

Test for check your knowledge

1. How many number of layers in OSI model?
a.5 b.4 **c.7** d.2
2. What does OSI stands for?
a. Operating System interface
b. Optical System interconnection
c. Operating System Internet
d. **Open system interconnection**
3. Which layer provides service to user?
a. Physical layer
b. Session layer
c. **Application layer**
d. Presentation layer
4. What is a switch?
a. Software
b. Computing device
c. **Network device**
d. Calculating device
5. What does a set of rules define?
a. SMTP
b. FTP
c. IMAP
d. **Protocol**
6. Identify among the following which is mainly used to host web site.
a. Mail server
b. **Webserver**
c. Database server
d. None
7. Identify the full form of HTTP?
a. **HyperText Transfer Protocol**
b. HyperText Transfer Package
c. Hyper Transfer Text Package
d. Hyper Transfer Text Practice
8. Identify the protocol primarily used for browsing data.
a. FTP
b. TCP
c. TFTP
d. **HTTP**
9. Identify the total versions of IP.
a. 1
b. **2**
c. 3

d. 4

10. Identify the first network which was based on TCP/IP protocol.

- a. **ARPANET**
- b. HUB
- c. Ethernet Card
- d. Router

11. Choose among the following, which is the most common internet protocol.

- a. PPP
- b. FTP
- c. TCP/IP
- d. **SMTP**

12. What does TCP/IP stand for?

- a. Telephone control protocol / Internet Protocol
- b. **Transmission control protocol/Internet protocol**
- c. Transmission control protocol/International protocol
- d. None

13. Which of the following layer isn't present in the TCP/IP model but is included in the OSI model?

- a. Network layer
- b. **Session layer**
- c. Application layer
- d. Transport layer

14. What is the collection of the hyperlinked document on the internet known as?

- a. HTML
- b. Email
- c. **WWW**
- d. Internet

15. What is the location of a resource on the internet given by?

- a. Email
- b. IP
- c. Protocol
- d. **URL**

16. Identify the incorrect network topology

- a. Bus
- b. Star
- c. **P2P**
- d. Ring

17. Choose the port number of FTP.

- a. 23
- b. **21**
- c. 110
- d. 143

18. What is the length of the IPv4 address?

- a. 8 bits
- b. 16 bits
- c. **32 bits**
- d. 128 bits

19. What is the length of the IPv6 address?

- a. 8 bits
- b. 16 bits
- c. 32 bits
- d. **128 bits**

20. What is the term used when the main server sends mail to another mail server?

- a. FTP
- b. **SMTP**
- c. TCP/IP
- d. MIME

21. What is the port number of SMTP?

- a. 110
- b. 143
- c. **25**
- d. 99

22. What does MIME stand for?

- a. Multipurpose Internet Mail Extra
- b. Multi Internet Mail End
- c. Multipurpose Internet Mail Email
- d. **Multipurpose Internet Mail Extension**

23. What does port number 143 refer to?

- a. SMTP
- b. FTP
- c. **IMAP**
- d. POP

24. Identify among the following the network device used to connect two dis-similar types of networks.

- a. Switch
- b. Hub
- c. **Bridge**
- d. Gateway

25. Identify the device used to boost up a weak signal.

- a. Modem
- b. **Repeater**
- c. Switch
- d. Router

26. What does MAC stand for?
- a. **Media Access Control**
 - b. Mass Access Control
 - c. Media Access Carriage
 - d. None
27. What is the length of the MAC address?
- a. 8 bits
 - b. 16 bits
 - c. 32 bits
 - d. **48 bits**
28. Which of the following is used to allocate and manage resources for a network?
- a. Bluetooth
 - b. **Server**
 - c. Node
 - d. None of the above
29. The arrangement where all data pass through a central computer is known as
- a. Ring topology
 - b. Mesh topology
 - c. **Star topology**
 - d. Bus topology
30. What of the following device is used in the network layer?
- a. Application gateway
 - b. Switch
 - c. **Router**
 - d. Repeaters
31. Identify if the following statement is True or False: Network Interface Card(NIC) is an I/O device.
- a. **True**
 - b. False
 - c. Depends on usage
 - d. None
32. What is required to use a Simple Network Management System?
- a. Servers
 - b. Protocols
 - c. **Rules**
 - d. IP
33. Identify the major difference between SNMPv3 and SNMPv2.
- a. Classification
 - b. Integration
 - c. Management
 - d. **Enhanced security**

34. Identify the network which extends a private network across a public network.
- a. Storage Area network
 - b. **Virtual private network**
 - c. Enterprise Private network
 - d. Local area network
35. Identify the layer which is responsible for data translating.
- a. Network
 - b. Datalink
 - c. **Presentation**
 - d. Application
36. Identify the layer which determines the interface of the system with the user.
- a. Network
 - b. Datalink
 - c. Presentation
 - d. **Application**
37. Which of the following topology arrangements is a point-to-point line configuration?
- a. Ring
 - b. Mesh
 - c. Star
 - d. **All of the above**
38. Identify the device which links two homogeneous packed broadcast local networks.
- a. Hub
 - b. Router
 - c. Bridge
 - d. **Gateway**
39. Why are parity bits used?
- a. To encrypt data
 - b. **To detect error**
 - c. To identify user
 - d. None
40. Identify among the following which belongs to class A.
- a. **121.12.12.248**
 - b. 128.12.12.248
 - c. 129.12.12.248
 - d. 130.12.12.248
41. What does LAN stand for?
- a. Local Array Network
 - b. **Local Area Network**
 - c. Local Area Net
 - d. None
42. Who keeps the private key in asymmetric key cryptography?

- a. Sender
- b. Receiver
- c. Both Sender and Receiver
- d. None

43. Calculate the maximum efficiency of pure ALOHA at $G = 0.5$?

- a. 16%
- b. 1.89%
- c. 18.4%
- d. 18.999%

44. Identify the switching method in which the message is divided into small packets.

- a. Virtual switching
- b. Packet switching
- c. Message switching
- d. None

45. What is a proxy server also known as?

- a. Application-level gateway
- b. Proxy tools
- c. Application proxy
- d. None

46. Identify among the following servers which allow LAN users to share data.

- a. Communication server
- b. Point server
- c. Data server
- d. File server

47. Choose the correct formula for the total vulnerable time value of pure ALOHA.

- a. $\frac{1}{2} T_{fr}$
- b. T_{fr}
- c. $2 * T_{fr}$
- d. $4 * T_{fr}$

48. Choose among the following which is a bit-oriented protocol.

- a. SSL
- b. HDLC
- c. HTTP
- d. All of the above

43. (The maximum efficiency of pure ALOHA is given by $G * e^{(-2G)}$)

Here $G = 0.5$

So, $0.5 * e^{(-2 * 0.5)} = 0.5 * e = 18.4\%$