

### DATA COMMUNICATION NETWORK (MCQ)

- 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) Communication between a computer and a keyboard involves \_\_\_\_\_ transmission
  - a) Automatic
  - b) Half-duplex
  - c) Full-duplex
  - \*d) Simplex
- 3) The first Network
  - a) CNET
  - b) NSFNET
  - c) ASAPNET
  - \*d) ARPANET
- 4) Physical or logical arrangement of network is \_\_\_\_\_
  - \*a) Topology
  - b) Routing
  - c) Networking
  - d) None of the mentioned
- 5) Data communication system within a building or campus is \_\_\_\_\_
  - \*a) LAN
  - b) WAN
  - c) MAN
  - d) None of the mentioned
- 6) Data communication system spanning states, countries, or the whole world is \_\_\_\_\_
  - a) LAN
  - \*b) WAN
  - c) MAN
  - d) None of the mentioned
- 7) The \_\_\_\_\_ is the physical path over which a message travels
  - a) Path
  - \*b) Medium
  - c) Protocol
  - d) Route
- 8) In TDM, slots are further divided into \_\_\_\_\_
  - a) Seconds
  - \*b) Frames
  - c) Packets
  - d) None of the mentioned
- 9) Which transmission media has the highest transmission speed in a network?
  - a) coaxial cable
  - b) twisted pair cable
  - \*c) optical fiber
  - d) electrical cable
- 10) Which of the following is not the Networking Devices?
  - A. Gateways
  - \*B. Linux

- C. Routers
  - D. Firewalls
- 11) Three or more devices share a link in \_\_\_\_\_ connection
- a) Unipoint
  - \*b) Multipoint
  - c) Point to point
  - d) None of the mentioned
- 12) 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
- 13) Which of this is not a guided media?
- a) Fiber optical cable
  - b) Coaxial cable
  - \*c) Wireless LAN
  - d) Copper wire
- 14) Communication channel is shared by all the machines on the network in
- \*a) broadcast network
  - b) unicast network
  - c) multicast network
  - d) none of the mentioned
- 15) Bluetooth is an example of
- \*a) personal area network
  - b) local area network
  - c) virtual private network
  - d) none of the mentioned
- 16) 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) all of the mentioned
- 17) 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)
- 18) Most packet switches use this principle \_\_\_\_\_
- a) Stop and wait
  - \*b) Store and forward
  - c) Both Stop and wait and Store and forward
  - d) Stop and forward
- 19) Repeater operates in which layer of the OSI model?
- \*A. Physical layer
  - B. Data link layer
  - C. Network layer
  - D. Transport layer

- 20) The resources needed for communication between end systems are reserved for the duration of the session between end systems in \_\_\_\_\_
- a) Packet switching
  - \*b) Circuit switching
  - c) Line switching
  - d) Frequency switching
- 21) A local telephone network is an example of a \_\_\_\_\_ network.
- a) Packet switched
  - \*b) Circuit switched
  - c) Both Packet switched and Circuit switched
  - d) Line switched
- 22) Ethernet frame consists of
- \*a) MAC address
  - b) IP address
  - c) both MAC address and IP address
  - d) none of the mentioned
- 23) What is start frame delimiter (SFD) in ethernet frame?
- \*a) 10101010
  - b) 10101011
  - c) 00000000
  - d) 11111111
- 24) IPV4 Address is
- A. 8 bit
  - B. 16 bit
  - \*C. 32 bit
  - D. 64 bit
- 25) What is the size of MAC Address?
- A. 16-bits
  - B. 32-bits
  - \*C. 48-bits
  - D. 64-bits
- 26) DNS is the abbreviation of
- A. Dynamic Name System
  - B. Dynamic Network System
  - \*C. Domain Name System
  - D. Domain Network Service
- 27) What is the size of Host bits in Class B of IP address?
- A. 04
  - B. 08
  - \*C. 16
  - D. 32
- 28) 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
- 29) What is the address size of IPv6 ?
- A. 32 bit
  - B. 64 bit

- \*C. 128 bit
  - D. 256 bit
- 30) 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
- 31) What is the default/ natural mask for a class C Network?
- A. 255.255.255.1
  - \*B. 255.255.255.0
  - C. 255.255.255.254
  - D. 255.255.255.255
- 32) What is the uses of subnetting?
- \*A. It divides one large network into several smaller ones
  - B. It divides network into network classes
  - C. It speeds up the speed of network
  - D. None of above
- 33) Layer-2 Switch is also called
- A. Multiport Hub
  - B. Multiport Switch
  - \*C. Multiport Bridge
  - D. Multiport NIC
- 34) Secure shell (SSH) network protocol is used for \_\_\_\_\_
- a) secure data communication
  - b) remote command-line login
  - c) remote command execution
  - \*d) all of the mentioned
- 35) In IPv4 Addresses, classful addressing is replaced with
- \*a) Classless Addressing
  - b) Classful Addressing
  - c) Classful Advertising
  - d) Classless Advertising
- 36) First address in a block is used as network address that represents the
- a) Class Network
  - b) Entity
  - \*c) Organization
  - d) Codes
- 37) In classful addressing, a large part of available addresses are
- a) Organized
  - b) Blocked
  - \*c) Wasted
  - d) Communicated
- 38) Which two statements describe the IP address 10.16.3.65/23?
- 1. The subnet address is 10.16.3.0 255.255.254.0.
  - 2. The lowest host address in the subnet is 10.16.2.1 255.255.254.0.
  - 3. The last valid host address in the subnet is 10.16.2.254 255.255.254.0.
  - 4. The broadcast address of the subnet is 10.16.3.255 255.255.254.0.
- a) 1 and 3
  - \*b) 2 and 4

c) 1, 2 and 4

d) 2, 3 and 4

Explanation: The mask 255.255.254.0 (/23) used with a Class A address means that there are 15 subnet bits and 9 host bits. The block size in the third octet is 2 (256 – 254). So this makes the subnets in the interesting octet 0, 2, 4, 6, etc., all the way to 254. The host 10.16.3.65 is in the 2.0 subnet. The next subnet is 4.0, so the broadcast address for the 2.0 subnet is 3.255. The valid host addresses are 2.1 through 3.254.

39) You need to subnet a network that has 5 subnets, each with at least 16 hosts. Which classful subnet mask would you use

a) 255.255.255.192

\*b) 255.255.255.224

c) 255.255.255.240

d) 255.255.255.248

40) In the layer hierarchy as the data packet moves from the upper to the lower layers, headers are

\*a) Added

b) Removed

c) Rearranged

d) Modified

41) In the OSI model, as a data packet moves from the lower to the upper layers, headers are \_\_\_\_\_

a) Added

\*b) Removed

c) Rearranged

d) None of the mentioned

42) The physical layer concerns with

\*a) bit-by-bit delivery

p) process to process delivery

c) application to application delivery

d) none of the mentioned

43) OSI stands for

\*a) open system interconnection

b) operating system interface

c) optical service implementation

d) none of the mentioned

44) A set of rules that governs data communication

\*a) Protocols

b) Standards

c) RFCs

d) None of the mentioned

45) The network layer concerns with

a) bits

b) frames

\*c) packets

d) none of the mentioned

46) The data link layer takes the packets from \_\_\_\_\_ and encapsulates them into frames for transmission.

\*a) network layer

b) physical layer

c) transport layer

d) application layer

- 47) Which layer is responsible for process to process delivery?
- a) network layer
  - \*b) transport layer
  - c) session layer
  - d) data link layer
- 48) An endpoint of an inter-process communication flow across a computer network is called
- \*a) socket
  - b) pipe
  - c) port
  - d) none of the mentioned
- 49) Which address identifies a process on a host?
- a) physical address
  - b) logical address
  - \*c) port address
  - d) specific address
- 50) How many layers does OSI Reference Model has?
- A. 4
  - B. 5
  - C. 6
  - \*D. 7
- 51) Which of the following is reliable communication?
- \*A. TCP
  - B. IP
  - C. UDP
  - D. All of them
- 52) Delimiting and synchronization of data exchange is provided by
- a) Application layer
  - \*b) Session layer
  - c) Transport layer
  - d) Link layer
- 53) Which is not a application layer protocol?
- a) HTTP
  - b) SMTP
  - c) FTP
  - \*d) TCP
- 54) 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
- 55) When displaying a web page, the application layer uses the \_\_\_\_\_
- \*a) HTTP protocol
  - b) FTP protocol
  - c) SMTP protocol
  - d) TCP protocol