

01. Data communication system within a personal area is_____ **D**
 A WAN B MAN
 C LAN D PAN
02. The communication channel is shared by some of the the machines on the network in **A**
 A Multicast Network B Unicast Network
 C Broadcast Network D Anycast Network
03. _____is the first network. **B**
 A CISCO B ARPANET
 C ASAPNET D NFSNET
04. In the layer hierarchy, as the data packet moves from the lower layers to the upper layers, headers are _____ **A**
 A Added B Removed
 C Rearranged D Modified
05. What is the data format used in Data Link Layer **A**
 A Frame B Packet
 C Segment D Bits
06. A_____is the physical path over which a message transactions happens **D**
 A Path B Routing
 C Protocol D Medium
07. How many layers are present in the OSI model? **B**
 A 5 B 7
 C 10 D 12
08. _____topology requires a multipoint connection. **D**
 A Star B Mesh
 C Ring D Bus
09. Physical or logical arrangement of network is _____ **A**
 A Topology B Control
 C Routing D Networking
10. Delimiting and synchronization of data exchange is provided by _____ **B**
 A Transport Layer B Session Layer
 C Network Layer D Presentation Layer
11. Transmission Control protocol has been used in the_____Layer **A**
 A Transport Layer B Datalink Layer
 C Network Layer D Presentation Layer
12. What is the full form of MAC **A**
 A Media Access Control B Machine Authentication Code
 C Machine Access Code D Message Authentication Code
13. Communication between a computer and another computer involves_____ **D**
 transmission.
 A No Communication line B Simplex
 C Half Duplex D Full Duplex
14. What is the Full form of IP address? **C**
 A Information Protocol B Integrated Protocol
 C Internet Protocol D Informative Protocol
15. How many bits does a IPV4 address have? **B**
 A 48 B 32
 C 8 D 4
16. Decryption or encryption of data are the responsibility of_____layer **D**
 A Transport Layer B Session Layer
 C Network Layer D Presentation Layer
17. Which of the following is an example of simplex mode? **A**
 A Keyboards B Walkie-talkie
 C Telephone network D Complex network

18. TCP is the acronym for **C**
 A Trivial Control Program B Triggering Control Protocol
 C Transmission Control Protocol D Transport Control Protocol
19. Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets? **B**
 A Ring B Star
 C Mesh D Bus
20. What is the correct order of data blocks in the TCP/IP layer from the Data Link Layer? **A**
 A Frame, Packet, Segment B Segment, Packet, Frame,
 C Packet, Frame, Segment, D Segment, Frame, Packet,
21. In the TCP/IP protocol suite, the _____ layer is responsible for transferring the packets from one router to the next. **D**
 A Physical B Transport
 C Data Link D Network
22. Which one of the following is a network topology? **B**
 A Router B Ring
 C Channel D Peer to Peer
23. In an OSI model architecture _____ layer establish and terminates the sessions **A**
 A Session Layer B Datalink Layer
 C Network Layer D Transport Layer
24. A device that can be connected to a network without using cable is called **D**
 A Distributed device B Centralized device
 C Open-source device D Wireless device
25. Which layer is the topmost layer in the TCP/IP model? **C**
 A Transport Layer B Internet Layer
 C Application Layer D Network Layer
26. In which layer the various services directly provided protocols to the users? **C**
 A Session Layer B Datalink Layer
 C Application Layer D Presentation Layer
27. What are the different data transmission mechanisms utilized on a network of switches and links? **D**
 A Packet switching and Line switching B Circuit switching and Line switching
 C Line switching and bit switching D Packet switching and circuit switching
28. _____ is the global system of interconnected computer networks that uses the Internet protocol suite **B**
 A Network B Internet
 C Web D Switching
29. The topology with the highest reliability is **D**
 A Bus B Star
 C Ring D Mesh
30. The error checking will be done in _____ **B**
 A HUB B Switch
 C Repeater D Bridge
31. In an OSI model architecture which layer transmits the error-free segments? **D**
 A Physical Layer B Datalink Layer
 C Network Layer D Transport Layer
32. Computers connected to a LAN(Local Area Network) can **D**
 A Run faster B Go online
 C E-mail D Share information and/or share peripheral equipment
33. The physical layer in PDU is called as _____ **C**
 A Data B Packet
 C Bits D Frames
34. A multi point connection is also called as _____ **A**

- A Multi Drop
C Multipath
- B Multi connection
D Multichannel
35. A network point that provides entrance into another network is called as _____ **A**
A Gateway
B Router
C Switch
D Bridge
36. What is the port number for SMTP? **A**
A 25
B 80
C 21
D 65
37. The _____ layer is responsible for regulating the flow of data to prevent the receiver from being overwhelmed with data **A**
A Data Link
B Network
C Presentation
D Session
38. Presentation layer lies of OSI model between Session and _____ layers **D**
A Data Link
B Network
C Presentation
D Application
39. The network layer protocol of internet is **B**
A Ethernet
B Internet protocol
C HTTP
D FTP
40. A subset of a network that includes all the routers but not contains loops is called **B**
A Tree without loops
B Spanning Tree
C A graph
D Acyclic graph
41. A single channel is shared by multiple signals by **C**
A Analog modulation
B Digital modulation
C Multiplexing
D Switching
42. Which transmission media has the highest transmission speed in a network? **C**
A Coaxial Cable
B Twisted Pair Cable
C Optical fiber
D electrical Cable
43. The physical layer translates logic communication requests from the _____ into hardware specific operations **A**
A Datalink Layer
B Network Layer
C Transport Layer
D Application Layer
44. _____ is a network of networks **B**
A Intranet
B Internet
C Multinet
D Extranet
45. _____ is a controlled private network that allows customers, suppliers, and vendors **C**
A Intranet
B Internet
C Extranet
D Arpanet
46. To deliver a message to the correct application program running on a host, the _____ address must be consulted **C**
A IP
B MAC
C PORT
D Session
47. Transport Layer protocols deals with **C**
A Application to application communication
B Node to node Communication
C Process to process communication
D End to end communication
48. The ASCII encoding of binary data is called **C**
A Base 8 encoding
B Base 16 encoding
C Base 32 encoding
D Base 64 encoding
49. _____ encoding has a transition at the beginning of each 0 bit. **D**
A RZ
B Manchester
C NRZ
D Differential Manchester
50. What does T stand for in 10 BASE T? **C**
A Thin Layer
B Thick Layer

- C Twisted Pair D 10 meters
51. _____ is used to associate a logical address with a physical address C
 A Network Translator B ICMP
 C ARP D RARP
52. The signal rate is also known as B
 A Bit Rate B Baud Rate
 C Digital Rate D Informative Rate
53. In a _____ scheme, all the signal levels are on one side of the time axis, either above or below. A
 A Unipolar B Bipolar
 C Polar D Multi Level
54. Not a function of data link protocol D
 A Error Control B Message Delineation
 C Media Access Control D Amplitude shift keying
55. In which ARQ, when a NAK is received, all frames sent since the last frame acknowledge are transmitted A
 A Go back N B Stop and Wait
 C Selective Reject D Selective Repeat
56. The device operation at Data Link Layer is C
 A Repeater B Router
 C Bridge D Layer III Switch
57. _____ is normally referred to as mB/nB coding; it replaces each m-bit group with an n-bit group. C
 A Line coding B Scrambling
 C Block coding D Bit coding
58. The shortest frame in HDLC protocol is usually the C
 A Information Frame B Management Frame
 C Supervisory Frame D U Frame
59. _____ is used to regenerate the signal B
 A HUB B Repeater
 C Bridge D Amplifier
60. In fiber optics, the signal is _____ waves. A
 A Light B Radio
 C Infrared D Very low frequency
61. Transmission media are usually categorized as _____. B
 A Fixed or unfixed B Guided or unguided
 C Determinate or indeterminate D metallic or nonmetallic
62. Which of the following summation operation is performed on the bits to check an error-detecting code? D
 A Attenuation B Codec
 C Error decoder D Check sum
63. Which of the following allows devices on the network to communicate with devices on another network? B
 A Modem B Gateway
 C T-Switch D Multiplexer
64. Automatic repeat request error management mechanism is provided by _____. A
 A logical link control sublayer B media access control sublayer
 C network interface control sublayer D application access control sublayer
65. _____ is the advantage of the bus topology B
 A Supports long Communication B Node failures don't affect others
 C Used limited cable for connection D Uses fiber only for fast communication
66. Transmission media lie below the _____ layer A
 A Physical B Network

- C Transport D Application
67. _____ is used for unicast communication C
 A Radio waves B Infrared
 C Microwaves D Lightwaves
68. The communication in simplex data flow is always _____ C
 A Bi-directional B Multi-directional
 C Uni-directional D Both directional
69. The protocols involve in noiseless channels are _____ A
 A Simplest, stop-and-wait B Stop-and-wait-ARQ
 C Go-back-N-ARQ D Selective repeat ARQ
70. _____ are the controlled access protocols B
 A ALOHA, CSMA, CSMA/CA, CSMA/CD B Reservation, polling, token passing
 C FDMA, TDMA, CDMA D same as random access protocols
71. How many phases does the circuit switching have? C
 A One B Two
 C Three D Four
72. The technique of temporarily delaying outgoing acknowledgements so that they can be hooked onto the next outgoing data frame is called _____ B
 A cyclic redundancy check B piggybacking
 C fletcher's checksum D parity check
73. The ten gigabit Ethernet speeds upto _____ B
 A 20Gbps B 10 Gbps
 C 30 Gbps D 40 Gbps
74. 192.168.2.255 address represents _____ communication C
 A Multicast B Unicast
 C Broadcast D Singlecast
75. What is the full form of HDLC? A
 A High level Data Link Control B High level Digital Link Control
 C High Level and Data Level Control D High and Data level Control
76. In CRC there is an error if the remainder at the receiver is _____ B
 A Zero B Non Zero
 C The quotient at the sender D Equal to the remainder
77. Which frame is supervisory? C
 A I- Frame B U-Frame
 C S- Frame D Super-Frame
78. How many types of HDLC frames are there? C
 A One B Two
 C Three D Four
79. CRC stands for _____ A
 A cyclic redundancy check B code repeat check
 C code redundancy check D cyclic repeat check
80. In pure ALOHA the time is _____ A
 A Continuous B Globally synchronized
 C Discrete D Very efficient
81. What is the standard form of SDLC? B
 A Simple Data Link Control B Synchronous Data Link Control
 C Syntactical Data Link Control D Sample Data Link Control
82. In the following, which one is not the design issue of the data link layer? C
 A Framing B Error Control
 C Provide connection less service D Flow control
83. In the Go back N sliding window protocol, what is the receiver's window size? A
 A One B Two
 C Three D Four
84. Which of the following is not a guided medium? D

85. _____ is used to interconnect the two different LANs in the same protocol. **B**

A Twisted-pair cable
C Fiber-optic cable
B Coaxial cable
D Atmosphere

86. Which address is using for communication in the data link layer? **D**

A HUB
C Amplifier
B Bridge
D Repeater

87. The actual phone conversation uses _____ switching model **B**

A IP based
C Connectionless
B Connection-oriented
D Lightweight

88. The packet switching is categorized into _____ on of the approach in the below options **A**

A Virtual Circuit approach
C Only connection disconnection
B Connection establishment
D Continuous transfer the data

89. The maximum length of this payload field in PPP is _____ bytes. **D**

A 1000
C 1400
B 1200
D 1500

90. What is the length of Flag for PPP **C**

A 6
C 8
B 7
D 9

91. The _____ scheme uses data patterns of size 2 and encodes the 2-bit patterns as one signal element belonging to a four-level signal. **D**

A 4B5B
C 4B1Q
B B8ZS
D 2B1Q

92. Which of the following encoding methods does not provide for synchronization? **A**

A NRZ-L
C NRZ-I
B RZ
D Manchester

93. Block coding can help in _____ and _____ at the receiver **A**

A Synchronization and error detection
C Error detection and attenuation
B Synchronization and attenuation
D Error detection and distortion

94. The maximum window size for data transmission using the selective reject protocol with n-bit frame sequence numbers is: **B**

A 2^n
C 2^{n-2}
B 2^{n-1}
D $2^n - 1$

95. Consider a selective repeat sliding window protocol that uses a frame size of 1 KB to send data on a 1.5 Mbps link with a one-way latency of 50 msec. To achieve a link utilization of 60%, the minimum number of bits required to represent the sequence number field is _____. **A**

A 5
C 7
B 6
D 8

96. Sliding window protocol works on _____ in which there is simultaneous two-way communication **C**

A Simplex
C Full Duplex
B Half duplex
D No duplex

97. Full form FCS **B**

A Frame Check Sum
C Frame Compute Sum
B Frame Check Sequence
D Frame Compute Sequence

98. Sliding window protocol makes use of frame namely **B**

A Advance Frame
C Digital Frame
B Acknowledgement Frame
D Automatic frame