b. presentation
c. transport
d. application

ans: B

323. Which layer deals with
i) file system transfer
ii) ii) virtual terminals emulation
iii) interprocess communication.

a. Application
b. Presentation
c. Session
d. Transport

ans: A

324. Which layer consists of dialogs and regulates conversations ?

a. Application
b. Presentation
c. Session
d. Transport

ans: C

325. List 4 session layer standards

ans: NFS, SQL, RPC, X

326. Which layer establishes end-to-end connection ?

a. network
b. transport
c. physical
d. data-link

ans: B

327. Which layer does: flow control, windowing, error recovery ?

a. data-link
b. network
c. transport
d. session

ans: C

328. T/F: 802.3 can not "see" upper layers.

ans: True

329. Which set has protocols of ONLY the Network layer ?

a. IP, UDP, TCP, RARP, ICMP
b. IP, UDP, ARP, RARP, ICMP
c. SPX, UDP, GNS, ARP, APPLETALK
d. IPX, FTP, ARP, RARP, ICMP

ans: B

330. which layer deals with keepalives ?

a. Physical
b. Data-link
c. Network
d. Transport

ans: B

331. In PPP, a _____ protocol frame is used for selecting and configuring the network layer protocol ?

ans: NCP (Network Control Protocol)

332. T/F : FDDI specifies protocols at both MAC sublayer and physical layer ?

ans: True

333. _____ makes transport layer independent from upper layer services ?

a. TDI
b. TLI
c. NDIS
d. SRB

ans: a. TLI = Transport Layer Interface

334. Windowing happens at _____ layer ?

a. network
b. transport
c. session
d. presentation

ans: B

335. Port is where upper layer protocols access _____ layer ?

a. data-link
b. network
c. transport
d. session

ans: C

336. T/F: TCP/IP has a formal session layer ?

ans : False

337. Which of the following services are provided by the presentation layer? (Choose all that apply)

a. DNA SCP
b. EBCDIC to ASCII
c. JPEG
d. MIDI
e. MPEG
f. NFS
g. PICT
h. QuickTime
i. RPC
j. SQL
k. TIFF
l. X Windows

ans: B,C,D,E,G,H,K

338. Which of the following services are provided by the session layer ?
(Choose all that apply)

a. DNA SCP
b. EBCDIC to ASCII
c. JPEG
d. MIDI
e. MPEG
f. NFS
g. PICT
h. QuickTime
i. RPC
j. SQL
k. TIFF
l. X Windows

ans: A,F,I,J,L

339. What does the MAC sublayer of the Data Link Layer do ?
(choose all that apply)

a. builds frames
b. checks to see that nothing got damaged in transit by CRC
c. determines "which machine goes first on the wire"
d. provides path to the destination host
e. Gets data on and off the wire

ans: A,B,C,E

340. What functions does the session layer perform ?

a. flow control
b. find te best route
c. frame building
d. communication control such as simlex/half-duples/full-duples and
connectionless/connection oriented

ans: A,D

341. What is a MAC ?

a. It is the network layer address of a NIC that can not be modified
b. It is the network layer address of a NIC that can be modified
c. It is the Data Link Layer address of a NIC that can not be modified
d. It is the Data Link Layer address of a NIC that can be modified

ans: C

342. True/False: 802.2 can identify upper layer protocols:

ans: False

343. There are ""_____"" layers in the OSI model.

Ans. 7

344. True or False: The purpose of each layer of the OSI is to provide
services to the next lower level?

Ans. False.

Note: It is to provide services to the next higher level.

345. The ""_____"" OSI layer provides synchronization by placing checkpoints in the data stream.

Ans. Session

346. True or False: The Transport layer deals with packets while the Data Link layer deals with frames.

Ans. True

347. True or False: Each OSI layer thinks it is communicating directly with the same layer in another computer. Even though the data is going through several layers.

Ans. True

348. True or False: In the OSI model the Physical layer communicates
directly with the _____ layer in another computer.

Ans. Physical

349. The 802 standards committee divided the Data Link Layer of the OSI model into the ""_____"" and ""_____"" sublayers.

Ans. LLC (Logical Link Control) and MAC (Media Access Control)

350. Network adapter card drivers reside in the ""_____"" sub-layer of the Data Link layer of the OSI model.

Ans. MAC (Media Access Control)

351. Name the 3 IEEE protocols at the Physical Layer:

Ans. 802.3 (Ethernet),
802.4 (token Passing) and
802.5 (Token Ring)

352. _____ works at the Data Link layer of the OSI model.

Ans: Bridge

Note: Bridges work with all protocols.

353. Bridges work at the Data Link Layer of the OSI model or more
specifically the _____ _____ _____ layer.

Ans: Media Access Control

354. You have connected a Token Ring Network (4MBit/s) and an Ethernet Network. Copying a 5MB File from Ethernet to Token Ring takes 30 seconds. Copying from Token Ring to Ethernet takes 2 Minutes. Why?

a. the Token Ring network is slower
b. the packet size is larger with Ethernet than Token Ring.
c. the packet size is larger with Token Ring than Ethernet.
d. TCP windows size

Answer: B

355. A server who performs processing for client computers is called?

a. application server
b. file/print server

Answer: A

356. OSI Stands for:

Ans: Open System Interconnection (OSI)

357. What would you use to make a 100mb network ? budget is low.

a. 100BaseT

Answer: A

358. Where do Bridge, Router, repeater and Gateway sits on the OSI model?

Answers:
Bridge: Data Link
Router: Network
Repeater: Physical
Gateway: Transport, Session, presentation, application

359. What network topology is at the exhibit (Exhibits looks like a star of David) ?
a. Mesh

Answer: A

360. What kind of cables can be called UTP cables ?
a. Cat 3,4, 5, 6 cable.

Answer: A

361. Which of the following protocols are Dial-Up-Protocols?
a. SLIP
b. PPP

Answer: A, B

362. SLIP and PPP, which one supports Dynamic IP and compression?
a. PPP
b. SLIP
c. CSLIP

Answer: A

363. You have a dial up connection and want to use error correction and compression. Which protocol do you use? (choose all that apply):
a. DLC
b. XNS
c. SLIP
d. PPP

Answer: D

364. Using 10BaseT what is needed to get 300 meters :
a. repeaters

Answer: A

365. Which protocol is used in packet switching to find the shortest route and most cost effective, measure hops?
a. RIP

Answer: A

366. You need to implement an Ethernet 100 MBPS network, what do you use?
a. Coaxial
b. UTP 3
c. UTP 5
d. Fiber optic

Answer: C

367. You are installing a 100BaseTX FastEthernet network in a 1-story building. The company has 100 of workstations. The rooms have 1 meter raised ceilings. What cable would you use:
a. Coax
b. Type 5 UTP
c. UTP
d. STP

Answer: B

Note: Fast Ethernet so it must be type 5 UTP.

368. What is a characteristic of 802.3 10BaseT standard
a. RJ11 Connector at both ends
b. UTP RJ45
c. BNC T-connector
d. 50 Ohm

Answer: B

369. What is a characteristic of the 802.3 100BT fast Ethernet?
a. CAT5 UTP
b. CAT3 UTP
c. Max cable length of 200 meters
d. BNT T-Connectors

Answer: A

370. What is the name for the number sequence needed for handling an IP address?

a. MAC
b. Gateway Address
c. Sock number
d. Node number
e. Subnet mask

Answer: E

371. What provide assurance of packet delivery?

a. Connectionless oriented
b. Connection oriented

Answer: B

372. Which has error correction? (choose all that apply)

Connection Oriented
Connectionless oriented

Answer: A

373. 802.X is /collision detect
a.3
b.4
c.5
d.12

Answer: A

Note: 4 is token bus and .5 is token ring. .12 is Demand Priority Access LAN.

374. You are setting up a 100 Mbps network in a building, which is pre-wired. After testing you decided that the cabling is category 3 compliant. What do you do?

a. Keep existing
b. Change to category 5

Answer: B

375. You want to connect 2 buildings together that are 1000 meters apart and communicate at 100 Mbps and provide some security on the cable. What do you choose?

a. Fiber optic

Answer: A

376. Your HOSTS file looks like this:

187.123.34.19 product
187.123.23.45 develop

you can ping 187.123.34.19 , but you cannot connect \\product\netapps . Why ?

ans: 187.123.34.19 is not the correct IP address of the machine “product”

377. Your HOSTS file looks like this:

10.11.12.13 UNIX programmer # Programmers FTP server
10.11.12.14 server
10.11.12.15 UNIX developer #Developers FTP server
10.11.12.20 developer # developer

you try to ftp developer, you can connect to the right server. But you try ftp 10.11.12.20, you fail to connect. Why?
ans: In Line 3 , developer is being defined as 10.11.12.15. Thus,
10.11.12.20 is NOT the machine “developer”.

378. Two subnet of computers. the subnet on the left has a server called L_SERVER and A workstation called L_WKST1 and the subnet on the right has one server called R_SERVER. L_WKST1 can connect to R_SERVER, but L_WKST1 can not connect to L_SERVER server on the same subnet. Why?

ans: the default gateway of CONTAINER is wrong

379. Host ----router ----server

Class B network.
host's IP : ...82.2 , Mask: 255.255.240.0
router's left IP-address is ...64.1
router's right IP-address is ...32.1.

Why can the host not access the server ?

Ans: With this Subnet mask, the host is in a different subnet than it's router.

380. Host ----router ----server

Class C network.
host's IP : ...82.2 , Mask: 255.255.255.0
router's left IP-address is ...64.1
router's right IP-address is ...32.1.

Why can the host not access the server ?

Ans: With this Subnet mask, the host is in a different subnet than it's router.

381. Host ----router ----server

Class C network.
host's IP : ...32.2 , Mask: 255.255.255.0
router's left IP-address is ...64.1
router's right IP-address is ...32.1.

How can you solve this problem ?

Ans: Switch the left and right IPs of the router

382. Your workstation can ping itself by ip, but it can't ping ip of the others on the same subnet. why? (The physical connection is OK).

Ans: subnet mask error

383. What do you use to find the path a packet takes?

Ans: traceroute

384. What do you use to monitor TCP/IP stats since the last reboot?

Ans: netstat

385. Command to troubleshoot DNS problems Host name resolution problems:

Ans: nslookup

386. Which of the following protocols are application protocols?

a. ARP
b. RIP
c. FTP
d. NFS

Answer: C

387. All IP addresses are eventually resolved to network interface card addresses. Which of the following is used to map an IP address to a network interface card address?

a. WINS
b. DHCP
c. DNS
d. ARP

Answer: d

388. _____ layer addresses the stations attached to the transmission medium and the next higher protocol that used the transmission service.

Ans: Data Link layer

389. What device can be installed in your network to resolve a broadcast storm?

Answer: Router

390. Which datalink communication protocols provide connection between computers via Dial-Up telephone lines?

Answer: PPP & SLIP

391. What does the transport protocol do?

a. It defines how data should be presented to the next receiving layer, packages the data accordingly, ad then passes data to the application though the session layer interface.
b. It provides low-level access to network adapters by providing data transmission support and some basic adapter management functions
c. It supports communications between applications on different computers by creating sessions, defining data-exchange formats, and providing application-support services
d. It is responsible for establishing logical names on the network, establishing connections between two logical names on the network, and supporting reliable data transfer between computers that have established a session

Ans: D

392. What is the name of the unique identifier encoded in the NIC?
a. MAC address
b. IP address.

Ans: B

393. What protocol counts hops from router to router to find the shortest path?

a. DHCP
b. RIP
c. SNMP
d. IP
e. DLC

Ans: RIP

394. Three computers and a printer in the same office are all connected by a cable so that users can share the printer. Is this a LAN?

Ans: Yes

"If they are sharing the same media and can communicate with each other chances are you have a LAN"

395. Three computers in California and one in Kansas City all use Microsoft Excel and Lotus CCMail is this a LAN?

Ans: No

Just because one or two computers use the same applications doesn't mean they automatically constitute a LAN.

396. In a peer-to-peer network, each computer can act as both a server and a _____ .

Ans: Client

397. In a peer-to-peer network, there are no dedicated _____ ?

Ans: Servers

In Client-Server network, the Server handles request made to it by the front-end client.

398. When one runs a packet sniffer on a workstation, that workstation's
network card goes into _____ mode .

a. interactive
b. routing
c. promiscuous
d. open

ans: C

399. When you run snoop on your Solaris workstation, the workstation goes into _____ mode .

a. inetractive
b. routing
c. promiscuous
d. open

Ans: C

400. How long is the "Destination Address" field in an Ethernet frame?

a. 2 bytes
b. 4 bytes
c. 6 bytes
d. 8 bytes

ans: C

NOTE: Same as an IP address, since an IP address goes in that field.

401. 2 examples of DCE devices ?

a. modems
b. routers
c. computers
d. interface cards

ans: A,D

402. 2 examples of DTE devices ?

a. modems
b. routers
c. computers
d. interface cards

ans: B,C

403. A subnet's mask is 255.255.255.224. How many nodes can this subnet have?

Ans: 30

404. A subnet's mask is 255.255.255.240. How many nodes can this subnet have?

Ans: 14

405. A subnet's mask is 255.255.255.192. How many nodes can this subnet have?

Ans: 62

406. What does RPC do?

a. Intercepts DHCP broadcasts
b. Broadcasts NETBIOS updates
c. Makes remote calls look local
d. Makes the use of redirector redundant

ans: C

407. ARP is _____ protocol?

a. broadcast
b. multicast
c. unicast
d. routing

ans: A

408. DCE (distributed computing Environment) is and example of _____ implementation?

a. RPC
b. Tranparent bridging
c. NFS
d. Source Bridge Routing

ans: A

409. TCP/IP has _____ layers?

a. 2
b. 3
c. 4
d. 5

ans: C

410. What IP network addresses are set aside for class A (for private use)?

a. 1.0.0.0 (mask 255.0.0.0)
b. 10.0.0.0 (mask 255.0.0.0)
c. 10.0.0.0 (mask 255.255.0.0)
d. 100.0.0.0 (mask 255.0.0.0)
e. 100.0.0.0 (mask 255.255.0.0)

ans: B

411. Fragmentation =?

a. data --> packets
b. packets ---> bits
c. datagram ----> multiple frames
d. frame ---> bits

ans : C (for transporting across network)

412. T/F: There is no way to inform TCP of congestion along the path

ans: True

413. What is spoofing?

a. Where a packets claims its source to be other that what its source
really is.
b. Same as "denial of service" attacks
c. Where a machine continually pings another machine
d. Where certain broadcasts are passed through a router

ans: A

NOTE: There is protection built-in in IPv6 to against this.

414. Sequence Number in a TCP header is used for (list all that apply)

a. acknowledgements
b. upper layer information
c. reordering of the octets received
d. protocol dependent information
e. rejecting the duplicate octates

ans: A,C,E

415. What is "keepalive"?

a. A keepalive is a small, layer-1 bit message that is transmitted by a
network device to let directly-connected network devices know of its presence.
b. A keepalive is a small, layer-2 message that is transmitted by a
network device to let directly-connected network devices know of its presence.
c. A keepalive is a small, layer-2 message that is transmitted by a
network device to let it neighbors know of congestion
d. A keepalive is a small, layer-3 message that is transmitted by a
network device to let directly-connected network devices know of its presence.
e. A keepalive is a small, layer-3 message that is transmitted by a
network device to let it neighbors know of congestion

ans: B

416. You have a class C subnet. You would like divide it up into 30 more subnets by "subnetting" ? What would be the subnet mask?

ans: 255.255.255.248
Referring to the formulas in the "SUBNETTING FORMULAS" section :
M = 5 (since max number of subnets would be 30 if M = 5)
Mask = 2^7+2^6+2^5+2^4+2^3 = 248

417. You have a class C subnet. You would like to divide it up into 10 more Subnets by "subnetting" . How many hosts can you have per subnet?

ans: 30

Referring: to the formulas in the "SUBNETTING FORMULAS" section.
M = 4 (since max number of subnets would be 6 if M = 3)
N = 8-4 = 4
Max hosts per subnet = 2^4 -2 = 14

418. You have a class C subnet. You would like divide it up into 12 more subnets by "subnetting". However you also have to have at least 13 hosts per subnet. Can you do it ?

ans: Yes.
Referring: to the formulas in the "SUBNETTING FORMULAS" section.
M = 4 (since max number of subnets would be 6 if M = 3)
N = 8-M = 4
Max hosts per subnet = 2^4 -2 = 14

419. You have a class C subnet. You would like divide it up into subnets by "subnetting". You have to have at least 48 nodes per subnet. How many subnets can you have ?

ans: 2

Refering: to the formulas in the "SUBNETTING FORMULAS" section:
max hosts/subnet = 2^N -2 , that means N has to be at least 6
That means M can be at most 2
max subnets = 2^M -2 = 2

420. Your class C network has been subnet-ed. Mask for the new subnets is 255.255.255.224. How many subnets and how many nodes per subnet can you have ?

ans: Max number of sunbets = 6, Max number of nodes per subnet = 30
(in the subnetting formulas M=3 N=5)

421. You have divided your class C network into 2 subnets. Your subnet mask is 255.255.255.192. What are the ranges of IPs for your subnets ? Your Network address before subnetting was 200.252.144.0

ans: 200.252.144.65-200.252.144.126 and 200.252.144.129-200.252.144.190

explanation: M=2 N=6
From the formulas in "SUBNETTING FORMULAS" section
The First range = 2^6+1 to 2^7-2 = 65 to 126
The Second range = 65+2^6 to 126+2^6 = 129 to 190

422. Your previous Network Administrator had subnneted your class C network into many subnets. Only info you have is that one of the IP range was 200.252.144.33 through 128.252.144.46. How many subnets did he make ? what was the mask ?

ans: 14, 255.255.255.240

explanation: We see that the subnet has 14 nodes. That means N=4 (2^4-2 = 16).
M= 8-4 =4 . Number of Subnets = 2^M -2 = 14.
Mask = 128+64+32+16 (add 4 bits) 255.255.255.240

423. You have a class B subnet. You would like divide it up into 30 more subnets by "subnetting" ? What would be the subnet mask ?

ans: 255.255.248.0
Refering to the formulas in the "SUBNETTING FORMULAS" section :
M = 5 (since max number of subnets would be 30 if M = 5)
Mask = 2^7+2^6+2^5+2^4+2^3 = 248

424. You have a class B subnet. You would like to divide it up into 10 more subnets by "subnetting" . How many hosts can you have per subnet?

ans: 4094
Refering: to the formulas in the "SUBNETTING FORMULAS" section.
M = 4 (since max number of subnets would be 6 if M = 3)
N = 16-4 = 12
Max hosts per subnet = 2^12 -2 = 4094

425. You have a class B subnet. You would like to divide it up into 12 more subnets by "subnetting". However you also have to have at least 4000 hosts per subnet. Can you do it?

ans: Yes.
Refering: to the formulas in the "SUBNETTING FORMULAS" section.
M = 4 (since max number of subnets would be 6 if M = 3)
N = 16-M = 12
Max hosts per subnet = 2^12 -2 = 4094

426. You have a class B subnet (128.252.0.0). You want to divide it into 2 subnets. What will the ranges of IPs?

ans: 128.252.65.1 to 128.252.126.254 AND 128.252.129.1 to 128.252.190.254

explanation: Referring to the 'SUBNETTINg FORMULA" section:
M=2 N=14. 2^(14-8)+1=65 2^(14-8+1)-2=126

427. What IP network addresses are set-aside for class B (for private use)?

a. 128.0.0.0 (mask 255.255.0.0)
b. 128.252.0.0 (mask 255.255.0.0)
c. 172.16.0.0 (mask 255.240.0.0)
d. 172.16.0.0 (mask 255.255.0.0)
e. 172.240.0.0 (mask 255.255.0.0)

ans: C

428. SLIP = ?

ans: Serial Line IP

429. PPP supports which of the following features?

a. encryption
b. login
c. password
d. error correction

ans: B,C,D

430. What does the receiving host do with packets when it is using a connection-oriented protocol ?

a. acknowledges only the first and last packet, puts the packets in their proper order.
b. acknowledges only the first and last packet, discards in any packet that have arrived out of sequence.
c. acknowledges each packet and puts the packets in their proper order.
d. acknowledges each packet and discards in any packet that have arrived
out of order

ans: C

431. You have a Solaris host that acts as the DNS server. Which process (daemon) must this Solaris host be running ?

a. dnsd
b. dns
c. named
d. nameserver -d

ans: C

432. Solaris machines more often than not runs routed daemon. routed is the unix equivalent of RIP. It is always run with -q option. Why ?

a. q options optimizes the process
b. q option uses a default route
c. q option only activates itself in the absence of a default router
d. q option tells the process not to advertise any routes. It just listens
to the RIP udates. That way it does not interfere with router in the subnet.

ans: D

433. What is the difference between 802.2 and 802.3 frames ?

a. 802.3 = 802.2 + LLC Header Info
b. 802.2 = 802.3 + LLC Header Info
c. 802.2 = 802.3 + Length field
c. 802.3 = 802.2 + Length field

ans: B

434. IP classes and their ranges (A-C):

a. 1-127, 128-191, 192-223
b. 1-127, 128-191, 192-254
c. 1-126, 128-192, 193-223
d. 1-126, 128-191, 192-223

ans: D

435. UDP runs its own _____ ?

a. Frame Building
b. Packet building
c. Packet Routing
d. CRC

ans: D (it does not have to rely on lower layers)

436. What IP network addresses are set aside for class C (for private use) ?

a. 172.16.0.0 (mask 255.240.0.0)
b. 172.16.0.0 (mask 255.255.0.0)
c. 196.168.0.0 (mask 255.255.0.0)
d. 192.168.0.0 (mask 255.255.0.0)
e. 198.168.0.0 (mask 255.255.255.0)

ans: D

437. What leading bit values in the IP address indicate a class A
and Class B address ?

a. 0 and 10
b. 0 and 11
c. 1 and 11
d. 01 and 10
e. 10 and 110

ans: A

438. What leading bit values in the IP address indicate a class C address ?

a. 0
b. 01
c. 10
d. 11
e. 110

ans: C

439. What does 802.3 have instead of "type" filed (as in 802.2) ?

a. a "frame-type" filed
b. a "IP" field
c. a "length" field
d. a "TTL" field

ans: C

440. What is the difference between 802.2 and 802.3 frames ?

a. 802.2 = 802.3 + LLC Header Info
b. 802.2 = 802.3 + TTL field
c. 802.3 = 802.2 + LLC Header Info
d. 802.3 = 802.2 + TTL field

ans: A

441. Name 3 problems with distance-vector protocol ?

a. not feasible for small internetwork
b. count-to-infinite
c. routing loops
d. inconsistent views of network

ans: B,C,D

442. Port numbers for the following 2 standard services:
Netstat , FTP

a. 25, 81
b. 21, 15
c. 23, 80
d. 15, 21
e. 15, 22

ans. D

443. Port numbers for the following 2 standard services:
SMTP, TFTP

a. 25, 81
b. 25, 68
c. 23, 69
d. 15, 68
e. 15, 22

ans. C

444. Port numbers for the following 2 standard services:
FINGER, POP3

a. 23, 100
b. 25, 109
c. 27, 111
d. 79, 100
e. 23, 109

ans: D

445. Port numbers for the following 2 standard services:
NNTP, NFSD

a. 118, 2048
b. 119, 2049
c. 120, 2050
d. 121, 2051
e. 122, 2052

ans: B

446. You have a class C subnet. You would like divide it up into 8 more
subnets by "subnetting" ? What would be the subnet mask ?

a. 255.255.255.192
b. 255.255.255.224
c. 255.255.255.240
d. 255.255.255.248
d. 255.255.255.252

ans: C
Explanation:
Refer to the formulas in the "SUBNETTING FORMULAS" section.
M = 4 (since max number of subnets would be 6 if M = 3)
Mask = 2^7+2^6+2^5+2^4 = 240

447. You have a class C subnet. You would like divide it up into 5 more subnets by "subnetting" . How many hosts can you have per subnet ?

a. 30
b. 31
c. 30
d. 62
e. 126

ans: C

Explanation:

Refering: to the formulas in the "SUBNETTING FORMULAS" section.
M = 3 (since max number of subnets would be 2 if M = 2)
N = 8-M = 5
Max hosts per subnet = 2^5 -2 = 30

448. You have a class C subnet. You would like divide it up into 5 more subnets by "subnetting". However you also have to have at least 31 hosts per subnet. Can you do it ?

a. Yes
b. No

ans: B

Explanation:
Answer is NO (Even though you are asking for 5x31=155 nodes)
Referring: to the formulas in the "SUBNETTING FORMULAS" section.
M = 3 (since max number of subnets would be 2 if M = 2)
N = 8-M = 5
Max hosts per subnet = 2^5 -2 = 30

449. You have a class C subnet. You would like divide it up into subnets by "subnetting". You have to have at least 24 nodes per subnet. How many subnets can you have ?

a. 2
b. 6
c. 7
d. 8
e. 14

ans: B
Explanation:
Refering: to the formulas in the "SUBNETTING FORMULAS" section:
max hosts/subnet = 2^N -2 , that means N has to be at least 5
That means M can be at most 3
max subnets = 2^M -2 = 6

450. Your class C network has been subnet-ed. Mask for the new subnets is 255.255.255.248. How many subnets and how many nodes per subnet can you have ?

a. 30, 6
b. 30, 7
c. 62, 2
d. 62, 6
e. 62, 7

ans: A

Explanation: (in the subnetting formulas M=5 N=3)

451. You have divided your class C network into 6 subnets. Your subnet mask is 255.255.255.224. What are the ranges of IPs for your subnets ? Your Network address before subnetting was 200.252.144.0

a. 32-62, 64-93, 96-125, 128-157, 160-189, 192-221
b. 33-63, 65-94, 97-126, 129-158, 161-190, 193-222
c. 34-64, 66-95, 98-127, 130-159, 162-191, 194-223
d. 35-65, 67-96, 99-128, 131-160, 163-192, 195-224

ans: B

Explanation: M=3 N=5
From the formulas in "SUBNETTING FORMULAS" section :
The First range = 2^5+1 to 2^6-2 = 33 to 62
The 2nd range = 33+32 to 62+32 = 65 to 94
The 3rd range = 65+32 to 94+32 = 97 to 126
The 4rd range = 97+32 to 126+32 = 129 to 158
The 5th range = 129+32 to 158+32 = 161 to 190
The 6th range = 161+32 to 190+32 = 193 to 222

452. Your previous Network Administrator had subnneted your Class C network into many subnets. Only info you have is that the mask was 255.255.255.224 How many subnets did he make ? How many nodes were there per subnet ?

a. 2, 62
b. 7, 30
c. 6, 30
d. 6, 62
e. 7, 62

ans: C

Explanation: 224=128+64+32 . That means number borrowed 1 bits = 3. M=3.
Subnets = 2^M -2 = 6 . Nodes per subnet = 2^N - 2 = 30 .

453. You have a class B subnet. You would like divide it up into 5 more subnets by "subnetting" . How many hosts can you have per subnet ?

a. 30
b. 1022
c. 2046
d. 4094
e. 8190

ans: E

Explanation:

Refering: to the formulas in the "SUBNETTING FORMULAS" section.
M = 3 (since max number of subnets would be 2 if M = 2)
N = 16-M = 13
Max hosts per subnet = 2^13 -2 = 8190

454. You have a class B subnet. You would like divide it up into 5 more subnets by "subnetting". However you also have to have at least 6000 hosts per subnet. Can you do it ?

a. Yes
b. No.

ans: B

Explanation:

Refering to the formulas in the "SUBNETTING FORMULAS" section.
M = 3 (since max number of subnets would be 2 if M = 2)
N = 16-M = 13
Max hosts per subnet = 2^13 -2 = 3070

455. Best example of Flat Addressing Scheme among the following ?

a. MAC addresses
b. Classless IP addresses
c. Classful IP addresses
d. IPX addresses

ans: A

456. 2 examples of a packet-switched network.

a. public telephone network
b. ethernet network
c. token-ring network
d. ATM network

ans: B,C

457. On a connectionless protocol , how does error recovery and flow control get taken care of ?

a. A different protocol has to run along side
b. error recovery and flow control are not taken care of
c. the upper layers take care of them
d. lower layers take care of them

ans: C

458. PPP is an extension of _____ ?

a. FRAME RELAY
b. SDLC
c. HDLC
d. LAPB

ans: b

459. PPP has _____ for multi-protocol support ?

a. protocol identifier
b. specified bit values
c. protocol indicator
d. protocol frame length

ans: C

460. List 3 session layer standards

ans: NFS, RPC, X

461. CIDR stands for _____?

a. Carrier International Domain Routing
b. Carrier Independent Domain Routing
c. Classless Inter-Domain Routing
d. Cross-platform Inter-Domain Routing

ans: C

462. Class D IP address range an its use?

a. 192-223, broadcast
b. 224-239, multicast
c. 224-255, broadcast
d. 192-255, multicast

ans: B

463. Class E IP address range and its use ?

a. 240-255, experimental
b. 224-239, multicast
c. 224-255, multicast
d. 192-255, experimental

ans: A

464. Which set has protocols of ONLY the Network layer ?

a. IP, UDP, TCP, RARP, ICMP
b. IP, UDP, ARP, RARP, ICMP
c. SPX, UDP, GNS, ARP, APPLETALK
d. IPX, FTP, ARP, RARP, ICMP

ans: B

465. 3 purposes of ICMP :

a. router discovery
b. gurantee of transport
c. estimate of bandwidth
d. error messaging
e. diagnostics/testing
f. gurantee of uniqueness of node addresses

ans: ADE

466. Fast Ethernet : Max distance for UTP and Fiber ?

a. 200m, 1000m
b. 1000m, 2000m
c. 100m, 1000m
d. 100m, 2000m

ans: D

467. How long is MAC address (bytes) ? How may bytes identifies the vendor?

a. 8,2
b. 6,3
c. 8,4
d. 6,2

ans: B

468. In PPP, which protocol is used to establish and configure a connection ?

a. CHAP
b. PAP
c. LCP
d. TCP

ans: C. LCP (Link Control Protocol)

469. In PPP, a _____ protocol frame is used for selecting and configuring the network layer protocol ?

ans: NCP (Network Control Protocol)

470. What is a "preamble" in IEEE 802.3 frame?

a. an indication of the end of a frame
b. an indication of the start of a new frame
c. an indication of congestion
d. an indication of a corrupted frame

ans: B

471. What does a "preamble" consist of ?

a. all 0s
b. all 1s
c. a 1 in the beginning and rest 0s
d. alternating 0s and 1s

ans: D

472. First 4 bits of Class E IP address = ?

a. 0001
b. 1100
c. 1110
d. 1111

ans: D

473. First 4 bits of Class D IP address =?

a. 0001
b. 1100
c. 1110
d. 1111

ans: C

474. 4 parts of UDP header:

a. source IP
b. destination IP
c. source port
d. destination port
e. length
f. UDP checksum

ans: C,D,E,F

475. ICMP redirects are sent from _____ to _____ ?

a. DTE, DCE
b. DCE, CTE
c. host, router
d. router, host

ans: D

476. What does ICMP redirect tell hosts ?

a. congestion has occurred
b. router is no longer active
c. there is a routing loop
d. to use different route since this path is not optimal

ans: D

477. Consider the IP address 128.252.144.84. What is the network id and what is the node id ? assume classful networking.

a. 0.0.0.0 and 128.252.144.84
b. 128.0.0.0 and 252.144.84
c. 128.252.0.0 and 144.84
d. 128.252.144.0 and 84

ans: C (class B network)

478. The following are the steps toward encapsulation. Put them in order:

1. User input 2. data 3. frame 4. segment 5. datagram 6. bits

a. 1-4-2-5-3-6
b. 1-5-4-2-3-6
c. 1-2-3-5-4-6
d. 1-2-4-5-3-6

ans: D

479. Which IP-class provides the fewest numbers of Hosts?

a. Class A
b. Class B
c. Class C
d. Class D

ans: D

480. You see the following subnet addresses ; what is the subnet mask ?

128.252.4.0
128.252.8.0
128.252.12.0
128.252.16.0

a. 255.255.255.0
b. 255.255.192.0
c. 255.255.240.0
d. 255.255.252.0

ans: D

481. What protocol is used to convert IP addresses to MAC addresses ?

a. IP
b. ARP
c. RARP
d. InARP
e. appletalk

ans: B

482. What is flow control ?

a. To keep the transmitting device from transmitting no faster
than the receiving device can receive.
b. To find the best route to a destination
c. To determine which machine transmits packets on the wire on a given instance.
d. To be able to send a beacon message when congestion occurs.

ans: A

483. Your previous Network Administrator had subnetted your network into many subnets. Only info you have is that one of the hosts IP was 200.252.144.33 and the mask was 255.255.255.240.
Which class network is it ?
How many bits are being subnetted ?
What is the broadcast address ?

a. B, 28, 255.255.255.47
b. C, 20, 255.255.255.47
c. C, 28, 255.255.255.47
c. C, 28, 255.255.255.32

ans: C

explanation:

We see that the first byte is 200. That puts it in class C. Mask's last byte 240 (128+64+32+16), that 4 bits. N=4 (see subnetting
formulas above). That subnetted bits = 8+8+8+4 = 28. There should be 14 (2^4-2) hosts in the subnet.
The highest Ip in the subnet will be 200.252.144.33+13 = 200.252.144.46
The broadcast address is always 1 higher than the highest Ip in the range.

484. Default subnet mask for Class A, B, and C ?

a. 0.255.255.255, 0.0.255.255, 0.0.0.255
b. 255.0.0.0 , 255.255.0.0, 255.255.255.0
c. 255.255.255.0, 255.255.0.0, 255.0.0.0
d. 0.0.0.0, 0.0.0.255, 0.0.255.255

ans: B

485. You have a class B network 172.16.0.0. You use a 11 bits for subnetting. Which of the following is a correct range of Ip addresses that belong to the same network.

a. 255.255.8.1 to 255.255.14.254
b. 255.255.255.9 to 255.255.255.14
c. 255.255.17.1 to 255.255.22.254
d. 255.255.17.0 to 255.255.22.255

ans: C

Explanation:

If you are using 11 bits for subnetting,
you have 5 Netowrk Bits and 11 Node bits
From the subnetting formulas above:
M=5 N=11
The first range = 255.255.X.1 to 255.255.Y.254
where X = 2^(N-8)+1 and Y= 2^(N-8+1)-2
For the next ranges, just add 2^(N-8) at each end of the range

The first range = 255.255.9.1 to 255.255.14.254
2^(N-8) = 2^3 = 8
The second range = 255.255.17.1 to 255.255.22.254
so on and so forth.

486. Which of the following methods are used as flow control ?
Choose 3

a. Acknowledgements
b. Windowing
c. Traceroute
d. TTL
e. Sliding windows

ans: A,B,E

487. You have class B network with a 12 bit subnet. How many subnets and how many hosts per subnet are available ?

a. 14, 14
b. 14, 4094
c. 4096, 14
d. 4094, 16
e. 4094, 14

ans: E

Explanation:
This is a tricky one. Even though your parent subnet is of Class B,
your network nodes extend beyond the Class B/Class C border (24th bit)
because you are using 12 bits subnets. Basically, you taking this
big network and splitting to many many little subnetworks.

Number of subnets = 2^12-2 = 4096 -2 = 4094 subnets
Number of hosts per subnet = 2^4 -2 = 14 hosts

488. 4 functions that ICMP protocol performs are:

a. echo (ping)
b. telnet
c. rcp
d. rlogin
e. rpc
f. TTL announce (used by traceroute)
g. source quench message (during congestion)
h. network error announcement

ans: A,F,G,H

489. Which of the following statements are correct ?

a. TCP is connection oriented and UDP is connectionless
b. UDP is connection oriented and TCP is connectionless
c. Both TCP and UDP are connection-oriented
d. Both TCP and UDP are connectionless

ans: A

490. RFC 1542 compliant ROUTERS pass what ?

a. DHCP broadcasts
b. RIP broadcasts
c. RIP2 broadcasts
d. multicast packets

ans: A

491. True or False: RJ-11 Connectors houses eight connections.

Ans. False

Note. RJ-11 houses 4 connections.

492. How many wires does an RJ-45 cable have ?

Ans. 8

493. True or False: RJ-45 connectors house less connections then RJ-11 because they are larger in size and use bigger cables.

Ans. False

Ans. The opposite is actually true. RJ-45 host more connections

494. True or False: Twisted pair cabling comes in various versions and can support up to 96 ports and transmission speeds of 100
Mbps.

Ans. True

Note. Category 5 is certified for data transmissions up to 100 Mbps. It is used with Fast Ethernet.

495. STP is less susceptible to electrical ""_____""".

Ans. Interference

Note: It is due to the shielding used to cancel out electrical noise

496. "_____" wrap is used for insulation on STP.

Ans. Foil

497. True or False: All network cards are 16 bit.

Ans. False

498. True or False: Network cards communicate at the same speed when talking to each other.

Ans. True

499. Telephone wire uses an ""_____"" connector"

Ans. RJ-11

500. A packet header contains 4 parts. they are:

Ans. An alert signal
Source Address
Destination Address and
Clock information for synchronization

501. A cyclical redundancy check (CRC) is usually contained in a packet's ""_____"".

Ans. Trailer

502. """_____"" are the rules and procedures used for network communication.

Ans. Protocols

503. When several protocols work together, they form a protocol ""_____"".

Ans. Stack

504. Protocols that support multipath LAN to LAN communication are ""_____"" protocols.

Ans. Routable.

505. What is the most popular internetworking protocol?

Ans. TCP/IP

506. The 2 most popular cable access methods are Token passing and ""_____""".

Ans. CSMA/CD (Carrier-Sense Multiple Access with Collision Detection)

507. This type of access method is generally used by Ethernet to regulate network traffic on a main cable segment.

Ans. CSMA/CD

508. Which network conforms to IEEE 802.3 specs and is called standard Ethernet ?

Ans. 10Base5

509. """_____"" provide communication between the computer and the main LAN cables and are located in the vampire taps attached to the cable.

Ans. Transceivers

510. True or False: All computers in the same domain share the same unique IP address.

Ans: False

511. A subnet mask is used to mask a portion of the IP address so that TCP/IP can distinguish the ""_____"" ID from the ""_____"" ID.

Ans: Network, Host

512. A modem modulates digital signals into analog and ""____"" analog signals back into digital signals.

Ans: Demodulates

513. """_____"" communication is not synchronized and uses a start and stop bit to separate character strings.

Ans: Asynchronous

Note: About a fourth of the data in asynchronous communication is traffic control and coordination

514. _____ communication relies on a timing system between two
devices.

Ans: Synchronous

Note: Synchronous communication is much more reliable then
Asynchronous

515. Your network's id is 128.251.6.0 and subnet mask 255.255.255.0 . What is most likely your router's IP address ?

Ans: 128.251.6.254

516. You have a Class C network. You have subnetted it into 2 subnets. How many hosts per subnet do you have ?

Ans: 62

517. You have a Class C network. You have subnetted it into 6 subnets. How many hosts per subnet do you have ?

Ans: 30

518. You have a Class C network. You have subnetted it into 14 subnets. How many hosts per subnet do you have ?

Ans: 14

519. You have a Class C network. You have subntted it into 2 subnets. What is the subnet mask ?

Ans: 255.255.255.192

520. You have a Class C network. You have subntted it into 6 subnets. What is the subnet mask ?

Ans: 255.255.255.224

521. You have a Class C network. You have subntted it into 14 subnets. What is the subnet mask?

Ans: 255.255.255.240

522. You have a Class C network. You want to subnet it such that you have at least 6 hosts per subnet. How many subnets can you have?

Ans: 30

523. You have a Class C network. You want to subnet it such that you have at least 5 hosts per subnet. How many subnets can you have?

Ans: 30

524. You have a Class C network. You want to subnet it such that you have at least 25 hosts per subnet. How many subnets can you have?

Ans: 6

525. You do not want to use any of DNS, NIS, NIS+ to resolve names. You just want to use /etc/hosts files. Which file should you copy to /etc/nsswitch.conf ?

Ans: /etc/nsswitch.files

526. Which file identifies the name of the system that is being booted ?

Ans: /etc/nodename

527. You just want to use NIS only to resolve names. Which file should you copy to /etc/nsswitch.conf ?

Ans: /etc/nsswitch.nis

528. You just want to use NIS+ only to resolve names. Which file should you copy to /etc/nsswitch.conf?

Ans: /etc/nsswitch.nisplus

529. In the nsswitch.conf file what does the following entry mean ?

NOTFOUND=continue

Ans: If the previous name service returns no entry, go ahead and use the next name service.

530. In the nsswitch.conf file what does the following entry mean ?

NOTFOUND=return

Ans: If the previous name service returns no entry, do not proceed to the next name service.

531. List 4 conditions that can be specified in the nsswitch.conf file?

Ans: success, unavail, notfound, tryagain

532. You are using DNS only for name resolution. If the primary server is not responding (down), which "condition" (nsswitch.conf) does this situation fall in?

Ans: unavail

533. List 2 available "actions" that can be specified in the nsswitch.conf file .

Ans: return and continue

534. Which command will take your machine back to a "blank" state? It will not know its own name/IP or any other machines in the network ?

Ans: sys-unconfig

535. The cold start file is consulted if :

Ans: NIS+ is selected as the name service for the local system.

536. _____ file identifies the name server (for information requests) if cold start file is to be consulted during the boot process .

Ans: /var/nis/NIS_COLD_START

537. Where does sys_unconfig reside ?

Ans: /usr/sbin

538. Your have a class C network. The IP addresses of your workstations start with 128.251.143 . What is the network address of your network ?

Ans: 128.251.143.0

539. Your have a class C network. The IP addresses of your workstations start with 128.251.143 . What is the broadcast address of your network?

Ans: 128.251.143.255

540. Host C mounts /usr/local from host B. Host C shares out /usr to few machines. Can host C share out /usr/local to these machines, as well?

Ans: No

541. A server has already shared out /usr/local. Can it also share out /usr to other machines?

Ans: No

542. True/False: nfsd and mountd are both RPC-based.

Ans: True

543. What does the share command do without any arguments ?

Ans: shows what has been shared out of the local machine and with what options.

544. 2 command you can use to see which directories have been shared out by server machine1?

Ans: dfshares machine1 and showmount –e machine1

545. What will the command "showmount –e" do?

Ans: show a list of shared directories of the local machine and which machines each of these directories have been shared to.

546. What will the command "dfshares" will do without any arguments?

Ans: show a list of shared directories of the local machine

547. Which command will mount /usr/local from server called machine1?

Ans: mount machine1:/usr/local /usr/local

548. Which command will mount /cdrom read-only from server called machine1?

Ans: mount –o ro machine1:/cdrom /cdrom

TEST PAPER-7

1. After installing a second network interface card to your system, which file would you need to create so that the system performs a re-configure at next boot up.

a) /.reconfigure
b) /etc/.reconfigure
c) /reconfigure
d) /etc/reconfigure

2. What command(s) would you use to show the RPC services' program numbers, version, and protocol?

a) rpcinfo
b) netstat -a
c) rpcinfo -p
c) netstat -rn

3. What information can ICMP provide?

a) Multiple routes
b) Detection circular or excessively long routes
c) Network unreachable
d) Number of collisions.

4. Which type of DNS nameserver provides only local cache of looked up DNS names?

a) primary server
b) secondary server
c) forwarding server
d) caching-only server

5. What is an SOA record?

6. What is a PTR record?

7. Given the following

; formerly NS.INTERNIC.NET
. 3600000 IN NS A.ROOT-SERVERS.NET.

A.ROOT-SERVERS.NET. 3600000 A 198.41.0.4

which file would you most likely find the above information to reside?

a) DNS.root
b) bind.root
c) named.root
d) domain.root

8. What flag would you use for in.routed when setting up a machine that is not a router?

a) -r
b) -s
c) -q
d) -l

9. Given the following output:

le0:
flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST> mtu 1500
inet 128.50.1.2 netmask ffffff00 broadcast 128.50.1.255
ether 8:0:20:75:6e:6f

type the command that you would enter in /etc/netmasks.

10. Regarding the Internet layer, what is a packet?

11. What option would you use for snoop to display packets in verbose summary mode?

a) -v
b) -i
c) -V
d) -o

12. Which file maps an ip address to an interface?

a) /etc/hostname.interface_name
b) /etc/inet/services
c) /etc/inet/hosts
d) /etc/inetd.conf

13. What file(s) would you need to modify to configure an interface?

a) /etc/inet/hosts
b) /etc/inet/services
c) /etc/hostname.interface_name
d) /etc/inetd.conf

14. Given the following output from a dhcp_network file, select the statement(s) that is true:

01080011043B65 03 129.146.86.206 129.146.86.181 -1 inet17
a) Lease for this IP address is negotiable.
b) inet17 is the hostname assigned for the DHCP client
c) Lease for this IP address is permanent.
d) The ip address for this client is 129.146.86.181.

15. Give the command that manages the DHCP client tables.

a) dhcpconfig
b) dhtadm
c) pntadm
d) dhcpmanage
e) dhcpagent

16. What is true about the FORWARD file?

a) It consists of user-defined aliases.
b) It exists on the local system.
c) It exists on the user's $HOME directory of the sender.
d) It consists of addresses to which you want you're mail forwarded to.

17. Given the following entry in /etc/dfs/dfstab,

share -F nfs /var/mail

which of the following command(s) would you need to run to set up the mail server.

a) exportfs -a
b) shareall -F nfs /var/mail
c) shareall
d) share -F nfs /var/mail

18. Which file holds the process id for BIND?

a) /etc/named.pid
b) /var/named/named.pid
c) /named.pid
d) /etc/bind.pid

19. What does the DIRECTORY keyword reference to in the DNS server configuration file?

a) the directory for DNS configuration files
b) the directory for DNS caching server files
c) the directory for secondary DNS server files
d) the directory for DNS configuration log files
e) the directory for DNS client configuration files

20. What is the name of BIND's configuration file?
a) named.conf
b) named.config
c) bind.conf
d) named.boot

21. What is the name of the BIND daemon on Solaris?

a) in.routed
b) inetd
c) in.named
d) in.rdisc

22. Given the following output, which file would you most likely find it in?

search zoo.edu
nameserver 128.50.1.1
nameserver 128.50.2.1

a) /etc/named.conf
b) /etc/resolv.conf
c) /etc/services
d) /etc/inetd.conf

23. What is the OSI equivalent for the Application layer in the TCP/IP model?

a) Application
b) Presentation
c) Session
d) Transport
e) Network

24. Sendmail is a

a) mail user agent
b) mail transfer agent
c) mail host
d) mail delivery agent

25. What is true about CSMA/CD?

a) It allows more than one device to transmit at the same time.
b) The acronym stands for Collision Sense Multiple Access/ Carrier Detect
c) The acronym stands for Carrier Sense Multiple Access/ Collision Detect
d) It ensures that only one device transmit at a time.

26. Which of the following can NOT run over Cat 5 cabling?

a) ATM
b) 10-BASE-T
c) 100-BASE-TX
d) 100-BASE-T4

27. Which standard is Ethernet specifed?

a) IEEE 802.3
b) IEEE 802.4
c) IEEE 802.5
d) RFC 950

28. Which statement refers to jabbers?

a) If the received packets less than 46 bytes, the packet is too short and is discarded.
b) If the received packet fails the CRC, the packet is corrupted and therefore discarded
c) If the received packet is greater than 1500 bytes (MTU), the packet is too long and is discarded.

29. Which of the following are considered LAN components?

a) router
b) gateway
c) computer
d) router Operating system
e) disk drive

30. Which statement most accurately describes Class-A IP addresses?

a) The first bit is 0, the next 7 bits are the network number, and the remaining 24 bits are the host number.
b) The first two bits are 10, the next 14 bits are the network number, and the remaining 16 bits are the host number.
c) The first three bits are 110, the next 21 bits are the network number, and the remaining 8 bits are the host number.
d) The first four bits are 1110, and the remaining 28 bits consist of an Identification for a specific multicast group.

31. Which file associates an RPC program with its unique RPC program number?

a) /etc/rpc
b) /etc/rc2.d/S69inet
c) /etc/inet/inetd.conf
d) /etc/rc2.d/S72inetsvc

TEST PAPER-8

1) Entries in /etc/rpc file
Programno,servicename,servicealias name.

2) Type full default path name of client template file of NTP -/etc/inet/ntp.client

3) Select the tepmplate file and configuration file of NTP server -/etc/inet/ntp.server

4) Which file contains the type of clock used by the NTP server.
a)/etc/inet/ntp.conf

5) Which are the two functions of Network interface layer?
Error detection & packet framing

6) Which two protocols does ping use?
IP & ICMP

7) The following network interface is not working. What is the reason?
hme0:
flags=1000843<BROADCAST,RUNNING,MULTICAST,IPv4> mtu 1500 index 2
inet 163.37.178.116 netmask ffffffe0 broadcast 163.37.178.127
ether 8:0:20:b4:2:32
interface not enabled

8) What is the other protocol ping uses which lies in the same layer as IP?
icmp

9) You are administrating web hosting server. You are configuring each domain a separate ip on the same interface. Your requirement exceeds the Solaris default number of IPs that can be configured on a interface. What command you use to increase the default number of IPs that can be configured on an interface?
Ans : ndd

10) Type the number of bits used to identify the Network Interface Cards ID in Ethernet address (Type the numerical value) _ -24

11) Given :

Hostname	IPaddress	Ehternet addr
	Ahost	<ip_addr>
	<mac_addr>	

How do you enter a arp entry for the host ahost?
Arp –s Ahost <mac address>

12) Which are the 2 advantages of DHCP ? –
a) services BOOTP clients
a) supports Jumpstart initialization
b) reduces configuration file requirements
c) bla bla….

13) Which are the following statements are true in a client – server environment? (Choose 2)
a) services are accessed by the user
b) services are accessed by processes
c) services are provided by process
d) bla bla.

14) The current domain is govn.com. How will you delicate the server century.govn.com the domain training.govn.com (Choose 2)
a) training in CNAME century.govn.com.
b) training.govn.com. in CNAME century.govn.com.
c) some wrong entries…

15) How do a diskless client gets it's IP from server (RARP)

16) What are the statements are true about a switch? (Choose 2)
a) can make more than one pair of connections at a time
b) can filter and forward packets by reading the IP addr from the packet
c) bla bla….

17) Which is the deamon for network discovery protocol?
Ans : in.rdisc

18) Which daemon implements rip
In.routed

19) Which one of the following you can disable by editing /etc/inet/services ? a) NFS
b) NIS
c) telnet
d) bla bla…

20) A host is having two network interface but it is not acting as router. Which of the two files makes it so.
a) /etc/gateway
b) /etc/notrouter
c) /etc/defaultrouter
d) bla bla…

21) Given the netstat –r o0utput

(I don't remember these entries and values exactly….. Just to give a vague idea..)
Routing Table:

Destination	Gateway	Flags	Ref	Use	Interface
224.0.0.0	admin-picc	U	3	63	le0:3
fishnet	admin-d	U	3	0	le0:1
62.1.58.0	admin-d	U	3	156	le0:5
samba	violet	UG	3	0	le0
bla bla bla…….					
……					
……..					
localhost	localhost	UH	012499557		lo0

Which host act as intermideate router ?
a) Violet – correct **answer** is **answer** with flag as UG
b) samba
c) admin-d

d) admin-picc
e) bla bla…

20) How will you verify that the interfaces in a host is enabled for ip forwarding ?
a) ndd /dev/ip ip-forwarding
b) ndd /dev/ip ip_forwarding
c) ndd –set /dev/ip ip_forwarding
d) bla bla……

22) What are the reasons for going in ip classless ? (Chose 2)
a) to reduce the routing table size
b) to support both IPv4 and IPv6
c) to overcome the depletion of Class B
d) bla bla…

23) Which one of the following is a DHCP assigned IPv6 addr?
a) fe80::18ff:fe1c:2cbe:4b1c/10
b) ffc0::18ff:fe1c:2cbe:4b1c /10
c) ff00::18ff:fe1c:2cbe:4b1c /10
d) ffff::18fg:fe1c:2cbe:4b1c /10
e) bla bla…

24) Which is the deamon for RIP ?
a) ripd
b) in.ripd
c) in.routed
d) bla bla…

25) How will you restart the DHCP server in debug mode..?
In.dhcpd -i <int.name> -d -v

26) Type the full path name of the DHCP database having the macro definitions - /var/dhcp/dhcptab

27) A host which tries to reach another host which is not in the same network finds that neither the host entry nor the network entry is there for that host in the routing table. Which is the next entry it should look into?
a) netmask
b) defaultroute
c) bla bla…

28) What are the informations you require to calculate the maximum number of hosts
a) subnetwork number
b) ip addr
c) netmask
d) bla bla…
Choose two

29) Your organisation requires varies departments having 50 to 400 hosts per department, to be connected to the n/w. Each department should be in separate subnet. You are provided with a class B ip addr. Which scheme will you go for?
a) implement variable length subnet mask
b) bla bla….

30) Sun Management center 2.1 supports (Choose 2)
a) displays performance report
b) shows pictorial realistic images of the server
c) shows the no of users logged in the server
d) edit the DNS database
e) edit the NIS+ database
f) bla bla….

31) Which are the options supported by SNMP?
a)get
b)set
c)trap

30)what are advantages of ipv6?
a)efficient routing
b)autoconfiguration

31)your host is unable to send packets to the default local router. When you try to add a route manually you get "Destination host unreachable". What is the problem
ans: you are trying to add a machine outside the local network as default gateway.

32)Given an ip address 168.64.65.96 and netmask 255.255.255.192 what command will you use to add a route to the above network.
Route add net 168.64.65.64 < default gateway ip> netmask 255.255.255.192 0

33)you have added a defaultrouter using the foll command
route add <network addr> <gateway> 0
but you are unable to reach the network and you get destination network unreachable error. What is the problem?
Metric value must be 1 instead of 0.

34)what topology can be built using a single continuous cable
bus

35)what protocol is used in internet layer apart from ip
icmp

36)which process helps in automatic discovery of defaultrouters
in.rdisc

37) what is rarp
maps (48 bit)mac to (32 bit)ip

38) what is the topmost level domain in reverse address lookup
arpa

39) A machine transfers packet to other networks thru a default gateway. What type of routing is this??
Indirect routing.

40)what are the contents of DNS zone files
SOA Record

41) Syntax for using CNAME in DNS
alias IN CNAME originalname

42) A mail server is denoted by what type of record?
MX

43) An update done in primary DNS server does not synchronize with secondary server. What could be the problem?
Serial number is not updated.

44) Functions of Bridge?

45)In peer to peer communication,one layer contacts the corresponding layer of another machine.

46)Sun server is having 5 network interfaces.It has to allocate prt numbers.What is true about this? (choose two)

a)each n/w int is assigned portnumbers
b)something related with netmask
c)will have 5 copies of /etc/inet/services
d)server will have only 5 portnumbers.
e)…….

47)what function will update dhcptab?

a)Adding new symbols
b)changing definitions of Macro

TEST PAPER-9

1. What is the full default pathname of the NTP client template file?

Answer: /etc/inet/ntp.client

2. What is the purpose of NTP?

A. to register clock differences within a network
B. to synchronize clocks within a global network
C. to provide an accurate network clock transmitter
D. to synchronize clocks within a timezone network

Answer: B

3. What is the full pathname of the file which contains the clock type
of an NTP server?

Answer: /etc/inet/ntp/conf

4. When setting up an NTP server, a template file is copied to a
configuration file.
Which two are the template and configuration files?
(Choose two.)

A. /etc/inet/ntp.conf
B. /etc/inet/xntp.conf
C. /etc/inet/ntp.server
D. /etc/inet/xntp.server
E. /etc/inet/xntp.config

Answer: A,C

5. Click the Exhibit button.

Which host is acting as an intermediate router?
A. samba
B. violet
C. admin-d
D. localhost
E. admin-picc
F. admin-picc3
Answer: B

6. Which daemon implements RIP?

A. rsh
B. ripd
C. rdisc
D. in.ripd
E. in.rdisc
F. in.routed

Answer: F

7. Which daemon can configure a default router dynamically?
A. rdisc
B. routed
C. in.rdisc
D. in.routed

Answer: C

8. Given:
host name IP address
myhost 200.54.42.10
printsvr 200.55.42.30
The machine myhost needs to send data to printsvr. The routing table on
myhost has no
entry for printsvr. The routing table on myhost has no entry fro the
200.55.42.0 network.
Which entry does the routing algorithm look for next?

A. RARP
B. default
C. loopback
D. ARP cache
E. 200.54.42.255

Answer: B

9. You have a host with two hme network interfaces. There are no
routing daemons running. Which two files could cause this? (Choose two.)

A. /etc/gateways
B. /etc/notrouter
C. /etc/defaultrouter
D. /etc/default/route

Answer: B,C

10. Given:
route add host lion tiger 1
Which two statements are true? (Choose two.)

A. The command would add a static route to the routing table.
B. The command indicates that tiger is an intermediate host on this
route.
C. All hosts on the lion network could be reached as a result of the
command.
D. The command indicates that lion is the only intermediate host on
this route.
E. The command would cause host tiger and lion to update their routing
tables.

Answer:

11. Two hosts in the same network are connected to different subnets.
Which routing method is used to transmit packets between these hosts?

A. none
B. direct
C. repeater
D. indirect
E. discovery

Answer: D

12. What is a link local address?

A. a class D IPv5 address
B. an IPv4 compatible IPv6 address
C. an IPv6 address that will not be forwarded by a router
D. an IPv6 address that will not be forwarded onto the Internet
E. an IPv4 address given by a DHCP server on the same subnetwork

Answer: C

13. Which is an automatically configured IPv6 address?
A. fe80::a00:20ff:fe8e:4f1c/10
B. fec0::a00:20ff:fe8e:4f1c/10
C. ff00::a00:20ff:fe8e:4f1c/10
D. fe80::a00:20fg:fe8e:4f1c/10
E. fec0::a00:20fg:fe83e:4f1c/10

Answer: A

14. You are attempting to add a default router using the command route
add default
192.20.20.10. You get the error message "network unreachable". The IP
address of the host you are using is 192.20.20.10 and the router
192.20.20.1 is reachable via a "direct" route. The router 192.20.20.1 is on
the network in question and is a viable default router. What would cause
the error message "network unreachable"?

A. The metric of 0 should be 1.
B. You already have several default routers.
C. Your default router should be reachable indirectly.
D. You should act as the default router to your own network.
E. Default routers can only be added via a file at boot-up.

Answer: A

15. A router is refusing to forward IP packets. Snoop has revealed that
packets are arriving on its interfaces, but it is refusing to forward
packets and route them. Which command should you use to verify that the
router is configured (in the kernel) to forward IP packets?

A. ndd –get /dev/udp ip-forward
B. ndd –get /dev/ip ip forwarding
C. ndd –get ip-forwarding /dev/tcp
D. ndd –set /dev/ip ip forwarding 1
E. ndd –set /dev/ip ip forwarding 0

Answer: B

16. The interface hme0 has the wrong IP address. Which command will
re-establish the correct address of 192.168.20.118, broadcast of
192.168.20.127, and netmask of 255.255.255.192?

A. ifconfig hme0 192.168.20.118 netmask 255.255.255.0 + broadcast
B. ifconfig hme0 192.168.20.118 netmask 192.168.20.127 broadcast +
C. ifconfig hme0 192.168.20.118 netmask 255.255.255.127 broadcast +
D. ifconfig hme0 192.168.20.118 netmask 255.255.255.192 broadcast +
E. ifconfig hme0 192.168.20.118 netmask 255.255.255.192 + broadcast

Answer: D

17. Given:
broadcast address netmask IP address
192.20.20.255 255.255.255.224 192.20.20.77
The broadcast address is incorrect. What is the correct broadcast
address?

A. The broadcast address should be 192.20.20.0.
B. The broadcast address should be 192.20.20.63.
C. The broadcast address should be 192.20.20.95.
D. The broadcast address should be 192.20.20.191.

Answer: C

18. You are not sure if you have received an Ethernet frame from a
workstation you are trying to reach by Telnet, which is on the same logical
network. You may have a cabling fault.Which command should you use to
verify that you have recently received the MAC address of the
workstation?

A. arp –a
B. arp –n
C. arp –d
D. arp –f
E. arp –k

Answer: A

19. Given:
IP address netmask
192.20.20.75 255.255.255.192
You are adding a "network" specific route.Presume the route has been deleted and you are establishing it.
Which command adds a routing table entry with a route mask
255.255.255.292?

A. route –net 192.20.20.64 192.20.20.192
B. route add –netmask 192.20.20.255 192.20.20.75 0
C. route add net 192.20.20.64 192.20.20.75 –netmask 255.255.255.192 0
D. route add net 192.20.20.64 192.20.20.75 –netmask 192.20.255.255
E. ifconfig hme0 inet 192.20.20.64 netmask 192.20.20.192 broadcast
192.20.20.64

Answer: C

20. What are two reasons to use Classless Interdomain Routing (CIDR)? (Choose two.)

A. to reduce the size of routing tables
B. to support IPv4 and IM on the same network
C. to make maximum use of entries in the ARP cache
D. to deal with the shortage of Class B IP addresses
E. to reduce the number of routers required in a network

Answer: A,D

21. Which two fields are found in the /etc/netmasks file? (Choose two.)

A. domain name
B. network name
C. netmask value
D. netgroup name
E. network number
Answer: C,E

22. What is a broadcast address?

A. the address from which a remote DNS lookup request originates
B. the address which is used to communicate with all hosts in a subnet
C. the address which is used to communicate with all hosts in an NIS domain
D. the address from which a request sent to all hosts on a subnet originates
Answer: B

23. Click the Exhibit button.

The exhibit shows the output for interface hme0 from ifconfig –a. Which
command is used to change the current state of the interface so that
the interface is running?
A. ifconfig hme0 up
B. ifconfig –up hme0
C. ifconfig hme0 plumb
D. ifconfig hme0 enable
E. ifconfig hme0 config
F. ifconfig –enable hme0

Answer: A

24. What are two direct benefits of using variable lenth subnet masks?
(Choose two.)
A. It improves the response time of ping.
B. It reduces the information stored in the ARP cache.
C. It reduces the amount of routing information stored.
D. It permits more efficient use of the IP address space.
E. It permits multiple IP addresses on the same interface.

Answer: C,D

25. Click the Exhibit button.

The hme0 interface on your system does not appear to be functioning
correctly. The output from ifconfig is shown in the exhibit. Which
statement describes the current configuration of the hme0 interface?
A. The network cable is disconnected.
B. The broadcast address is incorrect.
C. There is a duplicate IP address conflict.
D. The interface is configured, but not enabled.
E. The interface driver is not configured in the kernel.

Answer: D

26. You are an administrator for a web hosting organization. Each web site your company supports has its own IP address. You wish to assign each IP address to its own virtual interface on your server. Your server currently supports more web sites than the default number of virtual interfaces on Solaris.
Which command should you use to change the number of virtual interfaces so your strategy can be implemented?

A. ndd
B. route
C. netstat
D. ifconfig
E. inetinit

Answer: A

27. You are an administrator for a large organization that uses a single Class B address range.Your organization contains a number of departments which range in size from 25 to 400 people. Each department is to be given its own separate range of network addresses. Which networking strategy allows you to make efficient use of the addresses allocated to your organization?

A. use switches with more ports in the larger departments
B. configure static routing tables on all hosts and routers
C. use variable length subnet masks to divide the address space
D. obtain some Class C address ranges for the smaller departments
E. use /etc/netgroup to create network names for each department

Answer: C

28. A diskless client is not configured for DHCP. The client boots from a JumpStart server. How does the client obtain an IP address?

A. It does a DNS lookup.
B. It issues an ARP request.
C. It issues an RARP request.
D. It reads the /etc/hosts file.
E. It reads the /etc/nsswitch.conf file.

Answer: C

29. What is the purpose of RARP?

A. It maps a 32-bit IP address to a 48-bit Ethernet address.
B. It maps a 48-bit IP address to a 32-bit Ethernet address.
C. It maps a 48-bit Ethernet address to a 32-bit IP address.
D. It maps a 128-bit IP address to a 48-bit Ethernet address.
E. It maps a 32-bit Ethernet address to a 128-bit IP address.

Answer: C

30. Given:
host name IP address MAC address
ahost 192.40.62.10 8:0:20:75:6e:7d
which command puts a valid entry in the ARP table for workstation ahost?

A. arp –a ahost
B. arp –s 192.20.62.10
C. arp –d ahost 192.40.62.10
D. arp –s ahost 8:0:20:75:6e:7d
E. arp 8:0:20:75:6e:7d 192.40.62.10

Answer: D

31. When a system boots, which file is used to configure Ethernet network interfaces?

A. /etc/inittab
B. /etc/ifconfig.conf
C. /etc/default/netmasks
D. /etc/rcs.d/S30network.sh
E. /etc/init.d/S30network.sh

Answer: D

32. Which two statements about a service in the client-server model are true? (Choose two.)

A. A service is accessed by a user.
B. A service is provided by a process.
C. A service is accessed by a process.
D. A service is only started at system boot.
E. A service always occurs across a network link.

Answer: B,C

33. A port number defined in the /etc/inet/services file is a _____ port.

A. fixed
B. standard
C. well-known
D. pre-defined
E. pre-configured

Answer: C

34. Which three fields can be found in the /etc/rpc file? (Choose three.)

A. protocol type
B. program number
C. daemon process ID
D. service alias name
E. service process name

Answer: B,D,E

35. Which two protocols are used by the ping command? (Choose two.)

A. IP
B. TCP
C. UDP
D. ICMP

Answer: A,D

36. In the five-layer TCP/IP model, which function does the transport layer provide?
A. data routing
B. data formatting
C. physical connections
D. end-to-end data transfer

Answer: D

37. Which layer of the TCP/IP five-layer model contains ICMP?
A. Internet layer
B. hardware layer
C. transport layer
D. application layer
E. network interface layer

Answer: A

38. What is involved in peer-to-peer communication?

A. the sequential layer on another machine
B. the sequential layer on the same machine
C. the sequential protocol on the same machine
D. the sequential protocol on another machine
E. the corresponding layer on another machine
F. the corresponding layer on the same machine

Answer: E

39. What is stored in DNS zone files?
A. the zone's SOA record
B. the root name servers
C. the process ID of in.named
D. the name of the DNS cache bump file

Answer: A

40. Given:
[name] [ttl] class records type record data
What do the brackets [ ] around these zone file fields represent?

A. The field is optional.
B. The field is mandatory.
C. The field is a hex value.
D. The field is a literal value.

Answer: A

41. A DNS server is configured as a secondary server and successfully synchronizes with the primary server when the secondary server is first started. A zone file on the primary server is updated but the secondary server fails to synchronize. The secondary server is rebooted but this fails to help. Which failure causes this problem?

A. failure to update the NS record of the updated zone file
B. failure to update the time stamp of the updated zone file
C. failure to update the serial number of the updated zone file
D. failure to update the SOA ttl number of the updated zone file

Answer: C

42. Which record type does DNS use to identify workstations which will accept mail for a given domain?

A. PTR record
B. TXT record
C. MBX record
D. MX record
E. MAIL record

Answer: D

43. A DNS server is not responding to a DNS client's requests. Which four commands can be use in debugging DNS? (Choose four.)

A. dig
B. nslookup
C. pkill –INT inetd
D. pkill –INT in.inetd
E. pkill –USR1 in.named
F. pkill –INT in.named

Answer: A,B,E,F

44. Which configuration file is required on a DNS server?

A. /etc/named.conf
B. /etc/resolv.conf
C. /etc/named.zones
D. /etc/resolve.conf
E. /etc/named.config

Answer: A

45. What is forward mapping?

A. the mapping of a user name to a DNS client
B. the mapping of a workstation's name to its MAC address
C. the mapping of a workstation's name to its IP address
D. the mapping of a workstation's IP address to it's name

Answer: C

46. Which three are properties of a stateful transport protocol? (Choose three.)

A. The data are encrypted by the protocol.
B. A connection must be established and maintained.
C. Transmit and receive window sizes are negotiated.
D. Application data are not acknowledged by the protocol.
E. A handshake takes place prior to application data transmission.

Answer: B,C,E

47. What does the first field in /etc/inet/services describe?

A. socket number
B. network service
C. remote host name
D. transmission protocol

Answer: B

48. A Sun server has five Ethernet interfaces installed. The server will use port numbers to communicate on a LAN. Which two statements are correct? (Choose two.)

A. The server has only five port numbers.
B. Port numbers are allocated to each network service.
C. The number of ports depends on the IP address class.
D. There are five copies of the /etc/inet/services file.
E. Port numbers do not map onto the number of network interfaces.

Answer: B,E

49. What is the full default path name to the file containing the DHCP macro definitions?

Answer: /var/dhcp/dhcptab

50. Which two taks involve changes to the dhcptab database? (Choose two.)

A. defining an additional symbol
B. changing the definition of a macro
C. tuning the IGNORE FAILED ARP parameter
D. updating the pool of IP addresses assigned to clients
E. changing a client macro association so the client uses a different macro

Answer: A,B

51. How do you run DHCP in debug mode on a DHCP server?

A. You kill the DHCP server process then relaunch the server process using the
/sbin/dhcpagent –d2 command.
B. You kill the DHCP server process and set DHCP_DEBUT=true in the dhcp.conf file.
C. You kill the DHCP server process and change the DHCP start script to use the in.dhcpd –i
-d –v command. You then run the DHCP start script.
D. You kill the DHCP server process and change the DHCP start script to include
DHCP_DEBUT=true; export DHCP_DEBuG near the start of the script. You then run the DHCP start script.

Answer: A

52. Which tow statements regarding a switch are true? (Choose two.)

A. A switch can connect two networks which use different protocol suites.
B. A switch can connect more than one pair of cable segments simultaneously.
C. A switch can filter and selectively forward a packet based on the IP address in the packet.
D. A switch can dynamically connect and disconnect two cable segments without operator intervention.

Answer: B,D

53. Which two statements describe the function of a bridge? (Choose two.)
A. If filters packets by MAC addresses.
B. It forwards packets between networks.
C. It connects two or more hosts to a hub.
D. It connects two or more network segments.
E. It connects networks that use different protocol suites.

Answer: A,D

54. Which LAN topology can be implemented using a single continuous length of cable?

A. bus
B. star
C. FDDI
D. Token ring
E. star-wired ring

Answer: A

55. What is the length, in bits, of the network interface-specific
identifier (VID) of the Ethernet address? (Enter a numeric value.)

Answer: 24

56. Which command obtains the link_speed for the hme interface?

A. ndd /dev/hme link speed \?
B. ndd /dev/hme0 link spee \?
C. ifconfig –get link speed hme
D. ifconfig –get link speed hme0

Answer: A

57. Which two are features of Sun Mangement Center 2.1? (Choose two.)

A. displays performance data
B. modifies DNS databases remotely
C. displays user logged into server
D. displays photo-realistic images of the server
E. allows modification of the server's NIS+ database
F. configures and does setup of remote network printers
Answer: A,D

58. Which three are functions of SNMP? (Choose three.)

A. get
B. set
C. trap
D. delete
E. create
F. modify

Answer: A,B,C

59. Which two are benefits of IPv6? (Choose two.)

A. faster ARP/RARP
B. smaller addresses
C. more efficient routing
D. smaller routing tables
E. automatic address configuration

Answer: C,E

60. The ping command uses which protocol?

A. TCP encapsulated in IP
B. UDP encapsulated in IP
C. ICMP encapsulated in IP
D. ICMP encapsulated in UDP

Answer: C

61. A workstation is unable to route to the local router. You need to re-establish a default route to resolve the routing issue. When attempting to add the default route you get the message "network unreachable".What would cause the problem?

A. You already have a default route in the routing table.
B. You have run the ndd –set /dev/ip ip_forwarding 0 command.
C. The host is its own default router, as specified in the routing table.
D. The host is on a different network to the host you are specifying as the default router.

Answer: D

62. Which two are benefits of DHCP? (Choose two.)

A. assigns Domain Names
B. supports BOOTP clients
C. supports JumpStart initialization
D. reduces the need for configuration files

Answer: B,D

63. which domain name is uppermost in the branch of the DNS tree related to revers lookups?

A. com
B. net
C. arpa
D. in-addr

Answer: C

64. A dump of the DNS cache reveals that a workstation's name is cached as www.gvon.corn.gvon.corn.
The correct name in the cache should be www.gvon.corn.Thecurrent origin is gvon.com.Which zone line would cause this incorrect cache entry?
A. www.gvon in CNAME
B. www.gvon.com in CNAME saturn.gvon.com.
C. www.gvon.com. In CNAME saturn.gvon.com.
D. www.gvon.com.gvon.com in CNAME saturn.gvon.com.
E. www in CNAME saturn.gvon.com.

Answer: B

65. Given the current origin is gvon.corn, which two zone file lines correctly delegate to a server called centauri.gvon.corn the domain training.gvon.com.? (Choose two.)

A. gvon.com in NS centauri.gvon.com.
B. gvon in NS centauri.gvon.com.
C. training.gvon.com in NS centauri.gvon.com.
D. centauri.gvon.com. in NS gvon.com.
E. training in NS centauri.gvon.com.
F. training. In NS centauri.gvon.com.

Answer:

66. You have a workstation with a single Ethernet interface (hme). From which file does the kernel obtain a host name to configure the interface at boot time?

A. /etc/hosts
B. /etc/nodename
C. /etc/inet/hosts
D. /etc/hostname.hme0
E. /etc/nodename.hme0
F. /etc/inet/hosts.hme0

Answer: D

67. Due to a restructuring of your organization, your company has now been divided into four separate groups. Your network is to be organized into four separate subnetworks, but you only have a single Class C address range.Which file on every host on each subnetwork needs to be modified so that you can implement an appropriate subnetworking strategy?

A. /etc/netmasks
B. /etc/netgroup
C. /etc/inet/netmask
D. /etc/defaultrouter
E. /etc/inet/hostname.hme0

Answer: A

68. Which two values are used to calculate the network number? (Choose two.)

A. netmask
B. subnet number
C. host IP address
D. gateway address
E. host MAC address
F. broadcast address

Answer: A,C

69. In the five-layer TCP/IP model, which tow functions does the network interface layer
provide? (Choose two.)

A. packet framing
B. connections between applications
C. data addressing between networks
D. Cyclical Redundancy Checking (CRC)

Answer: A,D

70. In the five-layer TCP/IP model, which protocol is part of the same
layer as IP?
A. TCP
B. UDP
C. PPP
D. ARP
E. ICMP

Answer: E

71. Which program can you disable by modifying the /etc/inet/services file?
A. NFS
B. NIS
C. snoop
D. telnet
E. passwd
Answer: D

72. Which type of routing is used to send packets via a gateway?

A. local
B. direct
C. indirect
D. external
E. loopback

Answer: C

73. Which command is used to start up the NTP daemon?

A. /etc/init.d/ntp start
B. /etc/init.d/ntpd start
C. /etc/init.d/xntp start
D. /etc/init.d/xntpd start

Answer: D

74. What is the official international standard for time?

A. Sidereal Time
B. Greenwich Mean Time
C. Eastern Standard Time
D. Universal Time Coordiated

Answer: D

75. What is the full default path name fo the NTP server template file?

Answer: /etc/inet/ntp.server

76. Your routing table has become corrupted. You decide to empty the routing table before you recreate it
How do you delete all the entries from the routing table?

A. pkill init
B. rmroute all
C. route flush
D. route delete
E. route delete all

Answer: C

77. Which tow can be achieved by configuring the /etc/gateways file?
(Choose two.)

A. adding default and non-default routes
B. preventing routing processes such as RIP starting
C. adding a default route, preventing and routing daemon from starting
D. automatically adding static entries in the routing table when the
system boots

Answer: A,D

78. A host with network interfaces 200.3.34.18 and 200.4.64.23 is configured with default routing. It broadcasts its routing table every 30 seconds. Which routing daemon isrunning?

A. ospf
B. inetd
C. in.rdisc
D. in.routed
E. defaultroute

Answer: D

79. A machine boots and has a congured network interface. At minimum, which type of route is automatically added to the routing table?

A. exterior
B. interior
C. static direct
D. static indirect
E. dynamic direct
F. dynamic indirect

Answer: C

80. Which command displays the routing table?

A. route –l
B. netstat –r
C. netstat –R
D. netstat –i
E. netstat –a

Answer: B

81. You use the default router file in /etc to establish a default router to use for all indirectly routed packets. Which two are benefits of using this file? (Choose two.)

A. The routing table remains small.
B. Additional routing processes are not started.
C. The RIP daemon in NOT started but the RDISC daemon is.
D. It allows the machine to broadcast the default to other machines.
E. It prevents the addition of non-default routes to the routing table.
F. It allows the addition of default and non-default routes dynamically.

Answer: A,B

82. Which protocol supports Classless Interdomain Routing (CIDR)?

A. Border Gateway Protocol
B. Router Discovery Protocol
C. External Gateway Protocol
D. Interior Gateway Protocol
E. Internet control Message Protocol

Answer: A

83. Which three subnet masks are contiguous subnet masks for Class C addresses? (Choose two.)

A. 255.255.252.0
B. 255.255.255.64
C. 255.255.255.192
D. 255.255.255.240
E. 255.255.255.224

Answer: C,D,E

84. Which command is used to configure and enable a virtual interface?

A. ifconfig hme0 146.32.1.100 up
B. ifconfig hme0:1 add 146.32.1.100
C. ifconfig hme0 plumb 146.32.1.100 up
D. ifconfig hme0:1 146.32.1.100 virtual
E. ifconfig hme0:1 plumb 146.32.1.100 up

Answer: E

85. Given that files contain relevant data and the server has a single Ethernet interface, which three files are used to configure the Ethernet interface at system boot? (Choose three.)

A. /etc/hosts
B. /etc/network
C. /etc/nodename
D. /etc/netmasks
E. /etc/hostname.hme0

Answer: A,C,E

86. Which three fields can be components of an IP datagram header? (Choose three.)

A. transfer protocol
B. source IP address
C. source MAC address
D. destination IP address
E. destination port number

Answer: A,B,D

87. Which two statements about the named.conf file are true? (Choose two)

A. It allows nslookup to resolve queries.
B. It informs a primary of the addresses of secondary servers.
C. It informs a secondary server of the address of the primary.
D. It informs in.named which zones it supports as a primary or secondary.

Answer:

88. Which local file performs the same function as DNS for the local host only?

A. /etc/hosts
B. /etc/nslookup
C. /etc/resolv.conf
D. /etc/inet/networks

Answer: A

89. Given the first line of a zone file: @ IN.SOA auriga.gvon.com.
hostmaster.gvon.com.
What is the error?

A. The @ symbol is invalid.
B. soA must be in lowercase.
C. The IN must not have a trailing dot.
D. The "." After hostmaster.gvon.com is wrong.

Answer: C

90. What is used by data encapsulation?
A. data headers
B. packet framing
C. control characters
D. synchronization preambles

Answer: A

91. Which function does IP perform?
A. assembles data frames
B. provides reliable delivery
C. decides the path a packet will take
D. monitors and controls network devices

Answer: C

92. Which command should you use to display the configuration of an hme0 network interface?

A. ndd hme0 \?
B. ifconfig hme0
C. ndd /dev/hme0 \?
D. ifconfig /dev/hme0

Answer: B

93. You have a DHCP client on network 192.200.51.0. The DHCP server has the DHP data in the /var/dhcp directory.What is the full default path name of the file containing the IP address pool for the client?

Answer: /var/dhcp/192_200_51_0

94. The traceroute command shows routing paths to a given destination.
Which protocols are used by this diagnostic tool?

A. TCP + IP TTL
B. SNMP + IP TTL
C. HTTP + IP TTL
D. ICMP + IP TTL
E. SNMP + TCP

Answer: D

95. When analyzing network traffic in a fault analysis situation, a workstation's Ethernet card is sending ALL frames up the stack (inbound), not just those that contain broadcast and its own Ethernet address. In which mode is an Ethernet card configured to pass all Ethernet frames up the protocol stack (inbound) regardless of the Ethernet frame's destination MAC address?

A. Point-to-Point
B. PointCard Mode
C. Prominent Mode
D. Profligate Mode
E. Promiscuous Mode

Answer: E

96. An application has to use a connection-oriented protocol to transfer data. Which statement about this method of data transfer is true?

A. Transmission of data can only begin when the routing vector has been minimized.
B. Transmission of data can only begin when packet transit time has been established.
C. Transmission of data can only begin when the ARP reply packet size has been renegotiated.
D. Transmission of data can only begin when the remote server sends an initialacknowledgment.

Answer: D

97. Which two statements about the /etc/inet/inetd.conf file are true?
(Choose two.)

A. The rlogin program is enabled by this file.
B. Only TCP network services can be referenced in this file.
C. The command pkill –HUP inetd causes the file to be read.
D. A wait entry means services will start after a predetermined time.
E. Users, other than root, using network services do not consult this file.

Answer:

98. In the five layer TCP/IP model, at which tow layers does the
client-server relationship
function? (Choose two.)

A. hardware
B. Internet
C. transport
D. application
E. network interface

Answer: C,D

99. Which two technologies form part of the ONC+ suite? (Choose two.)

A. NFS
B. XDR
C. FTP
D. LDAP
E. Telnet

Answer: A,B

100. Which file does inetd use for linking service requests with
processes to start?

A. /etc/inetd.cfg
B. /etc/default/inet
C. /etc/inet/inetd.conf
D. /etc/init.d/inetinit
E. /var/inet/inetd.conf

Answer: C

101. Which two commands display the contents of the ARP table? (Choose
two.)

A. arp –a B. arp –d
C. arp –s D. netstat –a
E. netstat –p F. ifconfig –a

Answer: A,E

102. Your workstation needs to send data to host server1. Your workstation issues an ARP request for server1. What causes this?

A. Your default router is down.
B. Your workstation's ARP table is full.
C. The host server is on a different subnet.
D. Your workstation has no MAC address for server1.
Answer: D

103. Which LAN component forwards a packet between two separate networks based on the software protocol address?

A. bridge B. router
C. switch D. gateway
E. repeater

Answer: B

104. Which LAN component can be used to connect two or more networks based on different protocol suites?

A. bridge B. router
C. switch D. gateway
E. repeater

Answer: D

105. Which two tools use SNMP? (Choose two.)

A. Solstice DiskSuite
B. Solstice Admintool
C. Solstice **Answer**Book
D. Solstice Site Manager
E. Solstice Enterprise Manager

Answer: D,E

106. Which problem is solved through the use of SNMP OID?

A. locating an SNMP trap signal
B. identifying the properties of an SNMP data item
C. locating an object within a distributed SNMP database
D. identifying the event which will activate an SNMP trap message

Answer: C

Note: ***Please read each question Carefully and correct the answers if found any mistake, as these questions are collected from Yahoo Groups***

Best of Luck Vijay