

1. A mesh topology with 7 computers requires what number of cables to run among these computers?
- a. 20
  - b. 22
  - c. 21
  - d. 23

Ans:21

2. A subnet mask in class A has 14 1s. How many subnets does it define?
- a. 32
  - b. 8
  - c. 64
  - d. 128

Ans:64

3. Ad-hoc network is
- a. a permanent network
  - b. temporary network

Ans: a temporary network

4. An \_\_\_\_\_ has infinitely many levels of intensity over a period of time.
- a. analog signal
  - b. digital signal
  - c. both analog and digital
  - d. none of the analog and digital

Ans: analog signal

5. ARP protocol is used to get
- a. physical address when logical address is known
  - b. logical address when physical address is known
  - c. physical address when application specific address is known
  - d. none of the above

Ans: physical address when logical address is known

6. Class D IP addresses are used for
- a. Unicasting
  - b. Multicasting
  - c. Broadcasting
  - d. Reserved for future use

Ans: Multicasting

7. Collision is not possible in \_\_\_\_\_ logical topology.
- a. Bus
  - b. Star
  - c. Token Ring
  - d. none of the above

Ans: Token Ring

8. Dialog control is a function of which layer of the OSI reference model?

- a. Network
- b. Transport
- c. Session
- d. Presentation

Ans: Session

9. Do not use repeater when
- a. there is heavy network traffic
  - b. segments of the network are using different access methods
  - c. data filtering is need
  - d. All of the above

Ans: All of the above

10. Fault isolation and reconfiguration of network is difficult in \_\_\_\_ topology.

- a. star
- b. ring
- c. mesh
- d. bus

Ans: bus

11. Flow control and Error control are carried out at

- a. Transport layer only
- b. Data link layer only
- c. Transport layer and Data link layer
- d. None of the above

Ans: Transport layer and Data link layer

12. For class A IP address, which of the following is true?

- a. First 3 bytes represent net id and last 1 byte represent host id.
- b. First 2 bytes represent net id and last 2 bytes represent host id.
- c. First 22 bits represent net id and last 10 bits represent host id.
- d. First 1 byte represent net id and last 3 bytes represent host id.

Ans: First 1 byte represent net id and last 3 bytes represent host id.

13. Frequency Modulation (FM) uses which of the following unbounded transmission media?

- a. Micro Waves
- b. Radio Waves
- c. Infrared Waves
- d. Twisted Pair Cable

Ans: Radio Waves

14. Generally supernetting is performed with \_\_\_\_\_ addresses and subnetting is performed with \_\_\_\_\_ addresses.

- a. Class A, Class B or C
- b. Class B, Class A or C
- c. Class C, Class A or B
- d. Class A, Class A or B

Ans: Class C, Class A or B

15. Given the IP address 201.14.78.65 and the subnet mask 255.255.255.224, what is the subnet address?

- a. 201.14.78.32
- b. 201.14.78.65
- c. 201.14.78.64
- d. 201.14.78.12

Ans: 201.14.78.64

16. Global Positioning System(GPS) is an example \_\_\_\_\_ satellite.

- a. LEO
- b. GEO
- c. MEO
- d. All of the Above

Ans: MEO

17. How many bits are used as netid for class A IP addresses?

- a. 8
- b. 16
- c. 24
- d. 32

Ans: 8

18. How many bits from hostid will be used as netid bits if we divide a network into 8 smaller sub networks?

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

Ans: 3

19. How many hosts can be assigned different IP addresses to a network of class C.

- a. 253
- b. 254
- c. 255
- d. 256

Ans: 254

20. How many layers does an OSI reference model have?

- a. 5
- b. 6
- c. 7
- d. 8

Ans: 7

21. How many OSI layers of intermediate nodes are used when device A sends a message to device B in a different network?

- a. 1
- b. 2
- c. 3
- d. none of the above

Ans: 3

22. Identify the class of the following IP address: 4.5.6.7

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

Ans: class A

23. If you see a group of networked computers connected to a central backbone cable you know that the network has what type of physical topology?

- a. bus
- b. star
- c. ring
- d. cannot tell

Ans: bus

24. If you see a group of networked computers connected to a central hub, you know that the network has what type of physical topology?

- a. Ring
- b. Star
- c. Bus
- d. Cannot tell

Ans: Star

25. In \_\_\_\_\_ mode, each station can both transmit and receive, but not at the same time.

- a. simplex
- b. half duplex
- c. duplex
- d. none of the above

Ans: half duplex

26. The IPv4 address is of how many bits?

- 32
- 128
- 16
- 64

Ans: 32

27. What is the range of class C addresses?

- 0-127
- 128-191
- 192-223
- 224-239
- 240-255

Ans: 192-223

28. In the sending computer, UDP receives a data unit from the \_\_\_\_\_ layer.

- a. application

- b. transport
- c. network
- d. datalink

Ans: application

29. In the sending computer, UDP sends a data unit to the \_\_\_\_\_ layer.

- a. application
- b. transport
- c. network
- d. datalink

Ans: network

30. IP is responsible for \_\_\_\_ communication while TCP is responsible for \_\_\_\_ communication.

- a. host-to-host; process-to-process
- b. process-to-process; host-to-host
- c. process-to-process; network-to-network
- d. network-to-network; process-to-process

Ans: host-to-host; process-to-process

31. Low Earth Orbit (LEO) satellite have \_\_\_\_\_ orbit.

- a. Equatorial
- b. Inclined
- c. Polar
- d. All of the Above

Ans: Polar

32. Media such as data tapes and removable optical disks is well suited for \_\_\_\_\_.

- a. Online storage
- b. Near-line storage
- c. Offline storage
- d. None of the above

Ans: Offline storage

33. Modulation refers to

- a. conversion of analog signals into analog data
- b. conversion of analog signals into digital signals
- c. conversion of digital signals into digital data
- d. conversion of digital signals into analog signals

Ans: conversion of digital signals into analog signals

34. Multiply the header length field by \_\_\_\_\_ to find the total number of bytes in the TCP header.

- a. 2
- b. 4
- c. 6
- d. 8

Ans: 4

35. Network is used to

- a. share resources

- b. information sharing
- c. IP telephony
- d. e-mail
- e. all of the above

Ans: all of the above

36. Router cannot regenerate signals. State true or false.

- a. TRUE
- b. FALSE

Ans: FALSE

37. Segmentation and Reassembly is performed at

- a. Transport layer
- b. Data link layer
- c. Application layer
- d. Presentation layer

Ans: Transport layer

38. State true or false. Data communication can occur only through wired connection.

- a. TRUE
- b. FALSE

Ans: FALSE

39. State true or false. Digital signal is less error prone and can be rectified easily.

- a. TRUE
- b. FALSE

Ans: TRUE

40. State True or False. If a signal changes instantaneously, its frequency is Zero.

- a. TRUE
- b. FALSE

Ans: FALSE

41. State true or false. If some signal does not change at all, its frequency Zero.

- a. TRUE
- b. FALSE

Ans: TRUE

42. Strong central security and central file storage is possible in \_\_\_\_\_ network.

- a. Server based
- b. Peer based
- c. Both Server based and Peer Based
- d. None of Server based and Peer based

Ans: Server based

43. TCP is the protocol of \_\_\_\_\_ layer of TCP/IP model.

- a. Network,
- b. Transport
- c. Application

d. Physical & Data link

Ans: Transport

44. TCP lies between the \_\_\_\_\_ and the \_\_\_\_\_ layers of the TCP/IP protocol suite.

a. application;transport

b. transport;datalink

c. application;network

d. transport;network

Ans: application;network

45. TCP uses \_\_\_\_\_ for error detection.

a. checksum

b. acknowledgement

c. time-out

d. all of the above

Ans: checksum

46. The \_\_\_\_\_ model supports both connectionless and connection oriented communication in the network layer

a. TCP/IP

b. OSI

c. Both

d. None

Ans: OSI

47. The \_\_\_\_\_ model supports only one mode in the network layer (connectionless) but both in the transport layer (connectionless and connection oriented)

a. TCP/IP

b. OSI

c. both TCP/IP and OSI

d. none of the TCP/IP & OSI

Ans: TCP/IP

48. The \_\_\_\_\_ defines the client process.

a. ephemeral port number

b. IP address

c. well-known port number

d. physical address

Ans: ephemeral port number

49. The \_\_\_\_\_ layer in TCP/IP protocol suit contains Internetworking Protocol.

a. Network

b. Transport

c. Application

d. Physical & Datalink

Ans: Network

50. The \_\_\_\_\_ logical topology uses the token concept to transmit data within network.

a. bus

b. star

- c. ring
  - d. mesh
- Ans: ring

51. The \_\_\_\_\_ server is specializing in only a few tasks, that requires fewer resources .

- a. dedicated
- b. nondedicated
- c. dedicated & nondedicated
- d. none of the above

Ans: dedicated

52. The \_\_\_\_\_ carry signal in light form.

- a. twisted pair cable
- b. coaxial cable
- c. fiber optics
- d. none of the above

Ans: fiber optics

53. The \_\_\_\_\_ field is used for error detection.

- a. urgent pointer
- b. checksum
- c. sequence number
- d. acknowledgment number

Ans: checksum

54. The \_\_\_\_\_ is required for communication between to system within the same network.

- a. logical address
- b. IP address
- c. physical address
- d. port number

Ans: physical address

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- a. logical address
- b. IP address
- c. physical address
- d. port number

Ans: physical address

56. The \_\_\_\_\_ represent the capacity of the medium to carry information.

- a. frequency
- b. bandwidth
- c. amplitude
- d. bit rate

Ans: bandwidth

57. The \_\_\_\_\_ command in windows is used to retrieve the MAC address of your computer?

- a. getmymac
- b. whatismymac



- c. getmac
- d. None of the above

Ans: getmac

58. The definition of reliable delivery includes which of the following?

- a. error-free delivery
- b. receipt of the complete message
- c. in-order delivery
- d. all of the above

Ans: all of the above

59. The following IP address belongs to which class?

10110011 11110000 00001111 10101010

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

Ans: Class B

60. The layers of the OSI model (in order) are included in which of the following choices?

- a. Physical, Data Link, Network, Transport, Session, Presentation, Application
- b. Physical, Data Link, Network, Transport, Presentation, Session Application
- c. Physical, Network, Data Link, Transport, Presentation, Session Application
- d. Physical, Data Link, Transport, Network, Presentation, Session Application

Ans: Physical, Data Link, Network, Transport, Session, Presentation, Application

61. The Option field of the TCP header ranges from 0 to \_\_\_\_\_ bytes.

- a. 10
- b. 20
- c. 40
- d. 60

Ans: 40

62. The subnet mask for a class C network is 255.255.255.192. How many subnetworks are available?

- a. 2
- b. 4
- c. 8
- d. 192

Ans: 4

63. Twisted pair cable belongs to \_\_\_\_\_ transmission media.

- a. unguided
- b. guided
- c. wireless
- d. free space

Ans: guided

64. UDP and TCP are both \_\_\_\_\_ layer protocol.

- a. application

- b. network
- c. transport
- d. datalink

Ans: transport

65. UDP needs the \_\_\_\_\_ address to delivery the user datagram to the correct application program.

- a. port
- b. application
- c. internet
- d. physical

Ans: port

66. What is the default mask for class C?

- a. 11111111 11111111 11111111 00000000
- b. 11111111 11111111 00000000 00000000
- c. 11111111 00000000 00000000 00000000
- d. 11111111 11111111 11111111 11111111

Ans: 11111111 11111111 11111111 00000000

67. What is the full form of OSI?

- a. Open Standard Interface
- b. Open Systems Interface
- c. Open Standard Institute
- d. Open Systems Interconnection

Ans: Open Systems Interconnection

68. What is the maximum size of a 10BASE2 network?

- a. 100 meters
- b. 200 meters
- c. 300 meters
- d. 500 meters

Ans: 200 meters

69. What is the supernet mask for a supernet composed of 16 class C addresses?

- a. 255.255.240.16
- b. 255.255.16.0
- c. 255.255.248.16
- d. 255.255.240.0

Ans: 255.255.240.0

70. Which class addresses are not divided into netid and hostid?

- a. Class D
- b. Class E
- c. Class D & E
- d. None of the abve

Ans: Class D & E

71. Which class(es) IP addresses are wasted in classful addressing?

- a. Class A

- b. Class B
- c. Class A & B
- d. None of the above

Ans: Class A & B

72. Which file service is responsible for creating duplicate copies of files to protect against file damage?

- a. File Transfer
- b. File Update Synchronization
- c. File Archiving
- d. Remote File Access

Ans: File Archiving

73. Which lower layer provides services to presentation layer?

- a. session layer
- b. transport layer
- c. application layer
- d. None of the above

Ans: session layer

74. Which of the following can concurrently provide and request services?

- a. Server
- b. Client
- c. Peer
- d. None of the above

Ans: Peer

75. Which of the following can result performance gain in efficiency by 10%-300%?

- a. Virtual Memory
- b. Cache Memory
- c. RAM
- d. ROM

Ans: Cache Memory

76. Which of the following defines bandwidth?

- a. capacity of the medium
- b. number of bits transmitted per second
- c. number of bytes transmitted per second
- d. none of the above

Ans: capacity of the medium

77. Which of the following defines bit rate?

- a. Capacity of the medium
- b. number of bits transmitted per second
- c. number of bytes transmitted per second
- d. none of the above

Ans: number of bits transmitted per second

78. Which of the following do not have filtering capability?

- a. Routers

- b. Bridges
- c. Repeaters
- d. Switches

Ans: Repeaters

79. Which of the following fiber optical cable is used to cover longer distance?

- a. Singlemode
- b. Multimode grade index
- c. Multimode step index
- d. None of the above

Ans: Singlemode

80. Which of the following function does UDP perform?

- a. process-to-process communication
- b. host-to-host communication
- c. end-to-end reliable data delivery
- d. all of the above

Ans: process-to-process communication

81. Which of the following have MAC address and IP address?

- a. Routers
- b. Bridges
- c. Hubs
- d. Repeaters

Ans: Routers

82. Which of the following is a network address?

- a. First Address of a block
- b. Last Address of a block
- c. Both a & b
- d. None of a & b

Ans: First Address of a block

83. Which of the following is a technique to improve the processing power of a processor?

- a. Symmetric Multiprocessing
- b. Employ cache memory
- c. Use single high speed processor
- d. None of the above

Ans: Symmetric Multiprocessing

84. Which of the following is legal port number?

- a. 0
- b. 513
- c. 65535
- d. All of the above

Ans: All of the above

85. Which of the following is not a smart network device?

- a. Router

- b. Switch
- c. Bridge
- d. Repeater

Ans: Repeater

86. Which of the following is odd one out?

- a. Radiowaves
- b. microwaves
- c. infrared waves
- d. fiber optics

Ans: fiber optics

87. Which of the following is the functionality of network layer?

- a. Synchronization of bits
- b. Dialog control
- c. Compression
- d. logical addressing

Ans: logical addressing

88. Which of the following is true for protocol?

- a. Protocols are the signal transmitted across networks.
- b. Protocols are resources shared among network nodes.
- c. Protocols are the agreed upon rules for devices to exchange information.
- d. None of the above

Ans: Protocols are the agreed upon rules for devices to exchange information.

89. Which of the following model did not originally clearly distinguish between services, interfaces, and protocols?

- a. TCP/IP
- b. OSI
- c. TCP/IP & OSI
- d. none of the above

Ans: TCP/IP

90. Which of the following network device works on network, data-link and physical layer?

- a. Bridges
- b. Routers
- c. Repeaters
- d. Hubs

Ans: Routers

91. Which of the following OSI model layer adds header as well as trailer?

- a. Physical
- b. Datalink
- c. Network
- d. Transport

Ans: Datalink

92. Which of the following takes more time to make a complete trip of the Earth?

- a. LEO Satellite

- b. MEO Satellite
- c. GEO Satellite
- d. None of the Above

Ans: GEO Satellite

93. Which of the following transmission media is used for Cable TV networks?

- a. Twisted pair cable
- b. Coaxial cable
- c. Fiber optics
- d. None of the above

Ans: Coaxial cable

94. Which of the following transmission media is used for local area networks?

- a. Twisted pair cable
- b. Coaxial cable
- c. Fiber optics
- d. None of the above

Ans: Twisted pair cable

95. Which OSI layer is concerned with data encryption?

- a. Network
- b. Transport
- c. Session
- d. Presentation

Ans: Presentation

96. Which physical topology needs proper termination of a cable to avoid reflection?

- a. Star
- b. Ring
- c. Mesh
- d. None of the above

Ans: None of the above

97. Which two of the following are file services?

- A. Archiving
  - B. File segmenting
  - C. Update synchronization
  - D. Data integrity
- a. A & B
  - b. B & C
  - c. C & D
  - d. A & C

Ans: A & C

98. Which type of network is most likely confined to a building or a campus?

- a. Local Area Network
- b. Metropolitan Area Network
- c. Wide Area Network
- d. Personal Area Network

Ans: Local Area Network

99. You have a small office of few computers. Each machine is act as both client and server, What type of network are you running?

- a. peer-to-peer
- b. client-server
- c. wide area network
- d. none of the above

Ans: peer-to-peer

100. Which of the following uses pair of private and public keys, for confidentiality?

- a. Asymmetric key cipher
- b. Symmetric key cipher
- c. Both a & b
- d. None of the above

Ans: Asymmetric key cipher

101. Which of the following means protection against unauthorised modification in context of network security?

- a. Confidentiality
- b. Integrity
- c. Availability
- d. None of the above

Ans: Integrity

102. Which of the following handles confidentiality and integrity ?

- a. Digital Signature
- b. Encryption and decryption
- c. Traditional ciphers
- d. Substitution cipher

Ans: Digital Signature

1. Seven devices are arranged in a mesh topology. ....physical channels link these devices.

- A. Seven
- B. Six
- C. Twenty
- D. Twenty-one

**Answer: D**

2. A .....topology is a variation of star topology.

- A. Ring
- B. Bus
- C. Mesh
- D. Tree

**Answer: D**

3. In a peer-to-peer network, each computer in a network is referred as .....

- A. Server
- B. Client
- C. Peer
- D. Sender

**Answer: C**

4. Which layer provides the services to user?

- A. application layer

- B. session layer
- C. presentation layer
- D. physical layer

**Answer: A**

5. What is a Firewall in Computer Network?
- A. The physical boundary of Network
  - B. An operating System of Computer Network
  - C. A system designed to prevent unauthorized access
  - D. A web browsing Software

**Answer: C**

6. What is the size of MAC Address?
- A. 16-bits
  - B. 32-bits
  - C. 48-bits
  - D. 64-bits

**Answer: C**

7. Which of the following layer of OSI model also called end-to-end layer?
- A. Presentation layer
  - B. Network layer
  - C. Session layer
  - D. Transport layer

**Answer: D**

8. TELNET, FTP, SMTP protocols fall in the following layer of OSI model.
- A. Transport layer
  - B. Internet layer
  - C. Network layer
  - D. Application layer

**Answer: D**

9. Which of the following does not have a Net ID and Host ID?
- A. Class A
  - B. Class B
  - C. Class C
  - D. Class D

**Answer: D**

10. A device operating at physical layer is called \_\_\_\_\_
- A. Router
  - B. Gateway
  - C. Bridge
  - D. Repeater

**Answer: D**

11. Which of the following protocols are used to resolve the IP address into Mac address?
- A. ARP
  - B. RARP
  - C. DNS
  - D. DHCP

**Answer: A**

12. Radio waves are.....
- A. Omnidirectional
  - B. Unidirectional
  - C. bidirectional
  - D. none of the mentioned

**Answer: A**

13. Which of the following primarily uses guided media?
- A. Cellular telephone system
  - B. Local telephone system



- C. Satellite communications
- D. Radio broadcasting

**Answer: B**

14. Which of the following performs modulation and demodulation?

- A. fiber optics
- B. Switch
- C. Modulator
- D. MODEM

**Answer: D**

15. ....is a device that prevents the signal at the end of a bus backbone from echoing back on to the line

- A. Repeater
- B. Drop lines
- C. T-Connector
- D. Terminator

**Answer: D**

16. The core of an optical fiber is .....

- A. glass
- B. Plastic
- C. glass or plastic
- D. metal

**Answer: C**

17. Public key system is useful because

- A. It uses two keys.
- B. There is no key distribution problem as public key kept in a commonly accessible database.
- C. Private key can be kept secret.
- D. It is a symmetric key system.

**Answer: B**

18. Message .....means that the sender and the receiver expect privacy.

- A. Confidentiality
- B. Integrity
- C. Authentication
- D. Nonrepudiation

**Answer: A**

19. The .....is the encrypted message.

- A. Cipher Script
- B. Cipher Text
- C. Secret Text
- D. Secret Script

**Answer: B**

20. An electronic document that establishes your credentials when you are performing transactions.

- A. Digital Code
- B. Email
- C. OTP
- D. Digital Certificate

**Answer: D**

Q:-1	When collection of various computers seems a single coherent system to its client, then it is called _____
A.	computer network
B.	distributed system
C.	networking system
D.	mail system
Ans:-	B
Q:-2	Two devices are in network if _____
A.	a process in one device is able to exchange information with a process in another device
B.	a process is running on both devices
C.	PIDs of the processes running on different devices are same
D.	a process is active and another is inactive.
Ans:-	A
Q:-3	Which of the following computer networks is built on the top of another network?
A.	prior network
B.	chief network
C.	prime network
D.	overlay network
Ans:-	D
Q:-4	In computer network nodes are _____.
A.	the computer that originates the data
B.	the computer that routes the data
C.	the computer that terminates the data
D.	all of the mentioned
Ans:-	D
Q:-5	Communication channel is shared by all the machines on the network in _____
A.	broadcast network
B.	unicast network
C.	multicast network
D.	anycast network
Ans:-	A
Q:-6	Bluetooth is an example of _____
A.	personal area network
B.	MAN
C.	virtual private network
D.	wide area network
Ans:-	A
Q:-7	A _____ is a device that forwards packets between networks by processing the routing information included in the packet.
A.	Bridge
B.	Firewall
C.	Router
D.	Hub

Ans:-	C
Q:-8	A list of protocols used by a system, one protocol per layer, is called _____
A.	protocol architecture
B.	protocol stack
C.	protocol suite
D.	protocol system
Ans:-	B
Q:-9	Network congestion occurs _____
A.	in case of traffic overloading
B.	when a system terminates
C.	when connection between two nodes terminates
D.	in case of transfer failure
Ans:-	A
Q:10	Which of the following networks extends a private network across public networks?
A.	local area network
B.	virtual private network
C.	enterprise private network
D.	storage area network
Ans:-	B
Q:11	Which network topology requires a central controller or hub?
A.	Star
B.	Mesh
C.	Ring
D.	Bus
Ans:-	A
Q:-12	Which network topology requires a central controller or hub?
A.	Star
B.	Mesh
C.	Ring
D.	Bus
Ans:-	A
Q:-13	_____ topology requires a multipoint connection.
A.	Star
B.	Mesh
C.	Ring
D.	Bus
Ans:-	D
Q:-14	Data communication system spanning states, countries, or the whole world is _____.
A.	LAN
B.	WAN
C.	MAN
D.	PAN
Ans:-	B
Q:-15	Data communication system within a building or campus is_____.
A.	LAN
B.	WAN
C.	MAN
D.	PAN
Ans:-	A
Q:-16	WAN stands for _____.
A.	World area network
B.	Wide area network

C.	Web area network
D.	Web access network
Ans:-	B
Q:-17	_____ is the multiplexing technique that shifts each signal to a different carrier frequency.
A.	FDM
B.	TDM
C.	Both FDM & TDM
D.	PDM
Ans:-	A
Q:-18	Network layer firewall works as a _____.
A.	Frame filter
B.	Packet filter
C.	Content filter
D.	Virus filter
Ans:-	B
Q:-19	Network layer firewall has two sub-categories as _____.
A.	State full firewall and stateless firewall
B.	Bit oriented firewall and byte oriented firewall
C.	Frame firewall and packet firewall
D.	Network layer firewall and session layer firewall
Ans:-	A
Q:-20	A firewall is installed at the point where the secure internal network and untrusted external network meet which is also known as _____.
A.	Chock point
B.	Meeting point
C.	Firewall point
D.	Secure point
Ans:-	A
Q:-21	Which of the following is / are the types of firewall?
A.	Packet Filtering Firewall
B.	Dual Homed Gateway Firewall
C.	Screen Host Firewall
D.	Dual Host Firewall
Ans:-	A
Q:-22	A proxy firewall filters at _____.
A.	Physical layer
B.	Data link layer
C.	Network layer
D.	Application layer
Ans:-	D
Q:-23	A packet filter firewall filters at _____.
A.	Physical layer
B.	Data link layer
C.	Network layer or Transport layer
D.	Application layer
Ans:-	C
Q:-24	_____ allows LAN users to share computer programs and data.
A.	Communication server
B.	Print server
C.	File server
D.	Network
Ans:-	C

Q:-25	With respect to physical media, STP cables stands for _____.
A.	Shielded Twisted Pair Cable
B.	Spanning Tree Protocol Cable
C.	Static Transport Protocol Cable
D.	Shielded Two Power Cable
Ans:-	A
Q:-26	What is the max data transfer rate for optical fiber cable?
A.	10 Mbps
B.	100 Mbps
C.	1000 Mbps
D.	10000 Mbps
Ans:-	D
Q:-27	Which of the following architecture uses the CSMA/CD access method?
A.	ARC net
B.	Ethernet
C.	Router
D.	STP server
Ans:-	B
Q:-28	Which is not a application layer protocol?
A.	HTTP
B.	SMTP
C.	FTP
D.	TCP
Ans:-	D
Q:-29	The packet of information at the application layer is called _____.
A.	Packet
B.	Message
C.	Segment
D.	Frame
Ans:-	B
Q:-30	Which one of the following is an architecture paradigms
A.	Peer to peer
B.	Client-server
C.	HTTP
D.	Both Peer-to-Peer & Client-Server
Ans:-	D
Q:-31	Application layer offers _____ service.
A.	End to end
B.	Process to process
C.	Both End to end and Process to process
D.	None of the mentioned
Ans:-	A
Q:-32	E-mail is _____.
A.	Loss-tolerant application.
B.	Bandwidth-sensitive application
C.	Elastic application
D.	None of the mentioned.
Ans:-	C
Q:-33	Which of the following is an application layer service?

A.	Network virtual terminal
B.	File transfer, access, and management
C.	Mail service
D.	All of the mentioned
Ans:-	D
Q:-34	To deliver a message to the correct application program running on a host, the _____ address must be consulted.
A.	IP
B.	MAC
C.	Port
D.	None of the mentioned
Ans:-	C
Q:-35	Electronic mail uses which Application layer protocol?
A.	SMTP
B.	HTTP
C.	FTP
D.	SIP
Ans:-	A
Q:-36	The common name for a modulator-demodulator is _____.
A.	Joiner
B.	Networker
C.	Connector
D.	Modem
Ans:-	D
Q:-37	Which of the following device is used to connect two systems, especially if the systems use different protocols?
A.	Repeater
B.	Gateway
C.	Bridge
D.	Hub
Ans:-	B
Q:-38	A distributed network configuration in which all data/information pass through a central computer is
A.	Bus network
B.	Star network
C.	Ring network
D.	Point-to-point network
Ans:-	B
Q:-39	Which of the following communications modes support two-way traffic but in only one direction of a time?
A.	A. Simplex
B.	Half-duplex
C.	Three-quarters duplex
D.	Full duplex
Ans:-	D
Q:-40	The slowest transmission speeds are those of
A.	Coaxial cable
B.	Twisted-pair wire
C.	Fiber-optic cable
D.	Microwaves
Ans:-	B

Q:-41	Networks are monitored by security personnel and supervised by _____ who set(s) up accounts and passwords for authorized network users.
A.	IT managers
B.	The government
C.	Password administrators
D.	Network administrators
Ans:-	D
Q:-42	P2P is a _____ application architecture
A.	Client/server
B.	Distributed
C.	Centralized
D.	1-tier
Ans:-	B
Q:-43	_____ is the most important/powerful computer in a typical network.
A.	Desktop
B.	Network server
C.	Network client
D.	Network switch
Ans:-	B
Q:-44	What device separates a single network into two segments but lets the two segments appear as one to higher protocols?
A.	Switch
B.	Router
C.	Bridge
D.	Gateway
Ans:-	C
Q:-45	What is a benefit of networking your computer with other computers?
A.	Increase in the computer's speed
B.	Sharing of cables to cut down on expenses and clutter
C.	Sharing of resources to cut down on the amount of equipment needed
D.	Increase in the speed of the network
Ans:-	C
Q:-46	Which of the following is required to communicate between two computers?
A.	Communications software
B.	Protocol
C.	Communications hardware
D.	All of the above
Ans:-	D
Q:-47	The connection between your computer at home and your local ISP is called _____
A.	The last mile
B.	The home stretch
C.	The home page
D.	The backbone
Ans:-	C
Q:-48	A _____ is a set of rules.
A.	Resource locator
B.	Protocol
C.	Domain
D.	URL
Ans:-	B

Q:-49	A ____ typically connects personal computers within a very limited geographical area, usually within a single building.
A.	LAN
B.	WAN
C.	MAN
D.	TAN
Ans:-	A
Q:-50	Telnet is a _____ based computer protocol.
A.	Sound
B.	Text
C.	Image
D.	Animation
Ans:-	B
Q:-51	_____ is a technique that is used to send more than one call over a single line.
A.	Digital transmission
B.	Infrared transmission
C.	Digitizing
D.	Multiplexing
Ans:-	D
Q:-52	Communication channel is shared by all the machines on the network in
A.	unicast network
B.	broadcast network
C.	multicast network
D.	none of the mentioned
Ans:-	B
Q:-53	In computer network nodes are
A.	the computer that routes the data
B.	the computer that terminates the data
C.	the computer that originates the data
D.	all of the mentioned
Ans:-	D
Q:-54	The physical layer concerns with
A.	process to process delivery
B.	application to application delivery
C.	bit-by-bit delivery
D.	none of the mentioned
Ans:-	C
Q:-55	Public-key cryptography is also known as ?
A.	asymmetric cryptography
B.	symmetric cryptography
C.	Both A and B
D.	None of the above
Ans:-	A
Q:-56	Which of the following keys are known only to the owner?
A.	public key
B.	protected key
C.	private key



D.	unique key
Ans:-	C
Q:-57	PKI stands for?
A.	public key infrastructure
B.	private key infrastructure
C.	public key instance
D.	private key instance
Ans:-	A
Q:-58	Examples of hash functions are
A.	MD5
B.	SHA-1
C.	Both A and B
D.	None of the above
Ans:	C
Q:-59	In public key cryptosystem which is kept as public?
A.	Decryption keys
B.	Encryption keys
C.	Encryption & Decryption keys
D.	None of the above
Ans:	B
Q:-60	Which is the largest disadvantage of the symmetric Encryption?
A.	More complex and therefore more time-consuming calculations
B.	Problem of the secure transmission of the Secret Key
C.	Less secure encryption function.
D.	Isn't used any more.
Ans:	B

**Note: In the following questions, correct answers are given at the end.**

1 Computer Network is

- A. Collection of hardware components and computers
- B. Interconnected by communication channels
- C. Sharing of resources and information
- D. All of the Above

2. Protocols are?

- A. Agreements on how communication components and DTE's are to communicate
- B. Logical communication channels for transferring data
- C. Physical communication channels used for transferring data
- D. None of above

3. Two devices are in network if

- A. a process in one device is able to exchange information with a process in another device
- B. a process is running on both devices
- C. PIDs of the processes running of different devices are same
- D. none of the mentioned

4. what is a Firewall in Computer Network?

- A. The physical boundary of Network
- B. An operating System of Computer Network
- C. A system designed to prevent unauthorized access

D. A web browsing Software

5. The IETF standards documents are called

A. RFC

B. RCF

C. ID

D. None of the mentioned

6. Which data communication method is used to transmit the data over a serial communication link?

A. Simplex

B. Half-duplex

C. Full duplex

D. All of above

7. Each IP packet must contain

A. Only Source address

B. Only Destination address

- C. Source and Destination address
- D. Source or Destination address

8. What is the minimum header size of an IP packet?

- A. 16 bytes
- B. 10 bytes
- C. 20 bytes
- D. 32 bytes

9. Routing tables of a router keeps track of

- A. MAC Address Assignments
- B. Port Assignments to network devices
- C. Distribute IP address to network devices
- D. Routes to use for forwarding data to its destination

10. Which of the following is not the External Security Threats?

- A. Front-door Threats
- B. Back-door Threats
- C. Underground Threats
- D. Denial of Service (DoS)

11. What is the IP Address range of APIPA? A.

- 169.254.0.1 to 169.254.0.254
- B. 169.254.0.1 to 169.254.0.255
- C. 169.254.0.1 to 169.254.255.254
- D. 169.254.0.1 to 169.254.255.255

12. Which of the following is not the possible ways of data exchange?

- A. Simplex
- B. Multiplex
- C. Half-duplex
- D. Full-duplex

13. The management of data flow between computers or devices or between nodes in a network is called

- A. Flow control
- B. Data Control
- C. Data Management
- D. Flow Management

14. What does the port number in a TCP connection specify?

- A. It specifies the communication process on the two end systems
- B. It specifies the quality of the data & connection
- C. It specify the size of data
- D. All of the above

15. What is the purpose of the PSH flag in the TCP header?
- A. Typically used to indicate end of message
  - B. Typically used to indicate beginning of message
  - C. Typically used to push the message
  - D. Typically used to indicate stop the message
16. Which of the following protocol is/are defined in Transport layer?
- A. FTP
  - B. TCP
  - C. UDP
  - D. B & C
17. The meaning of Straight-through Cable is
- A. Four wire pairs connect to the same pin on each end
  - B. The cable Which Directly connects Computer to Computer
  - C. Four wire pairs not twisted with each other
  - D. The cable which is not twisted
18. What is the size of MAC Address?
- A. 16-bits
  - B. 32-bits
  - C. 48-bits
  - D. 64-bits
19. Repeater operates in which layer of the OSI model?
- A. Physical layer
  - B. Data link layer
  - C. Network layer
  - D. Transport layer
20. Which of the following layer of OSI model also called end-to-end layer?
- A. Presentation layer
  - B. Network layer
  - C. Session layer
  - D. Transport layer
21. Router operates in which layer of OSI Reference Model?
- A. Layer 1 (Physical Layer)
  - B. Layer 3 (Network Layer)
  - C. Layer 4 (Transport Layer)
  - D. Layer 7 (Application Layer)
22. ADSL is the abbreviation of
- A. Asymmetric Dual Subscriber Line
  - B. Asymmetric Digital System Line

- C. Asymmetric Dual System Line
- D. Asymmetric Digital Subscriber Line

23. How many layers does OSI Reference Model has?

- A. 4
- B. 5
- C. 6
- D. 7

24 Bridge works in which layer of the OSI model?

- A. Application layer
- B. Transport layer
- C. Network layer
- D. Datalink layer

25. Why IP Protocol is considered as unreliable?

- A. A packet may be lost
- B. Packets may arrive out of order
- C. Duplicate packets may be generated
- D. All of the above

26. What is the benefit of the Networking?

- A. File Sharing
- B. Easier access to Resources
- C. Easier Backups
- D. All of the Above

27. Which of the following is not the Networking Devices?

- A. Gateways
- B. Linux
- C. Routers
- D. Firewalls

28. What is the maximum header size of an IP packet?

- A. 32 bytes
- B. 64 bytes
- C. 30 bytes
- D. 60 bytes

29. Which of the following is correct in VLSM?

- A. Can have subnets of different sizes
- B. Subnets must be in same size
- C. No required of subnet
- D. All of above

30. DHCP Server provides\_\_\_\_\_to the client.

- A. Protocol
- B. IP Address
- C. MAC Address
- D. Network Address

31. What is the address size of IPv6 ?

- A. 32 bit
- B. 64 bit
- C. 128 bit
- D. 256 bit

32. What is the size of Network bits & Host bits of Class A of IP address?

- A. Network bits 7, Host bits 24
- B. Network bits 8, Host bits 24
- C. Network bits 7, Host bits 23
- D. Network bits 8, Host bits 23

33. What is the full form of RAID ?

- A. Redundant Array of Independent Disks
- B. Redundant Array of Important Disks
- C. Random Access of Independent Disks
- D. Random Access of Important Disks

34. What do you mean by broadcasting in Networking?

- A. It means addressing a packet to all machine
- B. It means addressing a packet to some machine
- C. It means addressing a packet to a particular machine
- D. It means addressing a packet to except a particular machine

35. What is the size of Source and Destination IP address in IP header?

- A. 4 bits
- B. 8 bits
- C. 16 bits
- D. 32 bits

36. What is the typical range of Ephemeral ports?

- A. 1 to 80
- B. 1 to 1024
- C. 80 to 8080
- D. 1024 to 65535

37. A set of rules that govern all aspects of information communication is called

- A. Server
- B. Internet
- C. Protocol
- D. OSI Model

38. Controlling access to a network by analyzing the incoming and outgoing packets is called

- A. IP Filtering
- B. Data Filtering
- C. Packet Filtering
- D. Firewall Filtering

39. DHCP is the abbreviation of
- A. Dynamic Host Control Protocol
  - B. Dynamic Host Configuration Protocol
  - C. Dynamic Hyper Control Protocol
  - D. Dynamic Hyper Configuration Protocol
40. What is the use of Bridge in Network?
- A. to connect LANs
  - B. to separate LANs
  - C. to control Network Speed
  - D. All of the above
41. Network congestion occurs
- A. in case of traffic overloading
  - B. when a system terminates
  - C. when connection between two nodes terminates
  - D. none of the mentioned
42. What is the meaning of Bandwidth in Network?
- A. Transmission capacity of a communication channels
  - B. Connected Computers in the Network
  - C. Class of IP used in Network
  - D. None of Above
- 43 Which of the following is correct regarding Class B Address of IP address
- A. Network bit – 14, Host bit – 16
  - B. Network bit – 16, Host bit – 14
  - C. Network bit – 18, Host bit – 16
  - D. Network bit – 12, Host bit – 14
44. provides a connection-oriented reliable service for sending messages
- A. TCP
  - B. IP
  - C. UDP
  - D. All of the above
45. What does Router do in a network?
- A. Forwards a packet to all outgoing links
  - B. Forwards a packet to the next free outgoing link
  - C. Determines on which outing link a packet is to be forwarded
  - D. Forwards a packet to all outgoing links except the originated link
46. What is the use of Ping command?
- A. To test a device on the network is reachable
  - B. To test a hard disk fault
  - C. To test a bug in a Application
  - D. To test a Pinter Quality
47. What is the size of Host bits in Class B of IP address?
- A. 04

- B. 08
- C. 16
- D. 32

48. Which of the following is correct in CIDR?

- A. Class A includes Class B network
- B. There are only two networks
- C. There are high & low class network
- D. There is no concept of class A, B, C networks

49. The processes on each machine that communicate at a given layer are called

- A. UDP process
- B. Intranet process
- C. Server technology
- D. Peer-peer process

50. Which of the following layer is not network support layer?

- A. Transport Layer
- B. Network Layers
- C. Data link Layer
- D. Physical Layer

**Correct Answers:**

1-D	2-A	3-A	4-C	5-A	6-C	7-C	8-C	9-D	10-C
11-C	12-B	13-A	14-A	15-A	16-D	17-A	18-C	19-A	20-D
21-B	22-D	23-D	24-D	25-D	26-D	27-B	28-D	29-A	30-B
31-C	32-A	33-A	34-A	35-D	36-D	37-C	38-C	39-B	40-A
41-A	42-A	43-A	44-A	45-C	46-A	47-C	48-D	49-D	50-A



1	If you see a group of networked computers connected to a central hub, you know that the network has what type of physical topology?				
	Ring	Star	Bus	Cannot tell	<b>Star</b>
2	If you see a group of networked computers connected to a central backbone cable you know that the network has what type of physical topology?				
	Bus	star	ring	cannot tell	<b>bus</b>
3	You have a small office of few computers. Each machine is act as both client and server, What type of network are you running?				
	peer-to-peer	client-server	wide area network	none of the above	<b>peer-to-peer</b>
4	Which type of network is most likely confined to a building or a campus?				
	Local Area Network	Metropolitan Area Network	Wide Area Network	Personal Area Network	<b>Local Area Network</b>
5	Which of the following can concurrently provide and request services?				
	Server	Client	Peer	None of the above	<b>Peer</b>
6	Which file service is responsible for creating duplicate copies of files to protect against file damage?				
	File Transfer	File Update Synchronizati on	File Archiving	Remote File Access	<b>File Archiving</b>
7	Which two of the following are file services? A. Archiving B. File segmenting C. Update synchronization D. Data integrity				
	A & B	B & C	C & D	A & C	<b>A &amp; C</b>
8	What is the maximum size of a 10BASE2 network?				
	100 meters	200 meters	300 meters	500 meters	<b>200 meters</b>
9	Which of the following can result performance gain in efficiency by 10%-300%?				
	Virtual Memory	Cache Memory	RAM	ROM	<b>Cache Memory</b>
10	Which of the following is a technique to improve the processing power of a processor?				

	Symmetric Multiprocessing	Employ cache memory	Use single high speed processor	None of the above	<b>Symmetric Multiprocessing</b>
11	In _____ mode, each station can both transmit and receive, but not at the same time.				
	Simplex	half duplex	duplex	none of the above	<b>half duplex</b>
12	Strong central security and central file storage is possible in _____ network.				
	Server based	Peer based	Both Server based and Peer Based	None of Server based and Peer based	<b>Server based</b>
13	Media such as data tapes and removable optical disks is well suited for _____.				
	Online storage	Near-line storage	Offline storage	None of the above	<b>Offline storage</b>
14	The _____ server is specializing in only a few tasks, that requires fewer resources .				
	Dedicated	nondedicated	dedicated & nondedicated	none of the above	<b>dedicated</b>
15	A mesh topology with 7 computers requires, what number of cables to run among these computers?				
	20	22	21	23	<b>21</b>
16	The _____ logical topology uses the token concept to transmit data within network.				
	Bus	star	ring	mesh	<b>ring</b>
17	Which physical topology needs proper termination of a cable to avoid reflection?				
	Star	Ring	Mesh	None of the above	<b>None of the above</b>
18	Fault isolation and reconfiguration of network is difficult in _____ topology.				
	Star	ring	mesh	bus	<b>bus</b>
19	Which of the following is true for protocol?				

	Protocols are the signal transmitted across networks.	Protocols are resources shared among network nodes.	Protocols are the agreed upon rules for devices to exchange information.	None of the above	<b>Protocols are the agreed upon rules for devices to exchange information.</b>
20	State true or false. Data communication can occur only through wired connection.				
	TRUE	FALSE			<b>FALSE</b>
21	How many layer an OSI reference model have?				
	5	6	7	8	<b>7</b>
22	Which lower layer provides services to presentation layer?				
	session layer	transport layer	application layer	None of the above	<b>session layer</b>
23	Which of the following is the functionality of network layer?				
	Synchronization of bits	Dialog control	Compression	logical addressing	<b>logical addressing</b>
24	The_____is required for communication between two system within the same network.				
	logical address	IP address	physical address	port number	<b>physical address</b>
25	The_____model supports both connectionless and connection oriented communication in the network layer				
	TCP/IP	OSI	Both	None	<b>OSI</b>
26	The_____model supports only one mode in the network layer (connectionless) but both in the transport layer (connectionless and connection oriented)				
	TCP/IP	OSI	both TCP/IP and OSI	none of the TCP/IP & OSI	<b>TCP/IP</b>
27	Which of the following model did not originally clearly distinguish between services, interfaces, and protocols?				
	TCP/IP	OSI	TCP/IP & OSI	none of the above	<b>TCP/IP</b>
28	The layers of the OSI model (in order) are included in which of the following choices?				

	Physical, Data Link, Network, Transport, Session, Presentation, Application	Physical, Data Link, Network, Transport, Presentation, Session Application	Physical, Network, Data Link, Transport, Presentation, Session Application	Physical, Data Link, Transport, Network, Presentation, Session Application	<b>Physical, Data Link, Network, Transport, Session, Presentation, Application</b>
29	Which OSI layer is concerned with data encryption?				
	Network	Transport	Session	Presentation	<b>Presentation</b>
30	Dialog control is a function of which layer of the OSI reference model?				
	Network	Transport	Session	Presentation	<b>Session</b>
31	TCP is the protocol of _____ layer of TCP/IP model.				
	Network	Transport	Application	Physical & Data link	<b>Transport</b>
32	The _____ layer in TCP/IP protocol suit contains Internetworking Protocol.				
	Network	Transport	Application	Physical & Datalink	<b>Network</b>
33	Twisted pair cable belongs to _____ transmission media.				
	Unguided	guided	wireless	free space	<b>guided</b>
34	The _____ carry signal in light form.				
	twisted pair cable	coaxial cable	fiber optics	none of the above	<b>fiber optics</b>
35	Which of the following transmission media is used for local area networks?				
	Twisted pair cable	Coaxial cable	Fiber optics	None of the above	<b>Twisted pair cable</b>
36	Which of the following transmission media is used for Cable TV networks?				
	Twisted pair cable	Coaxial cable	Fiber optics	None of the above	<b>Coaxial cable</b>
37	Which of the following is odd one out?				
	Radiowaves	microwaves	infrared waves	fiber optics	<b>fiber optics</b>
38	Which of the following network device works on network, data-link and physical layer?				
	Bridges	Routers	Repeaters	Hubs	<b>Routers</b>

39	Which of the following do not have filtering capability?				
	Routers	Bridges	Repeaters	Switches	<b>Repeaters</b>
40	Which of the following have MAC address and IP address?				
	Routers	Bridges	Hubs	Repeaters	<b>Routers</b>
41	Low Earth Orbit (LEO) satellite have _____ orbit.				
	Equatorial	Inclined	Polar	All of the Above	<b>Polar</b>
42	Global Positioning System(GPS) is an example _____ satellite.				
	LEO	GEO	MEO	All of the Above	<b>MEO</b>
43	Which of the following takes more time to make a complete trip of the Earth?				
	LEO Satellite	MEO Satellite	GEO Satellite	None of the Above	<b>GEO Satellite</b>
44	What is the full form of OSI?				
	Open Standard Interface	Open Systems Interface	Open Standard Institute	Open Systems Interconnection	<b>Open Systems Interconnection</b>
45	An _____ has infinitely many levels of intensity over a period of time.				
	analog signal	digital signal	both analog and digital	none of the analog and digital	<b>analog signal</b>
46	In data communications, we commonly use _____ signals and _____ signals.				
	nonperiodic analog, periodic digital	periodic analog , nonperiodic digital	nonperiodic analog, periodic digital	periodic analog, periodic digital	<b>periodic analog , nonperiodic digital</b>
47	State true or false. If some signal does not change at all, its frequency Zero.				
	TRUE	FALSE			<b>TRUE</b>
48	State True or False. If a signal changes instantaneously, its frequency is Zero.				
	TRUE	FALSE			<b>FALSE</b>
49	Multiply the header length field by _____ to find the total number of bytes in the TCP header.				
	2	4	6	8	<b>4</b>
50	The _____ field is used for error detection.				

	urgent pointer	checksum	sequence number	acknowledgment number	<b>checksum</b>
51	IP is responsible for _____ communication while TCP is responsible for _____ communication.				
	host-to-host; process-to-process	process-to-process; host-to-host	process-to-process; network-to-network	network-to-network; process-to-process	<b>host-to-host; process-to-process</b>
52	TCP lies between the _____ and the _____ layers of the TCP/IP protocol suite.				
	application; transport	transport; datalink	application; network	transport; network	<b>application; network</b>
53	The _____ defines the client process.				
	ephemeral port number	IP address	well-known port number	physical address	<b>ephemeral port number</b>
54	The definition of reliable delivery includes which of the following?				
	error-free delivery	receipt of the complete message	in-order delivery	all of the above	<b>all of the above</b>
55	Which of the following is legal port number?				
	0	513	65535	All of the above	<b>All of the above</b>
56	UDP needs the _____ address to delivery the user datagram to the correct application program.				
	Port	application	internet	physical	<b>port</b>
57	Which of the following function does UDP perform?				
	process-to-process communication	host-to-host communication	end-to-end reliable data delivery	all of the above	<b>process-to-process communication</b>
58	UDP and TCP are both _____ layer protocol.				
	Application	network	transport	datalink	<b>transport</b>
59	In the sending computer, UDP sends a data unit to the _____ layer.				
	Application	transport	network	datalink	<b>network</b>
60	In the sending computer, UDP receives a data unit from the _____ layer.				

	Application	transport	network	datalink	<b>application</b>
61	The Option field of the TCP header ranges from 0 to _____ bytes.				
	10	20	40	60	<b>40</b>
62	TCP uses _____ for error detection.				
	Checksum	acknowledgement	time-out	all of the above	<b>checksum</b>
63	A subnet mask in class A has 14 1s. How many subnets does it define?				
	32	8	64	128	<b>64</b>
64	Given the IP address 201.14.78.65 and the subnet mask 255.255.255.224, what is the subnet address?				
	201.14.78.32	201.14.78.65	201.14.78.64	201.14.78.12	<b>201.14.78.64</b>
65	What is the supernet mask for a supernet composed of 16 class C addresses?				
	255.255.240.16	255.255.16.0	255.255.248.16	255.255.240.0	<b>255.255.240.0</b>
66	Identify the class of the following IP address: 4.5.6.7				
	class A	class B	class C	class D	<b>class A</b>
67	The subnet mask for a class C network is 255.255.255.192. How many subnetworks are available?				
	2	4	8	192	<b>4</b>
68	What is the default mask for class C?				
	11111111 11111111 11111111 00000000	11111111 11111111 00000000 00000000	11111111 00000000 00000000 00000000	11111111 11111111 11111111 11111111	<b>11111111 11111111 11111111 00000000</b>

69 Computer Network is

- A. Collection of hardware components and computers
- B. Interconnected by communication channels
- C. Sharing of resources and information
- D. All of the Above**

70. Protocols are?

- A. Agreements on how communication components and DTE's are to communicate**

- B. Logical communication channels for transferring data
- C. Physical communication channels used for transferring data
- D. None of above

71. Two devices are in network  
if

- A. a process in one device is able to exchange information with a process in another device**
- B. a process is running on both devices
- C. PIDs of the processes running on different devices are same
- D. none of the mentioned

72. what is a Firewall in Computer Network?

- A. The physical boundary of Network
- B. An operating System of Computer Network
- C. A system designed to prevent unauthorized access**
- D. A web browsing Software

73. The IETF standards documents are called

- A. **RFC**
- B. RCF
- C. ID
- D. None of the mentioned

74. Which data communication method is used to transmit the data over a serial communication link?

- A. Simplex
- B. Half-duplex
- C. Full duplex**
- D. All of above

75. Each IP packet must contain

- A. Only Source address
- B. Only Destination address
- C. Source and Destination address**
- D. Source or Destination address

76. What is the minimum header size

- A. 16 bytes
- B. 10 bytes
- C. 20 bytes**
- D. 32 bytes



77. Routing tables of a router keeps track of

- A. MAC Address Assignments
- B. Port Assignments to network devices
- C. Distribute IP address to network devices
- D. Routes to use for forwarding data to its destination**

78. Which of the following is not the External Security Threats?

- A. Front-door Threats
- B. Back-door Threats
- C. Underground Threats**
- D. Denial of Service (DoS)

79. What is the IP Address range of APIPA?

- A. 169.254.0.1 to 169.254.0.254
- B. 169.254.0.1 to 169.254.0.255
- C. 169.254.0.1 to 169.254.255.254**
- D. 169.254.0.1 to 169.254.255.255

80. Which of the following is not the possible ways of data exchange?

- A. Simplex
- B. Multiplex**
- C. Half-duplex
- D. Full-duplex

81. The management of data flow between computers or devices or between nodes in a network is called

- A. Flow control**
- B. Data Control
- C. Data Management
- D. Flow Management

82. What does the port number in a TCP connection specify?

- A. It specifies the communication process on the two end systems**
- B. It specifies the quality of the data & connection
- C. It specify the size of data
- D. All of the above

83. What is the purpose of the PSH flag in the TCP header?

- A. Typically used to indicate end of message**
- B. Typically used to indicate beginning of message
- C. Typically used to push the message

D. Typically used to indicate stop the message

84. Which of the following protocol is/are defined in Transport layer?

A. FTP

B. TCP

C. UDP

**D. B & C**

85. The meaning of Straight-through Cable is

**A. Four wire pairs connect to the same pin on each end**

B. The cable Which Directly connects Computer to Computer

C. Four wire pairs not twisted with each other

D. The cable which is not twisted

86. What is the size of MAC Address?

A. 16-bits

B. 32-bits

**C. 48-bits**

D. 64-bits

87. Repeater operates in which layer of the OSI model?

**A. Physical layer**

B. Data link layer

C. Network layer

D. Transport layer

88. Which of the following layer of OSI model also called end-to-end layer?

A. Presentation layer

B. Network layer

C. Session layer

**D. Transport layer**

89. Router operates in which layer of OSI Reference Model?

A. Layer 1 (Physical Layer)

**B. Layer 3 (Network Layer)**

C. Layer 4 (Transport Layer)

D. Layer 7 (Application Layer)

90. ADSL is the abbreviation of

A. Asymmetric Dual Subscriber Line B. Asymmetric Digital System Line

C. Asymmetric Dual System Line

**D. Asymmetric Digital Subscriber Line**

91. How many layers does OSI Reference Model has?

A. 4      B. 5      C. 6      **D. 7**

92. Bridge works in which layer of the OSI model?

- A. Application layer      B. Transport layer  
C. Network layer      **D. Datalink layer**

93. Why IP Protocol is considered as unreliable?

- A. A packet may be lost      B. Packets may arrive out of order  
C. Duplicate packets may be generated      **D. All of the above**

94. What is the benefit of the Networking?

- A. File Sharing      B. Easier access to Resources  
C. Easier Backups      **D. All of the Above**

95. Which of the following is not the Networking Devices?

- A. Gateways      **B. Linux**  
C. Routers      D. Firewalls

96. What is the maximum header size of an IP packet?

- A. 32 bytes      B. 64 bytes  
C. 30 bytes      **D. 60 bytes**

97. Which of the following is correct in VLSM?

- A. **Can have subnets of different sizes**      B. Subnets must be in same size  
C. No required of subnet      D. All of above

98. DHCP Server provides \_\_\_\_\_ to the client.

- A. Protocol      **B. IP Address**  
C. MAC Address      D. Network Address

99. What is the address size of IPv6 ?

- A. 32 bit      B. 64 bit  
C. **128 bit**      D. 256 bit

100. What is the size of Network bits & Host bits of Class A of IP address?

- A. Network bits 7, Host bits 24**    B. Network bits 8, Host bits 24  
C. Network bits 7, Host bits 23    D. Network bits 8, Host bits 23

101. What is the full form of RAID ?

- A. Redundant Array of Independent Disks**    B. Redundant Array of Important Disks  
C. Random Access of Independent Disks    D. Random Access of Important Disks

102. What do you mean by broadcasting in Networking?

- A. It means addressing a packet to all machine**  
B. It means addressing a packet to some machine  
C. It means addressing a packet to a particular machine  
D. It means addressing a packet to except a particular machine

103. What is the size of Source and Destination IP address in IP header?

- A. 4 bits    B. 8 bits    C. 16 bits    **D. 32 bits**

104. What is the typical range of Ephemeral ports?

- A. 1 to 80    B. 1 to 1024    C. 80 to 8080    **D. 1024 to 65535**

105. A set of rules that govern all aspects of information communication is called

- A. Server**    B. Internet    C. Protocol    D. OSI Model

106. Controlling access to a network by analyzing the incoming and outgoing packets is called

- A. IP Filtering    B. Data Filtering  
**C. Packet Filtering**    D. Firewall Filtering

107. DHCP is the abbreviation of

- A. Dynamic Host Control Protocol**    **B. Dynamic Host Configuration Protocol**  
C. Dynamic Hyper Control Protocol    D. Dynamic Hyper Configuration Protocol

108. What is the use of Bridge in Network?

- A. to connect LANs**    B. to separate LANs

C. to control Network Speed      D. All of the above

109. Network congestion occurs

**A. in case of traffic overloading**    B. when a system terminates

C. when connection between two nodes terminates    D. none of the mentioned

110. What is the meaning of Bandwidth in Network?

**A. Transmission capacity of a communication channels**

**B. Connected Computers in the Network**

C. Class of IP used in Network

D. None of Above

111. Which of the following is correct regarding Class B Address of IP address

**A. Network bit – 14, Host bit – 16**

B. Network bit – 16, Host bit – 14

C. Network bit – 18, Host bit – 16

D. Network bit – 12, Host bit – 14

112. ....provides a connection-oriented reliable service for sending messages

**A. TCP**

B. IP

C. UDP

D. All of the above

113. What does Router do in a network?

**A. Forwards a packet to all outgoing link**

**B. Forwards a packet to the next free outgoing link**

**C. Determines on which outgoing link a packet is to be forwarded**

**D. Forwards a packet to all outgoing links except the originated link**

114. What is the use of Ping command?

**A. To test a device on the network is reachable**

B. To test a hard disk fault

C. To test a bug in a Application

D. To test a Printer Quality

115. What is the size of Host bits in Class B of IP address?

A. 04

B. 08

**C. 16**

D. 32

116. Which of the following is correct in CIDR?

**A. Class A includes Class B network**

B. There are only two networks

C. There are high & low class network      **D. There is no concept of class A, B, C networks**

117. The processes on each machine that communicate at a given layer are called

- A. UDP process      B. Intranet process
- C. Server technology      **D. Peer-peer process**

118. Which of the following layer is not network support layer?

- A. Transport Layer**      B. Network Layers
- C. Data link Layer      D. Physical Layer

119      When collection of various computers seems a single coherent system to its client, then it is called \_\_\_\_\_

- A.      computer network
- B.      istributed system**
- C.      networking system
- D.      mail system

Ans:-      B

Q:-120      Two devices are in network if \_\_\_\_\_

- A.      a process in one device is able to exchange information with a process in another device**
- B.      a process is running on both devices
- C.      PIDs of the processes running of different devices are same
- D.      a process is active and another is inactive.

Ans:      A

Q:-121      Which of the following computer networks is built on the top of another network.

- A.      prior network
- B.      chief network
- C.      prime network
- D.      overlay network**

Ans:-      D

Q:-122      In computer network nodes are\_\_\_\_\_.

- A. the computer that originates the data
- B. the computer that routes the data
- C. the computer that terminates the data
- D. all of the mentioned**

Ans:- D

Q:-123 Communication channel is shared by all the machines on the network in \_\_\_\_\_

- A. broadcast network**
- B. unicast network
- C. multicast network
- D. anycast network

Ans:- A

Q:-124 Bluetooth is an example of \_\_\_\_\_

- A. personal area network**
- B. MAN
- C. virtual private network
- D. wide area network

Ans:- A

Q:-125 A \_\_\_\_\_ is a device that forwards packets between networks by processing the routing information included in the packet.

- A. Bridge
- B. Firewall
- C. Router**
- D. Hub

Ans:- C

Q:-126 A list of protocols used by a system, one protocol per layer, is called \_\_\_\_\_

- A. protocol architecture
- B. protocol stack**
- C. protocol suite
- D. protocol system

Ans:- B

Q:-127 Network congestion occurs \_\_\_\_\_

- A. **in case of traffic overloading**
- B. when a system terminates
- C. when connection between two nodes terminates
- D. in case of transfer failure

Ans:- A

Q:128 Which of the following networks extends a private network across public networks?

- A. local area network
- B. **virtual private network**
- C. enterprise private network
- D. storage area network

Ans:- B

Q:129 Which network topology requires a central controller or hub?

- A. **Star**
- B. Mesh
- C. Ring
- D. Bus

Ans:- A

Q:-130 Which network topology requires a central controller or hub?

- A. **Star**
- B. Mesh
- C. Ring
- D. Bus

Ans:- A

Q:-131 \_\_\_\_\_topology requires a multipoint connection.

- A. Star
- B. Mesh



- C. Ring
- D. Bus**

Ans:- D

Q:-132 Data communication system spanning states, countries, or the whole world is \_\_\_\_\_.

- A. LAN
- B. WAN**
- C. MAN
- D. PAN

Ans:- B

Q:-133 Data communication system within a building or campus is \_\_\_\_\_.

- A. LAN**
- B. WAN
- C. MAN
- D. PAN

Ans:- A

Q:-134 WAN stands for \_\_\_\_\_.

- A. World area network
- B. Wide area network**
- C. Web area network
- D. Web access network

Ans:- B

Q:-135 \_\_\_\_\_ is the multiplexing technique that shifts each signal to a different carrier frequency.

- A. FDM**
- B. TDM
- C. Both FDM & TDM
- D. PDM

Ans:- A

Q:-136 Network layer firewall works as a\_\_\_\_\_.

- A. Frame filter
- B. Packet filter**
- C. Content filter
- D. Virus filter

Ans:- B

Q:-137 Network layer firewall has two sub-categories as\_\_\_\_\_.

- A. State full firewall and stateless firewall**
- B. Bit oriented firewall and byte oriented firewall
- C. Frame firewall and packet firewall
- D. Network layer firewall and session layer firewall

Ans:- A

Q:-138 A firewall is installed at the point where the secure internal network and untrusted external network meet which is also known as\_\_\_\_\_.

- A. Chock point**
- B. Meeting point
- C. Firewall point
- D. Secure point

Ans:- A

Q:-139 Which of the following is / are the types of firewall?

- A. Packet Filtering Firewall**
- B. Dual Homed Gateway Firewall
- C. Screen Host Firewall
- D. Dual Host Firewall

Ans:- A

Q:-140 A proxy firewall filters at\_\_\_\_\_.

- A. Physical layer
- B. Data link layer
- C. Network layer

**D. Application layer**

Ans:- D

Q:-141 A packet filter firewall filters at\_\_\_\_\_.

- A. Physical layer
- B. Data link layer
- C. Network layer or Transport layer**
- D. Application layer

Ans:- C

Q:-142 \_\_\_\_\_allows LAN users to share computer programs and data.

- A. Communication server
- B. Print server
- C. File server**
- D. Network

Ans:- C

Q:-143 With respect to physical media, STP cables stands for\_\_\_\_\_.

- A. Shielded Twisted Pair Cable**
- B. Spanning Tree Protocol Cable
- C. Static Transport Protocol Cable
- D. Shielded Two Power Cable

Ans:- A

Q:-144 What is the max data transfer rate for optical fiber cable?

- A. 10 Mbps
- B. 100 Mbps
- C. 1000 Mbps
- D. 10000 Mbps**

Ans:- D

Q:-145 Which of the following architecture uses the CSMA/CD access method?

- A. ARC net

- B. Ethernet**
- C. Router
- D. STP server

Ans:- B

Q:-146 Which is not a application layer protocol?

- A. HTTP
- B. SMTP
- C. FTP
- D. TCP**

Ans:- D

Q:-147 The packet of information at the application layer is called\_\_\_\_\_.

- A. Packet
- B. Message**
- C. Segment
- D. Frame

Ans:- B

Q:-148 Which one of the following is an architecture paradigms

- A. Peer to peer
- B. Client-server
- C. HTTP
- D. Both Peer-to-Peer & Client-Server**

Ans:- D

Q:-149 Application layer offers\_\_\_\_\_service.

- A. End to end**
- B. Process to process
- C. Both End to end and Process to process
- D. None of the mentioned

Ans:- A

Q:-150 E-mail is\_\_\_\_\_.

- A. Loss-tolerant application.
- B. Bandwidth-sensitive application
- C. Elastic application**
- D. None of the mentioned.

Ans:- C

Q:-151 Which of the following is an application layer service?

- A. Network virtual terminal
- B. File transfer, access, and management
- C. Mail service
- D. All of the mentioned**

Ans:- D

Q:-152 To deliver a message to the correct application program running on a host, the \_\_\_\_\_ address must be consulted.

- A. IP
- B. MAC
- C. Port**
- D. None of the mentioned

Ans:- C

Q:-153 Electronic mail uses which Application layer protocol?

- A. SMTP**
- B. HTTP
- C. FTP
- D. SIP

Ans:- A

Q:-154 The common name for a modulator-demodulator is \_\_\_\_\_.

- A. Joiner

- B. Networker
- C. Connector
- D. Modem**

Ans:- D

Q:-155 Which of the following device is used to connect two systems, especially if the systems use different protocols?

- A. Repeater
- B. Gateway
- C. Bridge
- D. Hub

Ans:- B

Q:-156 A distributed network configuration in which all data/information pass through a central computer is

- A. Bus network
- B. Star network
- C. Ring network
- D. Point-to-point network

Ans:- B

Q:-157 Which of the following communications modes support two-way traffic but in only one direction of a time?

- A. A. Simplex
- B. Half-duplex
- C. Three-quarters duplex
- D. Full duplex

Ans:- D

Q:-158 The slowest transmission speeds are those of

- A. Coaxial cable
- B. Twisted-pair wire
- C. Fiber-optic cable

D. Microwaves

Ans:- B

Q:-159 Networks are monitored by security personnel and supervised by \_\_\_\_\_ who set(s) up accounts and passwords for authorized network users.

A. IT managers

B. The government

C. Password administrators

D. Network administrators

Ans:- D

Q:-160 P2P is a \_\_\_\_\_ application architecture

A. Client/server

B. Distributed

C. Centralized

D. 1-tier

Ans:- B

Q:-161 \_\_\_\_\_ is the most important/powerful computer in a typical network.

A. Desktop

B. Network server

C. Network client

D. Network switch

Ans:- B

Q:-162 What device separates a single network into two segments but lets the two segments appear as one to higher protocols?

A. Switch

B. Router

C. Bridge

D. Gateway

Ans:- C

Q:-163 What is a benefit of networking your computer with other computers?

- A. Increase in the computer's speed
- B. Sharing of cables to cut down on expenses and clutter
- C. Sharing of resources to cut down on the amount of equipment needed
- D. Increase in the speed of the network

Ans:- C

Q:-164 Which of the following is required to communicate between two computers?

- A. Communications software
- B. Protocol
- C. Communications hardware
- D. All of the above

Ans:- D

Q:-165 The connection between your computer at home and your local ISP is called \_\_\_\_\_

- A. The last mile
- B. The home stretch
- C. The home page
- D. The backbone

Ans:- C

Q:-166 A\_\_\_\_\_is a set of rules.

- A. Resource locator
- B. Protocol
- C. Domain
- D. URL

Ans:- B

Q:-167 A\_\_\_\_\_typically connects personal computers within a very limited geographical area, usually within a single building.

- A. LAN
- B. WAN
- C. MAN
- D. TAN



Ans:- A

Q:-168 Telnet is a \_\_\_\_\_based computer protocol.

- A. Sound
- B. Text
- C. Image
- D. Animation

Ans:- B

Q:-169 \_\_\_\_\_is a technique that is used to send more than one call over a single line.

- A. Digital transmission
- B. Infrared transmission
- C. Digitizing
- D. Multiplexing

Ans:- D

Q:-170 [Communication channel is shared by all the machines on the network in](#)

- A. unicast network
- B. broadcast network
- C. multicast network
- D. none of the mentioned

Ans:- B

Q:-171 In computer network nodes are

- A. the computer that routes the data
- B. the computer that terminates the data
- C. the computer that originates the data
- D. all of the mentioned

Ans:- D

Q:-172 The physical layer concerns with

- A. process to process delivery

- B. application to application delivery
- C. bit-by-bit delivery
- D. none of the mentioned

Ans:- C

Q:-173 Public-key cryptography is also known as ?

- A. asymmetric cryptography
- B. symmetric cryptography
- C. Both A and B
- D. None of the above

Ans:- A

Q:-174 Which of the following keys are known only to the owner?

- A. public key
- B. protected key
- C. private key
- D. unique key

Ans:- C

Q:-175 PKI stands for?

- A. public key infrastructure
- B. private key infrastructure
- C. public key instance
- D. private key instance

Ans:- A

Q:-176 Examples of hash functions are

- A. MD5
- B. SHA-1
- C. Both A and B
- D. None of the above

Ans: C

Q:-177 In public key cryptosystem which is kept as public?

- A. Decryption keys
- B. Encryption keys
- C. Encryption & Decryption keys
- D. None of the above

Ans: B

Q:-178 Which is the largest disadvantage of the symmetric Encryption?

- A. More complex and therefore more time-consuming calculations
- B. Problem of the secure transmission of the Secret Key
- C. Less secure encryption function.
- D. Isn't used any more.

Ans: B