**Networking Concepts - 2016 SLC**

1)  Two hosts simultaneously send data through a link of capacity 1Mbps. Host A generates data with a rate of 1Mbps and uses TCP. Host B uses UDP and transmits a 100bytes packet every 1ms. Which host will obtain higher throughput?

A) Host A

B) They experience congestion collapse and negligible throughput.

C) They obtain roughly the same throughput.

D) Host B

2)  A system program that combines the separately compiled modules of a program into a form suitable for execution.

A) Assembler

B) Interpreter

C) Linking loader

D) Cross compiler

3)  A computer process is:

A) a program in a High level language kept on disk

B) a program in execution

C) a job in secondary memory

D) contents of main memory

4)  The loss in signal power as light travels down the fiber is called:

A) interruption

B) attenuation

C) scattering

D) propagation

5)  Communication circuits that transmit data in both directions but **not** at the same time are operating in:

A) an asynchronous mode

B) a full-duplex mode

C) a simplex mode

D) a half-duplex mode

6)  If your router is facilitating a CSU/DSU, which one of the following commands do you need to use to provide the router with a 64000bps serial link?

A) RouterA(config-if)#bandwidth 64000

B) RouterA(config-if)#clock rate 64

C) RouterA(config)#bandwidth 64

D) RouterA(config-if)#clock rate 64000

7)  What does a VLAN do?

A) breaks up broadcast domains in a layer 2 switch internetwork

B) acts as the fastest port to all servers

C) provides multiple collision domains on one switch port

D) provides multiple broadcast domains within a single collision domain

8)  What type of server allows access to the network as if users were actually on the LAN?

A) proxy Server

B) file Server

C) VPN Server

D) web Server

9)  Typically routers on a LAN are used to separate networks into:

A) email addresses

B) DNS zones

C) VPNs

D) subnets

10)  On a bus network, what is necessary to prevent signal bounce?

A) a switch

B) a repeater

C) a router

D) a terminator

11)  Which one of the following is an advantage of ISDN over PSTN?

A) It doesn't depend on public transmission lines.

B) It is easier to configure.

C) It provides greater throughput.

D) It is less expensive.

12)  What does it mean if a network administrator can PING a resource server using its IP address, but **not** its Internet name?

A) The computer is not configured to use DHCP.

B) The computer is not configured to use ARP.

C) The computer is not configured to use DNS.

D) The computer is not configured to use WINS.

13)  An authoritative DNS server knows a top-level domain server via:

A) alias

B) canonical hostname

C) hostname

D) IP address

14)  IEEE designates Thicknet as\_\_\_\_\_\_\_Ethernet.

A) 10Base5

B) 10Base10

C) 10BaseT

D) 10Base2

15)  Supervisor state is:

A) never used

B) only allowed for the operating system

C) entered by programs when they enter the processor

D) required to perform any I/O

16)  A station in a network forwards incoming packets by placing them on its shortest output queue. What routing algorithm is being used?

A) hot potato routing

B) static routing

C) flooding

D) delta routing

17)  Transport layer protocols break data into units known as what?

A) frames

B) chunks

C) segments

D) packets

18)  The maximum segment length on a 10BaseT network is\_\_\_\_\_\_\_meters.

A) 1000

B) 10

C) 50

D) 100

19)  What is the term for trying combinations of a user ID with every possible character combination until successful?

A) DDoS

B) dictionary

C) brute force

D) phreaking

20)  What is the public key encryption system that can verify the authenticity of an email sender and encrypt email data in transmission?

A) SSL

B) PGP

C) SSH

D) Kerberos

21)  Which topology is the easiest to modify?

A) Star

B) Ring

C) Bus

D) Token Ring

22)  What is SMTP?

A) Single Mailer Transport Protocol

B) Single Mail Transport Protocol

C) Simple Master Transport Protocol

D) Simple Mail Transport Protocol

23)  What does the passive command provide to dynamic routing protocols?

A) stops the router from sending any dynamic updates

B) stops the router from receiving any dynamic updates

C) stops an interface from sending or receiving periodic dynamic updates

D) stops an interface from sending periodic dynamic updates but not from receiving updates

24)  What device on a network acts as an intermediary between a client and server and evaluates the requests according to rules?

A) proxy server

B) anti-spyware

C) antivirus

D) router

25)  What is the advantage of a network?

A) increased sneakernet rollout

B) multiple users share resources

C) additional management

D) increased cost and reduced uptime

26)  E-mail uses this communication protocol.

A) TCP/IP

B) SMTP

C) HTTP

D) ICMP

27)  What is the default port number for FTP?

A) 21

B) 20

C) 25

D) 18

28)  Which class of IP address has the most host addresses available by default?

A) C

B) B

C) A and B

D) A

29)  One characteristic of a good network is that it will be:

A) very expensive

B) hard to manage

C) composed of a single brand

D) reliable

30)  In a FDDI network, the purpose of the dual counter-rotating rings is to provide:

A) high throughput

B) electrical interference immunity

C) transmit receive balance

D) high reliability

31)  Which one of the following is private IP address?

A) 172.15.14.36

B) 168.172.19.39

C) 192.168.24.43

D) 12.0.0.1

32)  The network naming convention "\\servername\sharename" is called:

A) USC

B) UNC

C) NETSTAT

D) NAMES

33)  Your company is so large that by the end of the week you can't fit all the files created or modified during the week on a single backup tape. Which solution would be the best?

A) compress the data on the backup tape

B) use multiple backup tapes

C) use a higher capacity backup tape

D) use incremental backups

34)  Which one of the following allows a router to respond to an ARP request that is intended for a remote host?

A) Proxy ARP

B) Gateway DP

C) Reverse ARP (RARP)

D) Inverse ARP (IARP)

35)  The type of groups that has a GUID attached to it so that you can use it to assign rights and permissions is called:

A) security

B) permissions

C) object

D) distribution

36)  A server service, provided by Microsoft, to control the deployment of security updates and patches is called:

A) Software Upload Services

B) Security Update Services

C) Software Update Services

D) Security Upload Services

37)  Your boss tells you to use the cheapest device that can divide the network into two segments to reduce traffic throughout the whole network. Which network device would you use?

A) bridge

B) gateway

C) router

D) hub

38)  What utility allows you to follow an IP packet across a network and examine the hops and timings?

A) Nslookup

B) ICMP

C) Traceroute

D) Pingroute

39)  What is split horizon?

A) It splits the traffic when you have a large bus (horizon) physical network

B) It prevents regular update messages from reinstating a route that has gone down.

C) It holds the regular updates from broadcasting to a downed link.

D) Information about a route should not be sent back in the direction from which the original update came.

40)  Public Key Encryption uses:

A) Asymmetric encryption

B) Symmetric encryption

C) Random indexing

D) Asymmetric indexing

41)  You type debug ip rip on router console and see that 172.16.10.0 is being advertised to you with a metric of 16. What does this mean?

A) The route is queued at 16 messages a second.

B) The route has a delay of 16 microseconds.

C) The route is inaccessible.

D) The route is 16 hops away.

42)  What command is used to stop RIP routing updates from exiting out an interface but still allow the interface to receive RIP route updates?

A) Router(config-router)# passive-interface s0

B) Router(config-router)# no routing updates

C) Router(config-if)# no routing

D) Router(config-if)# passive-interface

43)  An Encryption method that requires two keys, one to decrypt a document, one to encrypt a document is:

A) Dual Key Encryption

B) Public Key Encryption

C) Embedded Key Encryption

D) Private Key Encryption

44)  Which one of the following is **true** regarding RIPv2?

A) It converges faster than RIPv1.

B) It has the same timers as RIPv1.

C) It has a lower administrative distance than RIPv.

D) It is harder to configure than RIPv1.

45)  You can start programs if they don't have a shortcut on the desktop or in the programs submenu by:

A) typing cmd in the Start Run box

B) using the Shut Down command

C) using the Run dialog box and typing in the name of the program

D) typing cmd in the Start box and then the program

46)  DHCP stands for:

A) Dynamic Hypertext Carrier Packet

B) Dynamic Host Configuration Protocol

C) Direct Host Control Protocol

D) Direct Hypertext Connection Protocol

47)  What does the X mean in OSX?

A) Extensible

B) Xen

C) Extras

D) Ten

48)  Which command would you use to apply an access list to a router interface?

A) Access-list ip 101 in

B) IP access-list 101 out

C) IP access-group 101 in

D) Access-group ip 101 in

49)  T1 and PRI ISDN service generally have a rated speed of what?

A) 512Kbit/sec

B) 3Mbit/sec

C) 256Kbit/sec

D) 1.544Mbit/sec

50)  HTTPS communication traffic is on what TCP port?

A) 23

B) 443

C) 80

D) 21

51)  Which of the following authentication protocol is the least secure?

A) PAP

B) MS-CHAP

C) EAP

D) CHAP

52)  What is the term for the device that serves as the demarcation point between the carrier's local loop and the customer premise wiring?

A) CO

B) FiOS

C) Surge Protector

D) NID

53)  Which router command allows you to view the entire contents of all access lists?

A) Router# show interface

B) Router# show access-lists

C) Router> show ip interface

D) Router> show all access-lists

54)  What is the term for a type of network bridge that provides communication via radio frequency channels on a cable television infrastructure?

A) T1

B) cable modem

C) DSL

D) ISDN

55)  What is a network protocol that allows for network authentication and data encryption that can be configured for remote or local access and is based on defined rules?

A) ICMP

B) RIP

C) IGMP

D) IPSEC

56)  What is the most common method for encrypting TCP/IP communications?

A) PGP

B) Kerberos

C) SSL

57)  What does a firewall help ensure?

A) That personnel costs remain low

B) That hardware is safe from failure

C) That the network is safe from outside influence

D) That the users are safe

58)  The transmission signal coding method of a TI carrier is called:

A) NRZ

B) Binary

C) Manchester

D) Bipolar

59)  In OSI network architecture, the dialogue control and token management are the responsibility of:

A) network layer

B) session layer

C) transport layer

D) data link layer

60)  What is the term for the criminally fraudulent process of attempting to gain sensitive information such as usernames and passwords by masquerading as a trustworthy entity in electronic commerce?

A) cracking

B) phishing

C) pharming

D) sniffing

61)  In Cisco's Unified Wireless Solution, what is the split-MAC architecture?

A) The split-MAC architecture uses MAC addresses to create a forward/filter table and break up broadcast domains.

B) The split-MAC architecture uses MAC addresses on the wireless network and IP addresses on the wired network.

C) The split-MAC architecture uses MAC addresses to create a forward/filter table and break up collision domains.

D) The split-MAC architecture allows the splitting of 802.11 protocol packets between the AP and the controller to allow processing by both devices.

62)  A computer's motherboard contains \_\_\_\_, or openings with multiple electrical contacts, that allow devices such as NICs, modems, or sound cards to connect to the computer's expanded bus.

A) hubs

B) ports

C) runts

D) expansion ports

63)  Each network node has a network address and a \_\_\_\_\_\_\_\_\_\_address.

A) IP

B) MAC

C) PCD

D) IPX

64)  When setting up Frame Relay for point-to-point subinterfaces, which one of the following must **not** be configured?

A) the local DLCI on each subinterface

B) the Frame Relay encapsulation on the physical interface

C) an IP address on the physical interface

D) the subinterface type as point-to-point

65)  A fault tolerance method that uses two disks each with its own controller to duplicate stored data is called?

A) mirroring

B) striping

C) duplexing

D) parity

66)  What IEEE standard describes Ethernet?

A) 802.11

B) 802.3

C) 802.27

D) 802.16

67)  Network layer protocols break data in to units known as what?

A) frames

B) segments

C) chunks

D) packets

68)  In relation to encryption, a "key" is a:

A) index in an lookup table

B) string of random characters

C) metal object with notches and groves

D) pointer to a random number

69)  What type of attack redirects or captures packets over a secure transmission as they occur?

A) DDoS

B) cracking

C) phishing

D) man-in-the-middle

70)  Suppose that you have a customer who has a central HQ and six branch offices. They anticipate adding six more branches in the near future. They wish to implement a WAN technology that will allow the branches to economically connect to HQ and you have no free ports on the HQ router. Which one of the following would you recommend?

A) PPP

B) Frame Relay

C) HDLC

D) ISDN

71)  A Digital Certificate ensures that the sender is:

A) a certification Authority

B) who they say they are

C) owner of the domain

D) a CompTIA member

72)  In relation to security, WPA is a:

A) wide-area LAN Protection Application

B) wireless security method

C) Western Digital Partition Access security

D) Windows Protection Application

73)  Which command is required for connectivity in a Frame Relay network if Inverse ARP is **not** operational?

A) Frame-relay map

B) Frame-relay arp

C) Frame-relay lmi-type

D) Frame-relay interface-dci

74)  The official standard governing cable modem operation is called:

A) DOCSIS

B) CABLEIT

C) CABLESIS

D) V.92

75)  Software that allows one computer to run multiple, independent, operating systems on one physical server is called:

A) mastering

B) simulating

C) clustering

D) virtualization

76)  Which one of the following are types of flow control?

A) Windowing

B) Buffering and Cut-through

C) Cut-through

D) Buffering and Windowing and Congestion avoidance

77)  In the OSI reference model, the \_\_\_\_ layer is layer 3.

A) transport

B) data link

C) physical

D) network

78)  Which fields are contained within an IEEE Ethernet frame header?

A) source and destination MAC address and FCS field

B) source and destination network address and FCS field

C) source and destination MAC address and source and destination network address

D) source and destination MAC address

79)  The network model where all computers are equal is known as:

A) sneakernet

B) client/server

C) peer to peer

D) bus

80)  A hub operates in what OSI model layer?

A) network

B) transport

C) physical

D) data link

81)  What is the easiest way to get a non-Windows operating system like Macintosh or UNIX/Linux to connect to a Windows computer?

A) change the IP address on the non-Windows system

B) make that non-Windows system look like another Windows computer

C) turn on the firewall

D) use NFS

82)  When data is encapsulated, which is the correct order?

A) data, frame, packet, segment, bit

B) data, segment, frame, packet, bit

C) segment, data, packet, frame, bit

D) data, segment, packet, frame, bit

83)  Most Linux versions include a directory service of sorts called \_\_\_\_.

A) eDirectory

B) NIS

C) active directory

D) X.500

84)  What makes a UNIX/Linux system look like a Windows system and allows it to access a Windows systems shared resources such as shared folders?

A) IPX/SPX

B) FAT32

C) Samba

D) AppleTalk

85)  What problem with cabling is a major cause of network problems?

A) installation

B) twist count

C) materials

D) manufacturing

86)  The network address of 172.16.0.0/19 provides how many subnets and hosts?

A) 8 subnets, 2,046 hosts each

B) 8 subnets, 8,190 hosts each

C) 7 subnets, 30 hosts each

D) 7 subnets, 2,046 hosts each

87)  Which one of the following is **true** when describing a unique local address?

A) Packets addressed to a unicast address are delivered to a single interface.

B) These are like private addresses in IPv4 in that they are not meant to be routed.

C) These addresses are meant for nonrouting purposes, but they are almost globally unique so it is unlikely they will have an address overlap.

D) These are your typical publicly routable addresses, just like a regular publicly routable address in IPv4.

88)  You need to subnet a network that has five subnets, each with at least sixteen hosts. Which classful subnet mask would you use?

A) 255.255.255.192

B) 255.255.255.248

C) 255.255.255.224

D) 255.255.255.240

89)  You telnet to a router and make your necessary changes; now you want to end the Telnet session. What command do you type in?

A) Close

B) Disconnect

C) Disable

D) Exit

90)  Which one of the following is true when describing a multicast address?

A) Packets are delivered to all interfaces identified by the address. This also is called a one-to-many address.

B) Packets addressed to a unicast address are delivered to a single interface.

C) It identifies multiple interfaces and is only delivered to one address. This address also can be called one-to-one-of-many.

D) These addresses are meant for nonrouting purposes, but they are almost globally unique so it is unlikely they will have an address overlap.

91)  Which one of the following is **true** when describing a link-local address?

A) These addresses are meant for nonrouting purposes, but they are almost globally unique so it is unlikely they will have an address overlap.

B) These are your typical publicly routable addresses, just like a regular publicly routable address in IPv4.

C) Packets addressed to a unicast address are delivered to a single interface.

D) These are like private addresses in IPv4 in that they are not meant to be routed.

92)  A point-to-point circuit that can be set up dynamically and dropped when no longer needed is known as what?

A) ring

B) permanent

C) daisy chain

D) switched

93)  What company developed SSL?

A) Cisco

B) Symantec

C) Microsoft

D) Netscape

94)  In a ring topology that uses multiple-ring, a client computer has suddenly lost its connection. Where would you start troubleshooting first?

A) repair the defective component

B) isolate the ring

C) restore the system

D) remove the failing section

95)  On a VLSM network, which mask should you use on point-to-point WAN links in order to reduce the waste of IP addresses?

A) /28

B) /30

C) /27

D) /29

96)  If you want to have more than one Telnet session open at the same time, what keystroke combination would you use?

A) Ctrl+Shift+X, then 6

B) Ctrl+Shift+6, then X

C) Ctrl+X, then 6

D) Tab+Spacebar

97)  When measuring the height of a wave, this is referred to as:

A) frequency

B) phase

C) amplitude

D) wavelength

98)  If you want to connect buildings without physical cabling, what wireless device would you use?

A) hub

B) switch

C) router

D) bridge

99)  You are troubleshooting a connectivity problem in your corporate network and want to isolate the problem. You suspect that a router on the route to an unreachable network is at fault. What IOS user exec command should you issue?

A) Router> ping

B) Router> trace

C) Router> show ip route

D) Router> show interface

100)  What type of RJ45 UTP cable do you use to connect a PC's COM port to a router or switch console port?

A) Crossover cable

B) Crossover with a CSU/DSU

C) Rolled

D) Straight-through

2016 SLC Networking Concepts

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| --- | --- |
| 1) | D |
| 2) | C |
| 3) | B |
| 4) | B |
| 5) | D |
| 6) | D |
| 7) | A |
| 8) | C |
| 9) | D |
| 10) | D |
| 11) | C |
| 12) | C |
| 13) | D |
| 14) | A |
| 15) | B |
| 16) | A |
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| 18) | D |
| 19) | C |
| 20) | B |
| 21) | A |
| 22) | D |
| 23) | D |
| 24) | A |
| 25) | B |
| 26) | B |
| 27) | A |
| 28) | D |
| 29) | D |
| 30) | D |
| 31) | C |
| 32) | B |
| 33) | D |
| 34) | A |
| 35) | A |
| 36) | C |
| 37) | A |
| 38) | C |
| 39) | D |
| 40) | A |
| 41) | C |
| 42) | A |
| 43) | B |
| 44) | B |
| 45) | C |
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| 93) | D |
| 94) | B |
| 95) | B |
| 96) | B |
| 97) | C |
| 98) | D |
| 99) | B |
| 100) | C |