THE EAGLE

A+

NETWORK
FINAL REVISION
PART I

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Multiple Choice Questions of Computer Networking

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-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

3-How many layers does OSI Reference Model has?
A. 4   B. 5   C. 6   D. 7

4-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

5- IPV4 Address is
A. 8 bit   B. 16 bit   C. 32 bit   D. 64 bit

6- DNS is the abbreviation of
A. Dynamic Name System   B. Dynamic Network System
C. Domain Name System   D. Domain Network Service

7-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

8-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

9- 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

10- 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)

11- Each IP packet must contain
A. Only Source addresses   B. Only Destination address
C. Source and Destination address   D. Source or Destination address

12- Bridge works in which layer of the OSI model?
A. Application layer   B. Transport layer   C. Network layer   D. Data link layer

13- _____ provides a connection-oriented reliable service for sending messages
A. TCP   B. IP   C. UDP   D. All of the above

14-Which layers of the OSI model are host-to-host layers?
A. Transport, Session, Persentation, Application   B. Network, Transport, Session, Presentation
C. Datalink, Network, Transport, Session   D. Physical, Datalink, Network, Transport

15-Which of the following IP address class is Multicast
A. Class A   B. Class B   C. Class C   D. Class D

16-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

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17-The last address of IP address represents
A. Unicast address   B. Network address   C. Broadcast address   D. None of above
18-How many bits are there in the Ethernet address?
A. 64 bits   B. 48 bits   C. 32 bits   D. 16 bits
19-How many layers are in the TCP/IP model?
A. 4 layers   B. 5 layers   C. 6 layers   D. 7 layers
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-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
22- What is the minimum header size of an IP packet?
A. 16 bytes   B. 10 bytes   C. 20 bytes   D. 32 bytes
23- Which of following provides reliable communication?
A. TCP   B. IP   C. UDP   D. All of the above
24-What is the address size of IPv6 ?
A. 32 bit   B. 64 bit   C. 128 bit   D. 256 bit
25-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
26-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
27-The Internet is an example of
A. Cell switched network   B. circuit switched network
C. Packet switched network   D. All of above
28-What does protocol defines?
A. Protocol defines what data is communicated.   B. Protocol defines how data is communicated.
C. Protocol defines when data is communicated.   D. All of above
29-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
30-Repeater operates in which layer of the OSI model?
A. Physical layer   B. Data link layer   C. Network layer   D. Transport layer
31-What is the benefit of the Networking?
A. File Sharing   B. Easier access to Resources
C. Easier Backups   D. All of the Above
32-Which of the following is not the Networking Devices?
A. Gateways   B. Linux   C. Routers   D. Firewalls
33-What is the size of MAC Address?
A. 16-bits   B. 32-bits   C. 48-bits   D. 64-bits
34- Which of the following can be Software?
A. Routers   B. Firewalls   C. Gateway   D. Modems
35-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 an Application   D. To test a Pinter Quality
36-. MAC Address is the example of
A. Transport Layer   B. Data Link Layer   C. Application Layer   D. Physical Layer

2

37-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

38-Layer-2 Switch is also called
A. Multiport Hub   B. Multiport Switch   C. Multiport Bridge   D. Multiport NIC

39- Difference between T568A and T568B is
A. Difference in wire color   B. Difference in number of wires
C. Just different length of wires   D. Just different manufacturer standards

40-. 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

41-Which of the following is not the External Security Threats?
A. Front-door Threats   B. Back-door Threats
C. Underground Threat   D. Denial of Servic (DoS)

42-What is the Demilitarized Zone?
A. The area between firewall & connection to an external network
B. The area between ISP to Military area
C. The area surrounded by secured servers
D. The area surrounded by the Military

43-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

44-What is the maximum header size of an IP packet?
A. 32 bytes   B. 64 bytes   C. 30 bytes   D. 60 bytes

45-What is the size of Host bits in Class B of IP address?
A. 04   B. 08   C. 16   D. 32

46-What is the usable size of Network bits in Class B of IP address?
A. 04   B. 08   C. 14   D. 16

47-In which type of RAID, data is mirrored between two disks.
A. RAID 0   B. RAID 1   C. RAID 2   D. RAID 3

48-What do you mean by broadcasting in Networking?
A. It means addressing a packet to all machines
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

49-Which of the following is/are Protocols of Application?
A. FTP   B. DNS   C. Telnet   D. All of above

50-Which of the following protocol is/are defined in Transport layer?
A. FTP   B. TCP   C. UDP   D. B & C

51-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

52-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

53-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

3

54-The class-based addressing is also known as
A. Modern Model   B. Classful Model   C. Classless Model   D. Heterogeneous Model

55-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

56-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

57-Which of the following is reliable communication?
A. TCP   B. IP   C. UPD   D. All of them

58-What is the typical range of Ephemeral ports?
A. 1 to 80   B. 1 to 1024   C. 80 to 8080   D. 1024 to 65535

59-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

60-What is the 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

61-When collection of various computers seems a single coherent system to its client, then it is called
a) Computer network   b) Distributed system   c) Both (a) and (b)   d) None of the mentioned

62-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

63-Which one of the following computer network is built on the top of another network?
a) prior network   b) chief network   c) prime network   d) overlay network

64-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

65-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

66-UTP is commonly used in
a) DSL   b) FTTP   c) HTTP   d) None of the mentioned

67-Fiber optics possess following properties
a) Immune electromagnetic interference   b) Very less signal attenuation
c) Very hard to tap   d) All of the mentioned

68-Multiple object can be sent over a TCP connection between client and server in
a) persistent HTTP   b) nonpersistent HTTP   c) both (a) and (b)   d) none of the mentioned

69-HTTP is _____ protocol.
a) application layer   b) transport layer   c) network layer   d) none of the mentioned

70-FTP server listens for connection on port number
a) 20   b) 21   c) 22   d) 23

71-In FTP protocol, client contacts server using ____ as the transport protocol.
a) transmission control protocol   b) user datagram protocol
c) datagram congestion control protocol   d) stream control transmission protocol

72-Ethernet frame consists of
a) MAC address   b) IP address   c) both (a) and (b)   d) none of the mentioned

73-What is stat frame delimeter (SFD) in ethernet frame?
a) 10101010   b) 10101011   c) 00000000   d) 11111111

74-MAC address is of
1) 24 bits   b) 36 bits   c) 42 bits   d) 48 bits
75-High speed ethernet works on
a) coaxial cable   b) twisted pair cable   c) optical fiber   d) none of the mentioned
76-The maximum size of payload field in ethernet frame is
a) 1000 bytes   b) 1200 bytes   c) 1300 bytes   d) 1500 bytes
77- A _____ set of rules that governs data communication.
a) Protocols   b) Standards   c) RFCs   d) Servers
78- How many layers are present in the Internet protocol stack (TCP/IP model)?
a) 5   b) 7   c) 6   d) 10
79- Which address is used to identify a process on a host by the transport layer?
a) physical address   b) logical address   c) port address   d) specific address
80-Transmission data rate is decided by
a.network layer   b.physical layer   c.data link layer   d.transport layer
The section contains questions on physical layer, data link layer, transport layer and network layer.
81-The physical layer is concerned with _____
a) bit-by-bit delivery   p) process to process delivery
c) application to application delivery   d) port to port delivery
82-Which transmission media provides the highest transmission speed in a network?
a) coaxial cable   b) twisted pair cable   c) optical fiber   d) electrical cable
83-The portion of physical layer that interfaces with the media access control sublayer is called
a) physical signalling sublayer   b) physical data sublayer
c) physical address sublayer   d) physical transport sublayer
84-the physical layer provides _____
a) mechanical specifications of electrical connectors and cables
b) electrical specification of transmission line signal level
c) specification for IR over optical fiber
d) all of the mentioned
85-The physical layer is responsible for _____
a) line coding   b) channel coding   c) modulation   d) all of the mentioned
86-The physical layer translates logical communication requests from the _____ into hardware specific operations.
a) data link layer   b) network layer   c) trasnport layer   d) application layer
87-Wireless transmission of signals can be done via _____
a) radio waves   b) microwaves   c) infrared   d) all of the mentioned
88-The network layer is concerned with _____ of data.
a) bits   b) frames   c) packets   d) bytes
89-Which one of the following is not a function of network layer?
a) routing   b) inter-networking   c) congestion control   d) error control
90-A 4 byte IP address consists of _____
a) only network address   b) only host address
c) network address & host address   d) network address & MAC address
91-In virtual circuit network each packet contains _____
a) full source and destination address   b) a short VC number
c) only source address   d) only destination address
92-A subset of a network that includes all the routers but contains no loops is called _____
a) spanning tree   b) spider structure   c) spider tree   d) special tree
93-Which one of the following algorithm is not used for congestion control?
a) traffic aware routing   b) admission control
c) load shedding   d) routing information protocol

5

94-The network layer protocol for internet is _____
a) Ethernet   b) internet protocol   c) hypertext transfer protocol   d) file transfer protocol

95-Transport layer aggregates data from different applications into a single stream before passing it to _____
a) network layer   b) data link layer   c) application layer   d) physical layer

96-Which of the following are transport layer protocols used in networking?
a) TCP and FTP   b) UDP and HTTP   c) TCP and UDP   d) HTTP and FTP

97- User datagram protocol is called connectionless because _____
a) all UDP packets are treated independently by transport layer
b) it sends data as a stream of related packets
c) it is received in the same order as sent order
d) it sends data very quickly

98-Transmission control protocol _____
a) is a connection-oriented protocol   b) uses a three way handshake to establish a connection
c) receives data from application as a single stream   d) all of the mentioned

99-An endpoint of an inter-process communication flow across a computer network is called
a) socket   b) pipe   c) port   d) machine

100-Which one of the following is a version of UDP with congestion control?
a) datagram congestion control protocol   b) stream control transmission protocol
c) structured stream transport   d) user congestion control protocol

101-A _____ is a TCP name for a transport service access point.
a) port   b) pipe   c) node   d) protocol

102-Transport layer protocols deals with _____
a) application to application communication   b) process to process communication
c) node to node communication   d) man to man communication

103-Which of the following is a transport layer protocol?
a) stream control transmission protocol   b) internet control message protocol
c) neighbor discovery protocol   d) dynamic host configuration protocol

104-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

105-Which of the following tasks is not done by data link layer?
a) framing   b) error control   c) flow control   d) channel coding

106-Header of a frame generally contains _____
a) synchronization bytes   b) addresses   c) frame identifier   d) all of the mentioned

107-Automatic repeat request error management mechanism is provided by _____
a) logical link control sublayer   b) media access control sublayer
c) network interface control sublayer   d) application access control sublayer

108-When 2 or more bits in a data unit has been changed during the transmission, the error is called _____
a) random error   b) burst error   c) inverted error   d) double error

109-CRC stands for _____
a) cyclic redundancy check   b) code repeat check   c) code redundancy check   d) cyclic repeat check

110-Which of the following is a data link protocol?
a) Ethernet   b) point to point protocol   c) hdlc   d) all of the mentioned

This set of Computer Networks Multiple Choice Questions & Answers (MCQs) focuses on TCP

111-Which of the following is false with respect to TCP?
a) Connection-oriented   b) Process-to-process   c) Transport layer protocol   d) Unreliable

112-In TCP, sending and receiving data is done as _____
a) Stream of bytes   b) Sequence of characters   c) Lines of data   d) Packets

113-TCP process may not write and read data at the same speed. So we need _____ for storage.
a) Packets   b) Buffers   c) Segments   d) Stacks

114-TCP groups a number of bytes together into a packet called _____
a) Packet   b) Buffer   c) Segment   d) Stack

115-Communication offered by TCP is _____
a) Full-duplex   b) Half-duplex   c) Semi-duplex   d) Byte by byte

116-To achieve reliable transport in TCP, _____ is used to check the safe and sound arrival of data.
a) Packet   b) Buffer   c) Segment   d) Acknowledgment

117-In segment header, sequence number and acknowledgement number fields refer to _____
a) Byte number   b) Buffer number   c) Segment number   d) Acknowledgment

118-Suppose a TCP connection is transferring a file of 1000 bytes. The first byte is numbered 10001. What is the sequence number of the segment if all data is sent in only one segment?
a) 10000   b) 10001   c) 12001   d) 11001

119-Bytes of data being transferred in each connection are numbered by TCP. These numbers start with a _____
a) Fixed number   b) Random sequence of 0's and 1's
c) One   d) Sequence of zero's and one's

120-The value of acknowledgement field in a segment defines _____
a) sequence number of the byte received previously   b) total number of bytes to receive
c) sequence number of the next byte to be received   d) sequence of zeros and ones

121-The receiver of the data controls the amount of data that are to be sent by the sender is referred to as _____
a) Flow control   b) Error control   c) Congestion control   d) Error detection

122-Size of TCP segment header ranges between _____
a) 16 and 32 bytes   b) 16 and 32 bits   c) 20 and 60 bytes   d) 20 and 60 bits

123-Connection establishment in TCP is done by which mechanism?
a) Flow control   b) Three-Way Handshaking   c) Forwarding   d) Synchronization

124-The server program tells its TCP that it is ready to accept a connection. This process is called _____
a) Active open   b) Active close   c) Passive close   d) Passive open

125- A client that wishes to connect to an open server tells its TCP that it needs to be connected to that particular server. The process is called _____
a) Active open   b) Active close   c) Passive close   d) Passive open

126-The sizes of source and destination port address in TCP header are _____ respectively.
a) 16-bits and 32-bits   b) 16-bits and 16-bits   c) 32-bits and 16-bits   d) 32-bits and 32-bits

127-Which of the following is false with respect to UDP?
a) Connection-oriented   b) Unreliable   c) Transport layer protocol   d) Low overhead

128- What is the main advantage of UDP?
a) More overload   b) Reliable   c) Low overhead   d) Fast

129-What is the header size of a UDP packet?
a) 8 bytes   b) 8 bits   c) 16 bytes   d) 124 bytes

130-Which of these is not applicable for IP protocol?
a) is connectionless   b) offer reliable service
c) offer unreliable service   d) None of the mentioned

131-Collection of network or networks is called
a.Intranet   b.Internet   c.Extranet   d.LAN network

132-Hardware address is known as _____
a) MAC address   b) IP Address
c) Network Interface Card   d) Address Resolution Protocol
133-MAC stands for _____
a) Media Area Control   b) Memory Access Control
c) Memory Area Control   d) Media Access Control
134-What translates IP address into MAC address?
a) Organizationally Unique Identifier   b) Address Resolution Protocol
c) Network Interface Card   d) Burned In Address
135-Does MAC address contain characters.
a) True   b) False
136- MAC addresses are very useful in diagnosing network issues.
a) True   b) False
137- On wireless networks _____ filtering is the security measure.
a) OUI   b) IP   c) NIC   d) MAC
138-MAC addresses are used as _____
a) Network addresses   b) IP address   c) Hardware address   d) Burned in address
139-The original IEEE 802 MAC address comes from_____
a) MAC address   b) IP address   c) Ethernet address   d) Http
140-IEEE s tandards for Institute of Electrical and Electronics Engineers.
a) False   b) True

8