1. Open Shortest Path First (OSPF) is also called as \_\_\_\_\_\_\_\_\_\_\_\_\_

**a) Link state protocol**

b) Error-correction protocol

c) Routing information protocol

d) Border gateway protocol

2. The computation of the shortest path in OSPF is usually done by \_\_\_\_\_\_\_\_\_\_\_\_

a) Bellman-ford algorithm

b) Routing information protocol

**c) Dijkstra’s algorithm**

d) Distance vector routing

5. Which of the following is not a type of OSPF packet?

a) Hello

b) Link-state request

**c) Link-state response**

d) Link-state ACK

6. What is the default administrative distance of OSPF?

A. 120

B. 100

C. 90

**D. 110**

7. A network administrator needs to configure a router with a distance-vector protocol that allows classless routing. Which of the following satisfies those requirements?

A. IGRP

B. OSPF

C. RIPv1

**D. EIGRP**

E. IS-IS

8. Which term is not related to NAT ?

a). inside local

b). outside local

c). inside global

**d). external global**

9. Meaning of Outside local

a). Name of inside source address before translation

**b). Name of destination host before translation**

c). Name of inside host after translation

d). Name of outside destination host after translation

10. Which command will allow you to see nat translation on your router?

**a). show ip nat translations**

b). show ip nat statistics

c). debug ip nat

d). clear ip nat translations

11. Which command would you place on the interface on a private network?

**a). ip nat inside**

b). ip nat outside

c). ip outside global

d). ip inside local

12. Which of the following is considered to be the address after translation?

a). Inside local

b). Outside local

**c). Inside global**

d). Outside global

13. Which type of access list limits the description of traffic by source address?

A. Extended

B. Named

C. Dynamic

**D. Standard**

14. Which statement will block traffic for a server of 192.168.1.5 for SSH?

A. Router(config)#access-list 90 deny ip host 192.168.1.5 eq 22

B. Router(config)#access-list 90 deny tcp any host 192.168.1.5 eq 22

C. Router(config)#access-list 199 deny tcp host 192.168.1.5 any eq 23

**D. Router(config)#access-list 199 deny tcp any host 192.168.1.5 eq 22**

15. Which command statement configures a valid access list?

A. Router(config)#access-list 99 deny tcp host 192.168.2.7 eq 443

B. Router(config)#access-list 189 deny any host 192.168.1.5 eq 22

**C. Router(config)#access-list 143 permit tcp any host 192.168.8.3 eq 80**

D. Router(config)#access-list 153 permit any host 192.168.4.5 eq 22

16. You want to apply an access list of 198 to an interface to filter traffic into the interface. Which command will achieve this?

A. Router(config)#ip access-list 198 in fast 0/1

B. Router(config-if)#ip access-list 198 in

C. Router(config-if)#ip access-class 198 in

**D. Router(config-if)#ip access-group 198 in**

17. What is checked in standard ACLs when making decision on approval or denial?

a). Only destination IP address

b). Both source & destination IP addresses

c). Nothing is check (everything is allowed)

**d). Only source IP address**

18. Which type of mask is used in ACE’s of Access Control Lists?

a). Subnet Mask

**b). Wildcard Mask**

c). Face Mask

d). N95 Mask

19). What is the range of numbered extended ACL’s?

a). 1-10

b). 1-2, 100-999

c). 1 – 999

**d). 100-199, 2000-2699**

20). A host is able to ping a web server but it is not able to do HTTP request. What is the most likely cause of the problem?

a). ACL blocking port 23

b). ACL blocking all ports

**c). ACL blocking port 80**

d). ACL blocking port 443

21. Which statement is true about Access Control Lists?

a). ACL lookup is done from bottom to top

**b). ACL lookup is done from top to bottom**

22. Which Routing protocol provides link-state routing?

a) EIGRP

b) RIP

c) RIPv2

**d) OSPF**

23. Identify which of the services below uses both TCP and UDP ports?

a). FTP

b). TFTP

**c). DNS**

d). SSH

23. **Which command on Cisco Routers is used to configure as authoritative NTP server?**

**a). #ntp master 3**

b). #ntp peer IP

c). #ntp server IP

d). #ntp source IP

24. Which value indicates the distance from the NTP authoritative time source?

a). Priority

b). Location

c). Layer

**d). Stratum**

**25. Which NTP type designates a Cisco Router without an external reference clock as an authoritative time source?**

**a). Server**

b). Peer

c). Master

d). Client

| **26. What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?** |
| --- |
| | A. | Application | | --- | --- | | **B.** | **Host-to-Host** | | C. | Internet | | D. | Network Access | |

| **27. Which class of IP address provides a maximum of only 254 host addresses per network ID?** |
| --- |
| | A. | Class A | | --- | --- | | B. | Class B | | **C.** | **Class C** | | D. | Class D | |

| **28. Which layer 4 protocol is used for a Telnet connection?** |
| --- |
| | A. | IP | | --- | --- | | **B.** | **TCP** | | C. | TCP/IP | | D. | UDP | |

| **29. What protocol is used to find the hardware address of a local device?** |
| --- |
| | **A.** | **RARP** | | --- | --- | | **B.** | **ARP** | | **C.** | **IP** | | **D.** | **ICMP** | |

30. When configuring a router as a PPPoE client, which configuration is not necessary?

a). Configuration of the dailer interface

b). Configuration of an IP address on the dialer interface

c). Configuration of the dialer-rule

**d). Configuration of a password on the dialer interface**

31. **How to create BGP process within AS 150 on Cisco routers?**

a). router bgp 150 create

**b). router bgp 150**

c). router 150

d). bgp 150

32. **Which one of these BGP network statements is valid?**

A) network 199.199.199.199 mask 255.255.255.0

B) network 191.200.100.0

**C) network 172.16.0.0 mask 255.255.0.0**

D) network 200.100.50.0=

33. **Which of the following is not an IGP?**

A. RIPv2

B. EIGRP

**C. BGP**

D. OSPF

34. Router 1 has a Fast Ethernet interface 0/0 with IP address 10.1.1.1. The interface is connected to a switch. This connection is then migrated to use 802.1Q trunking. Which of the following commands could be part of a valid configuration for Router 1's Fa0/0 interface?

a). dot1q enable

b). trunking enable

**c). encapsulation dot1q 4**

d). Activate trunking

35.  **What is the standard form of WI-FI?**

a). Wired Fidelity

b). Wired Function

**c). Wireless Fidelity**

d). None of the above

36).  **The frequency range of WI-FI is around \_\_\_\_\_\_\_\_\_\_**

**a). 2.4 GHz and 5GHz**

b). 2.9 GHz and 5GHz

c). 3.4 GHz and 5GHz

d). 4.4 GHz and 5GHz

37). **The range of the WI-FI is around \_\_\_\_\_\_\_\_\_\_\_**

**a). 50 meters**

b). 60 meters

c). 70 meters

d). 80 meters

38). What is the access point (AP) in a wireless LAN?

**a) device that allows wireless devices to connect to a wired network**

b) wireless devices itself

c) both device that allows wireless devices to connect to a wired network and wireless devices itself

d) all the nodes in the network

39). In wireless ad-hoc network \_\_\_\_\_\_\_\_\_

**a) access point is not required**

b) access point is must

c) nodes are not required

d) all nodes are access points

40). In wireless distribution system \_\_\_\_\_\_\_\_\_\_

**a) multiple access point are inter-connected with each other**

b) there is no access point

c) only one access point exists

d) access points are not required

41). A wireless network interface controller can work in \_\_\_\_\_\_\_

a) infrastructure mode

b) ad-hoc mode

**c) both infrastructure mode and ad-hoc mode**

d) WDS mode

42). What is Wired Equivalent Privacy (WEP)?

a) security algorithm for ethernet

**b) security algorithm for wireless networks**

c) security algorithm for usb communication

d) security algorithm for emails

43). What is WPA?

**a) wi-fi protected access**

b) wired protected access

c) wired process access

d) wi-fi process access

44). **Which of following are the examples of the standard WI-FI devices**

a). Wireless routers

b). Wireless ethernet bridge

**c). Wireless access point**

d). All of the above

45). **What is the type of authentication used in WPA personal mode?**

a). FSK

**b). PSK**

c). IEEE 802.1X/EAP

d). None of the above

46. Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets?

1. Ring
2. Local area
3. Hierarchical
4. **Star**

47. What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interferences?

1. Unshielded twisted pair
2. **Optical fiber**
3. Coaxial cable
4. Microwave

48. The location of a resource on the internet is given by its?

1. Protocol
2. **URL**
3. E-mail address
4. ICQ

49. Which device limits the external access to a network?

1. **Firewall**
2. Switch
3. Router
4. Server

50. Which of the following protocol is used for remote terminal connection service?

(A) RARP

(B) UDP

(C) FTP

**(D) TELNET**

51. Which of the following terms is just the collection of networks that can be joined together?

**(A) Intranet**

(B) Extranet

(C) Internet

(D) LAN

52.

| Communication channel is shared by all the machines on the network in | |
| --- | --- |
| a. | unicast network |
| b. | multicast network |
| c. | broadcast network |
| d. | none of the mentioned |

53. Which one of the following is a data link [protocol](https://instrumentationtools.com/various-communication-protocols-in-plc/)?

A) point to point protocol

**B) HDLC**

C) Ethernet

D) all of these answers

54. Which one of the following extends a private network across public networks?

a) local area network

**b) virtual private network**

c) enterprise private network

d) storage area network

55. A point-to-point protocol over ethernet is a network protocol for

**a) encapsulating PPP frames inside ethernet frames**

b) encapsulating ehternet framse inside PPP frames

c) for security of ethernet frames

d) for security of PPP frames

56. Network layer firewall works as a

a) frame filter

**b) packet filter**

c) both (a) and (b)

d) none of the mentioned

57. In wireless distribution system

**a) multiple access point are inter-connected with each other**

b) there is no access point

c) only one access point exists

d) none of the mentioned

58. What is Wired Equivalent Privacy (WEP) ?

a) security algorithm for ethernet

**b) security algorithm for wireless networks**

c) security algorithm for usb communication

d) none of the mentioned

59. Which device broadcast signals including collision to all ports?

a). Router

b). Switch

c). Bridge

**d). Hub**

60. Which devices work with Physical Layer of OSI Model?

a). Router

b). Switch

c). NIC

**d). Hub**

61. Which protocol is used to configure IP address, Mask and Gateway to hosts automatically?

a). DNS

b). SMTP

**c). DHCP**

d). HTTP

62. You have one IP address provided from your ISP with a /30 mask. However, you have 300 users that need to access the Internet. What technology will you use to implement a solution?

**A. PAT**

**B.** VPN

**C.** DNS

**D.** LANs

63. Which *address* is assigned to, and uniquely identifies, each machine on a network?

**a). Host address**

b). Network address

c). Broadcast address

d). MAC address

64. Which address is used in routing to send packets to a remote network?

a). Host address

**b). Network address**

c). Broadcast address

d). MAC address

65. Which is The global unicast address range?

a). FF00::/8

b). FE80::/10

**c). 2000::/3**

d). FC00::/7

66. Which IPv6 addresses are publicly routable?

a). Unicast

**b). Global unicast addresses**

c). Link-local addresses

d). Unique local addresses

67. Which is IPv6 multicast range?

a). FC00::/7

**b). FF00::/8**

c). 3FFF:FFFF::/32

d). 2001:0DB8::/3

68. Which address is equivalent of 127.0.0.1 in IPv4?

a). 0:0:0:0

b). ::

c). ::/8

**d). ::1**

69. Which newer standard protocol being used more and more in place of POP3?

a). RDP

b). SMTP

c). SFTP

**d). IMAP**

70. Which have a dramatically negative effect on network performance, so they’re definitely something we want to avoid?

a). Broadcast

**b). Collision**

c). Ethernet

d). Multicast

71. What is Cisco ASA?

a). It is a security device for providing security only to computers

**b). It is a security device for providing security for all devices connected to a network**

c). It is a security device for providing security for all IP addresses inside an intranet

d). It is a security device for providing security only to devices logging in through VPN

72. What does ASA stand for?

A. Advanced Security Application

B. Adaptive Security Application

**C. Adaptive Security Appliance**

D. Advanced Security Application

73. When dealing with security levels, what is the most secure level?

A. 10

**B. 100**

C. 255

D. 1000

74. What is the default enable password on the ASA?

1. Porn

B. Cisco

C. Cisco ASA

**D. There is none by default**

75. What is the default device name on the ASA?

1. ASA

B. Cisco

C. Hostname

**D. CiscoASA**