

Cs601 Quiz no 2

1. In _____ each station is allocated a time slot during which it can send data

TDMA.....confirm

2. PAP and CHAP are used by _____ as Authentication Protocols.

PPP.....confirm

3. In each character protocol each character of frame is encoded using _____ coding system .

Bit-oriented

4. IN MAC, when nodes use a multi-point or broadcast link, we need a _____ to coordinate access to the link.

Multiple-access protocol/.....confirm

5. The original Ethernet technology with the data rate of 10 MBps is called _____?

Standard Ethernet....confirm

6. _____ uses fiber-optic cable

10base-F....confirm

7. One of the most common protocols for point-to-point access is _____.

PPP.....confirm

8. _____ is an Authentication Protocol, which uses two-step process to authenticate user information.

PAP.....confirm

9. If duration of noise is decreased during a transmission over noisy channel, fixed data rate of the channel will cause _____ number of bits being impacted by the noise

More.....confirm

10. For carrier sense Multiple Access/Collision Detection (CSMA/CD), we need a restriction on the

Collision size....confirm

11. Stop-and-Wait protocol is used for _____.

Both flow and error control.....confirm

12. In hexadecimal notation of Ethernet address, each byte is separated by _____ symbol.

Colon....confirm

13. In a linear block code, the _____ of any two valid codewords creates another valid codeword.

14.

XOR.....confirm

15. In the _____ method, the stations in a network are organized in a logical ring.

Token-passing....confirm

16. Which one of the following is not a Channelization Protocol?

CSMA.....confirm

17. In order to find the location of two errors in an eight bit stream, we have to see _____ different combinations.

28....confirm

18. If we need to correct a single error in an 8-bit data unit, we need to consider _____ possible error locations

16.....confirm

19. In _____ each station sends a frame whenever it has a frame to send.

Slotted ALoHA.....confirm

20. _____ is the process of converting digital data to digital signals.

Line coding.....confirm

21. In case of higher data rate, the number of impacted bits will be _____.

Higher

22. In _ protocol, the sender sends one frame at a time and wants for an acknowledgment before sending the next one.

Stop-and-wait

23. In block coding we divide our message into blocks of K bits called as _____.

Data words....confirm

24. CDMA stands for _____.

Code division Multiple Access.....confirm

25. ____ is not a function of data link control.

Modulation.....confirm

26. CHAP is an Authentication Protocol, which uses _____ process to authenticate user information.

Three-way.....confirm from net

27. In the context of Ethernet address, the source address is always a _____ address.

Unicast...confirm

28. In the context of Ethernet address, the destination address is always a _____ address.

Unicast, multicast, broadcast....confirm

29. _____ transmission technology (based on Ethernet) provides a data rate of 1 billion bits per second.

Gigabit Ethernet....confirm

30. Fast Ethernet has a data rate of _____ Mbps.

100.....confirm

31. In random access method, when two or more than two nodes transmit at the same time when

All the nodes in collision survives

32. Data link layer is divided into _____ sub layers

Two.....confirm

33. If the hamming distance between sent and received code word is _____ then it shows that received data is corrupted.

(Is not equal to)0....confirm

34. In order to find hamming distance between two pair of words, _____ logical operation is used.

XOR....confirm

35. Ethernet address is of _____ bytes

6....confirm

36. In _____ a station monitors the medium after it sends a frame to see if the transmission was successful.

CSMA/CD.....confirm

37. For carrier sense Multiple Access/Collision Detection (CSMA/CD), we need a restriction on the _____.

Frame size...confirm

38. Ethernet address is of _____ bytes

6

39. What was the main drawback in the aloha random access method

Redundancy in data

40. In telephone, network POP stands for

Point-of presence

41. Possession of token gives the station the right to _____.

Send the data

42. In Ethernet, the source address field in the MAC frame is the _ address

Previous station physical

43. Normally the value of Kmax in pure aloha is

15

44. _____ uses thin coaxial cable.

10 base 5

45. MAC stands for _____

Media access control

46. In the context of Ethernet implementations maximum medium length of 10 base-F

2000

47. Transmission technology based on Ethernet provides a data rate of 1 billion bits per second.

Standard Ethernet

48. Works with topologies in which one device is designated as a primary station and the other devices are secondary stations

None of the given

49. MAC address is of _____.

48 bits

50. The type of aloha which improves the efficiency of pure aloha is.

Slotted aloha

51. A personal computer or workstation on an Ethernet network must have _____ card

NIC

52. In which controlled access method all data exchange must be made through primary device even when the ultimate destination is a secondary device

Polling

53. In _____ each band is reserved for a specific station and it belongs to the station all the time

FDMA

54. In pure aloha the vulnerable time is _____ the frame transmission time

Two times

55. DSL stands for _____.

Digital subscriber line

56. In the context of Ethernet address, the source address is always a _____ address

Multicast

57. The original Ethernet technology with the data rate of 10 Mbps is called

Standard ethernet

58. Which of the following is a correct controlled access method

All options

59. When we represent the data in CDMA if a station is idle then it sends

0

60. In telephone, network POP stands for _____.

Point of presence

61. What was the main drawback in the aloha random access method

Redundancy data rate

62. _transmission technology based on Ethernet provide a data rate of 1 billion bits per second

Gigabit Ethernet

63. In which controlled access method all data exchanges must be made through a primary device even when the ultimate destination is a secondary device.

Polling

64. In telephone, network POP stands for

Point of presence

65. Mac address is of _____

48 bits

66. In _____ collision are avoided by deferring transmission even if the channel is idle

The interframe space

67. POTS stand for _?

Plain old telephone system.....confirm

68. Normally the value of Kmax in pure aloha is

15

69. In Ethernet frame both destination and sender addresses are of length

6 byte

70. In _____ each band is reserved for a specific station and it belongs to the station all the time

FDMA

71. The original Ethernet technology with a data rate of 10MBps is called

Standard Ethernet

72. The _ method has the highest chance of collision because two or more stations may find the line idle and send their frames immediately

1 persistent method

73. IN allocated a time slot during which it can send data each station is

TDMA

74. In which controlled access method al data exchanges must be made through primary device even when the ultimate destination is a secondary device

Polling

75. CDMA stands for

Code data multiply access

76. Works with topologies in which one device is designated as a primary station and the other device are secondary stations

Polling

77. In Ethernet, the source address field in the MAC frame is the address

Next destination physical

1. VCI address is _____ address in virtual circuit approach.

1. Private
2. Variable
3. Local
- 4. Global**

2. Traditionally MANs have been implemented using one of the 2 technologies, Circuit Switching and Packet Switching

1. true
- 2. false**

3. In the _____ method, the stations in a network are organized in a logical ring.

- 1. Token-passing**
2. Polling
3. Reservation
4. None of the given

4. Like 10 Base 5, 10 Base 2 is a _____ topology LAN.

1. Ring

2. Mesh

3. Star

4. Bus

5. In Pure ALOHA, the vulnerable time is _____ the frame transmission time.

1. Same as

2. Three times

3. Two times

4. Four times

6. The transmission medium that carries the message is referred to as the _____.

1. send and receive device

2. communication channel

3. protocol

4. gateways

7. Analog signals are refers to be _____

1. Continuous

2. Discrete

3. Periodic

4. Aperiodic

8. There are _____ types of serial transmission.

1. 3

2. 4

3. 2

4. None of the given

9. To calculate the data rate for noisy channel _____ formula is used.

1. Shannon

2. Nyquist

3. Propagation

4. Greedy

10. There are three types of Hubs that exist. Which of the following options correctly describes these three?

1. Passive, dormant, special

2. Active , dormant , passive

3. Passive, Active, Turbo

4. Passive, Active, Intelligent

11. _____ is the rate of change with respect to time.

1. Voltage

2. Time
 3. Frequency
 - 4. Amplitude**
- 12. To control and manage the transfer of data, a protocol called Point to Point Protocol (PPP) is used at the _____ layer.**
1. Physical
 - 2. Network**
 3. Presentation
 4. Data link
- 13. What is the frequency of a sine wave if it completes one cycle in 2 seconds?**
- 1. 0.5**
 2. 0.6
 3. 0.3
 4. 0.2
- 14. _____ relatively measures the strength of two signals.**
1. Signal rate
 2. Bit rate
 3. Decibel
 - 4. Pulse Rate**
- 15. Central Hub in a Tree is an _____.**

1. Active hub
 2. passive hub
16. At the CRC generator, _____ added to the data unit before the divisional process.
1. 0s are
 2. 1s are
 3. a polynomial is
 4. a CRC remainder is
17. A broadcast signal is received by the orbiting satellites which rebroadcasts _____.
1. to the resender
 2. to the sender
 3. to the atmosphere
 4. none of the given
18. The flag in PPP is a byte that needs to be _____ whenever it appears in the data section of the frame.
1. Duplicated
 2. Blocked
 3. Cleaned

- 4. Escaped**
- 19. In _____, a signal is directed straight from antenna to antenna.**
- 1. Line of sight propagation**
 2. Ground propagation
 3. Space propagation
 4. Tropospheric propagation
- 20. Which of the following consist of just one redundant bit per data unit?**
1. Two dimensional Parity check.
 2. CRC
 - 3. Simple Parity Check**
 4. Checksum
- 21. The term _____ means that only one bit of a given data unit is changed from 1 to 0 or from 0 to 1.**
1. Packet Error
 2. Burst Error
 - 3. Single Bit Error**
 4. Character Error
- 22. Flow control is needed to prevent _____.**
1. Bit errors
 2. Overflow of the sender buffer
 - 3. Overflow of the receiver buffer**

4. Collision between sender and receiver
- 23. Transmission Control Protocol is a(n) _____ layer protocol.**
1. Transport
 2. Application
 3. Session
 - 4. Network**
- 24. A fiber -optic cable transmit signals in the form of _____.**
- 1. Light**
 2. Sound
 3. Wave
 4. None of the given
- 25. Possession of TOKEN gives the station the right to _____.**
1. Modify the data
 - 2. Send the data**
 3. Delete the data
 4. Receive the data
- 26. The inversion of the level at 1 bit is called as _____.**
1. NRZ-L
 - 2. NRZ-I**
 3. RZ

4. None of the given.
- 27. What was the main draw back in ALOHA Random-Access method?**
1. Redundancy in Data
 2. Potential Collision
 3. Inconsistent Data rate
 - 4. All of the given**
- 28. Data is transmitted using light through a _____ cable.**
1. twisted pair
 - 2. fiber-optic**
 3. coaxial
 4. microwave
- 29. In _____, each station sends a frame whenever it has a frame to send.**
- 1. Slotted ALOHA**
 2. Fragmented ALOHA
 3. Pure ALOHA
 4. None of the given
- 30. In OSI model headers are added at layer _____.**
1. 1,2,3 only
 2. 6,5,7 only
 3. 5,4,3 only

4. 6,5,4,3,2 only
31. Is there any difference between Data communication and telecommunication are network?
1. Yes
 2. No
32. _____ is an Authentication Protocol, which is used by the PPP to authenticate passwords.
1. CHAP
 2. PAP
 3. LCP
 4. ICMP
33. Which level of the TCP/IP reference model routes data/information across a network channel?
1. Application Layer
 2. Data Link Layer
 3. Transport Layer
 4. Network Layer
34. In ASK, both _____ and _____ remain constant.
1. Amplitude, Frequency
 2. Amplitude, phase
 3. Frequency, Phase

4. Amplitude, Samples
- 35. Which error detection method consists of a parity bit for each unit as well as an entire data unit of parity bits?**
1. Checksum
 2. Cyclic Redundancy Check (CRC)
 - 3. Longitudinal Red Check (LRC)**
 4. Vertical Redundancy Check (VRC)
- 36. Baud rate is greater than or equal to the bit rate.**
1. True
 - 2. False**
- 37. The most common type of connector used by coaxial cable is _____.**
- 1. BNC**
 2. RJ-45
 3. RJ-11
 4. RJ-57
- 38. In even parity check code, the value of syndrome is _____ if the number of 1s is even.**
1. 1
 2. 2
 - 3. 0**
 4. 4

- 39. What is the period of a Sine wave having frequency of 10 Hz?**
1. 0.2
 - 2. 0.1**
 3. 0.5
 4. 0.3
- 40. In _____, both peak amplitude and frequency remains constant as the phase changes.**
- 1. PSK**
 2. QAM
 3. Both PSK & QAM
 4. None of the given
- 41. There are _____ types of guided media.**
1. 2
 - 2. 3**
 3. 4
 4. 5
- 42. _____ is responsible for governing node to node communication.**
1. Application Layer
 2. Session Layer
 - 3. Data Link layer**
 4. Presentation Layer

43. TROPOSHERE is the layer of atmosphere above the troposphere but

below space

1. True

2. False

44. Terminal, microprocessor, computer, printer or any other device that generates or consumes digital data is known as _____

1. DCE

2. DTE

3. DCE & DTE

4. None of the given

45. Normally the value of K_{max} in pure ALOHA is _____.

1. 25

2. 10

3. 15

4. 30

46. Sampling means measuring _____ of signal at equal intervals

1. Amplitudes

2. Frequencies

3. Phases

4. None of the given

47. A sine wave is _____.

1. periodic and discrete
 2. aperiodic and discrete
 - 3. periodic and continuous**
 4. aperiodic and continuous
- 48. The inversion of the level represents a 1 bit in _____ encoding**
- 1. NRZ-I**
 2. NRZ-L
 3. RZ
 4. Manchester
- 49. To make sure that source does not overwhelm destination by sending data faster than it can be handled and processed is called?**
1. Addressing & Routing
 2. Exchange Management
 - 3. Flow Control**
 4. Recovery
- 50. Time domain plot show changes in signal phase with respect to time.**
1. true
 - 2. false**
- 51. In which controlled-access method all data exchanges must be made through primary device even when the ultimate destination is a secondary device?**

- 1. Polling**
 2. Reservation
 3. Token Passing
 4. Port Forwarding
- 52. If a digital signal has "L" number of levels. _____ is the number of bits required to represent each level.**
- 1. Log L**
 2. Log Base 2 L
 3. L Square
 4. Log(2*L)
- 53. _____ category of coaxial cable is used for Cable TV.**
1. RG-58
 2. RG-59
 - 3. RG-11**
 4. RG-47
- 54. The level of signal is always positive in NRZ encoding.**
1. true
 - 2. false**
- 55. Radio is an example of _____ signal conversion.**
- 1. Analog to analog**
 2. Analog to digital

3. Digital to Digital
 4. Digital to analog
- 56. Analog To Analog Conversion Methods include _____.**
- 1. AM, PM and FM**
 2. AM, FSK and PM
 3. AM, PM and QAM
 4. None of the given
- 57. The original Ethernet technology with the data rate of 10 Mbps is called _____?**
- 1. Standard Ethernet**
 2. Fast Ethernet
 3. Gigabit Ethernet
 4. 10 Gigabit Ethernet
- 58. Which of the following is not a characteristic of a sine wave?**
1. Amplitude
 - 2. Segmentation**
 3. Phase
 4. Frequency
- 59. By using _____ system, change in the file contents during file transmission can be avoided.**
1. Routing

2. Flow Control

3. Error Detection and Correction

4. Congestion Control

60. In order to find the location of two errors in an eight bit stream, we have to see _____ different combinations.

1. 28

2. 16

3. 8

4. 4

61. In CSMA/CA, _____ is the amount of time divided into slots.

1. Interframe Window

2. Contention Window

3. Fragmented Window

4. Collided Window

62. _____ is used in the Stop-and-Wait protocol to overcome the issue of duplication.

1. Frame sequencing

2. Acknowledgement numbering

3. Counter and Timer reset

4. Frame sequencing and Acknowledgement numbering

63. Which one of the following is a correct-access method?

1. Polling
2. Token Passing
- 3. Reservation**
4. All of the given

64. In the encoding where positive to negative transition is one and vice versa is zero.

1. Manchester
2. Differential Manchester
3. All of the given
- 4. None of given**

65. If the window size is 63 in go-back N ARQ then what is the range of sequence number?

- 1. 0 to 63**
2. 0 to 64
3. 1 to 63
4. 1 to 64

66. Following characteristics fully describe _____,

Amplitude

Period/Frequency

Phase

- 1. Sine Waves**

2. Digital Signals
 3. Aperiodic Signals
 4. None of the given
- 67. Digitizing an Analog Signal is called _____.**
- 1. Analog-to-Digital Conversion**
 2. Digital-to-Digital Conversion
 3. Digital-to-Analog Conversion
 4. None of the given
- 68. At the CRC checker, _____ means that the data unit is damaged.**
1. A string of 0s
 2. A string of 1s
 3. A string of alternating 1s and 0s
 - 4. A nonzero remainder**
- 69. Which one of the following is a Random-Access protocol?**
1. TDMA
 - 2. CDMA/CD**
 3. ALOHA
 4. CDMA/CA
- 70. Human voice is example of _____ signal.**
1. Digital

2. Analog
 3. Discrete
 4. None of the given
71. In statistical time division multiplexing, number of slots in frame are less than _____.
1. Output data rate
 2. Input lines
 3. Input frequency
 4. Multiplexed T lines
72. A _____ modem is used to connect two DTEs directly.
1. 'NULL
 2. Cable
 3. DSL
 4. None of the given
73. If we need to correct a single error in an 8-bit data unit, we need to consider _____ possible error locations.
1. 16
 2. 2
 3. 4
 4. 8

74. Asynchronous TDM is efficient only when the size of the time slot is kept relatively _____.

- 1. Large**
2. Small
3. Medium
4. Zero

75. The _____ protocol uses both flow and error control.

1. TCP/IP
2. HDLC
3. ICMP
- 4. Stop-and-Wait**

76. In _____, each station is allocated a time slot during which it can send data.

1. CDMA
2. NDMA
- 3. TDMA**
4. FDMA

77. The extra bits added with the original data for error detection/correction are called _____.

1. Fault bits
2. Port numbers

3. Redundant bits

4. Process IDs

78. _____ is correct formula to determine the total number of ports needed for one system connected in a mesh network.

1. $N+1$

2. $N-1$

3. $N(N+1)$

4. $N \times N$

79. _____ is sometimes called the bit rate.

1. signal rate

2. modulation rate

3. Data rate

4. pulse rate

80. Collisions in CSMA/CA are avoided through _____.

1. The Interframe Space

2. The Contention Window

3. Acknowledgements

4. All of the given

81. _____ category of coaxial cable is used for thin Ethernet.

1. RG-58

2. RG-59

3. RG-1
 4. RG-47
- 82. Which one is not the function of data link layer?**
- 1. Line discipline**
 2. Flow control
 3. Error control
 4. Network control
- 83. Session layer is responsible for _____.**
1. Reassembly of data
 - 2. Maintaining the connection**
- 84. _____ mode of serial transmission guarantees fixed rate of data.**
1. Synchronous
 2. Asynchronous
 - 3. Isochronous**
 4. Metasynchronous
- 85. Data Link layer provides services to the _____ layer.**
1. Application
 2. Transport
 - 3. Network**
 4. Session
- 86. The _____ is the number of signal elements sent per unit time.**

1. Data rate

2. Signal rate

3. Bit rate

4. Period

87. The logical connection between the peer layers is _____ connection.

1. Physical

2. Direct

3. Indirect

4. Tangible

88. What is the period of a Sine wave having frequency of 5 Hz?

1. 0.2

2. 0.1

3. 0.5

4. 0.3

89. A sine wave is defined by _____ characteristics.

1. 2

2. 3

3. 4

4. 5

90. If duration of noise is decreased during a transmission over noisy channel, fixed data rate of the channel will cause _____ number of bits being impacted by the noise.

1. Constant

2. More

3. Less

4. Zero

91. S-frames in High-Level Data Link Control (HDLC) are only used to transfer _____ information.

1. User data

2. Control

3. Redundant

4. Original

92. The _____ generates the data and passes it along with any control information to a _____.

1. DTE, DCE

2. DCE, DTE

3. DTE, DTE

4. DCE, DCE

93. The type of ALOHA which improves the efficiency of Pure ALOHA is _____.

1. **Slotted ALOHA**
 2. Upper ALOHA
 3. Integrated ALOHA
 4. Lower ALOHA
94. **What is the period of a Sine wave having frequency of 2 Hz?**
1. 0.2
 2. 0.1
 3. **0.5**
 4. 0.3
95. **WDM stands for _____.**
1. Wideband De-Modulation
 2. Worst Data Manipulation
 3. **Wavelength Division Multiplexing**
 4. None of the given
96. **Latency is made of _____ components.**
1. **Two**
 2. Three
 3. Four
 4. Five
97. **The logical connection between the peer layers is _____ connection.**
1. Physical

2. Direct
3. Indirect
- 4. Tengible**

98. In line discipline after the data transmission, the sending system finishes with an _____ frame.

- 1. EOT**
2. EKT
3. ENT
4. ESP

99. _____ of a signal is the collection of all the component frequencies it contains.

1. Time domain
2. Frequency domain
- 3. Frequency spectrum**
4. None of the given

100. CHAP is an Authentication Protocol, which uses _____ process to authenticate user information.

1. Two-way
- 2. Three-way**
3. Four-way
4. Five-way

101. RZ stands for _____.

1. Return to Z
2. Retire a Zero
- 3. Return of Zero**
4. None of the given

1. In _____ each band is reserved for a specific station, and it belongs to the station all the time.

- 1. FDMA**
2. CDMA
3. TDMA
4. CSMA

2. In TCP/IP protocol suite, the process of adding header at each layer on sending side is known as _____.

1. Encapsulation
2. De-encapsulation
- 3. Packetizing**
4. Framing

3. In Block coding we divide our message into blocks of k bits called as _____.

1. Code words
- 2. Data words**

3. Passwords

4. Cross words

4. In circuit switched networks we have low efficiency but minimal _____.

1. Delay

2. Speed

3. Throughput

4. Errors

5. Error correction is more _____ than the error detection.

1. Easy

2. Useless

3. Informal

4. Difficult

6. AM signal requires _____ the BW of original signal

1. Twice

2. Half

3. Same

4. Three Times

7. Asynchronous transmission is _____.

1. Slow

2. Fast

3. Costly

4. None effective

8. The Internet is _____.

1. software for sending e-mail around the world

2. a government-owned agency that links computers

3. a global network of computers networks

4. a specialised form of local area network

9. Time division multiplexing is used in _____ systems.

1. Analog

2. Hybrid

3. Digital

4. Automated

10. Radio wave transmission utilizes _____ different types of propagation.

1. Two

2. Three

3. Four

4. Five

11. Checksum is an error-detection technique that can be applied to a message of _____ length.

1. Exactly 4

2. Exactly 8

3. Exactly 32
 - 4. Any**
- 12. At the Application layer, object/information is in the form of _____.**
1. Message
 - 2. Packet**
 3. Segment
 4. Frame
- 13. POST stand for _____?**
1. Plain Old Telephone Set
 2. Plain Old Time Sharing
 3. Plain Old Telephone System
 - 4. Plain Old Telephone Service**
- 14. Which of the following statement is correct?**
- 1. Digital signals are less prone to Noise**
 2. Digital signals are highly prone to Noise
 3. Analog Signals are less prone to Noise
 4. Digital signals are not affected by Noise
- 15. In selective-reject ARQ, only the specific damaged or lost frame is _____.**
- 1. Retransmitted**
 2. Forwarded

3. Selected

4. Rejected

16. In ASK correct formula for calculating the bandwidth is as _____.

1. $B=(1+d)S$

2. $B=(1*d)S$

3. $B=(d-1)S$

4. $B=(d-5)S$

17. Encoding digital data into digital signals is called _____.

1. Analog-to-Digital Conversion

2. Digital-to-Digital Conversion

3. Digital-to-Analog Conversion

4. None of the given

18. If the Hamming distance between sent and received code word is _____, then it shows that received data is corrupted.

1. $\neq 0$

2. $= 0$

3. $\neq 1$

4. $= 1$

19. Quadrature Amplitude Modulation (QAM) is the combination of _____ and _____.

1. FSK, PSK

2. PSK, FSK
 3. ASK, PSK
 4. ASK, FSK
- 20. PSK is susceptible to the noise degradation.**
1. True
 - 2. False**
- 21. _____ works with topologies in which one device is designated as a primary station and the other devices are secondary stations.**
1. Reservation
 - 2. Polling**
 3. Token
 4. None of the given
- 22. No matter whether the link is dedicated or broadcast, data link control (DLC) layer provides services between _____.**
1. Virtual LANs
 - 2. Two adjacent nodes**
 3. Ethernet links
 4. Source and destination PCs
- 23. CDMA stands for _____.**
1. Carrier Division Multiple Access
 2. Carrier Data Multiple Access

3. Code Data Multiple Access

4. Code Division Multiple Access

24. If users must take turns using the link, then it is called Spatial Sharing.

1. true

2. false

25. GO-BACK-N protocol is one of the _____ layer protocols, which is used to control the flow of data during the transmission.

1. Physical

2. Network

3. Presentation

4. Data link

26. In _____ a dedicated communication path is established between two stations through the nodes of the network

1. Circuit switching

2. Packet switching

27. Signals travel through fiber optic cable are in the form of _____.

1. Light

2. Bits

3. Electromagnetic

4. Bytes

28. _____ contains a repeater.

1. **Active hub**
 2. Passive hub
29. **In frequency shift keying, _____ remain(s) constant.**
1. Frequency
 2. Amplitude
 3. Both Amplitude and Phase
 4. **Both Phase and Frequency**
30. _____ is/are un-reliable protocol(s).
1. IP and TCP
 2. UDP
 3. **IP and UDP**
 4. TCP
31. _____ is not a function of Data Link Control.
1. Framing
 2. **Modulation**
 3. Error Control
 4. Flow Control
32. **Each computer on the Internet has a unique numeric address called a(n) _____.**
1. domain address
 2. protocol address

- 3. IP address**
4. Web address
- 33. dB is negative if a signal is _____.**
- 1. Attenuated**
2. Distorted
3. Amplified
4. Noisy
- 34. We can have _____ different groups with a 4 bit block.**
1. 4
- 2. 8**
3. 16
4. 32
- 35. Line Configuration refers to the way two or more devices attach to a _____.**
1. Path
2. Circuit
- 3. Link**
4. Router
- 36. Error detection and correction are the services provided by _____ layer.**
- 1. Data link layer**

2. Application layer
 3. Physical layer
 4. Session layer
- 37. Which of the following sublayer resolves the contention for the shared media.**
- 1. MAC**
 2. LLC
 3. Physical
 4. None of the given.
- 38. There are _____ basic categories of multiplexing.**
1. 2
 - 2. 3**
 3. 7
 4. 5
- 39. Low pass channel has _____ bandwidth between two stations.**
- 1. Dedicated**
 2. Shared
 3. Multiplexed
 4. Infinite
- 40. BSC supports _____ transmission using _____ flow control.**

1. Full-duplex, Stop and wait ARQ
 2. Half-duplex, Selective reject ARQ
 3. Full-duplex, Selective reject ARQ
 - 4. Half-duplex, Stop and wait ARQ**
- 41. Quantization is a method of assigning _____ values in a specific range to sampled instances.**
1. Negative
 2. Positive
 3. Binary
 - 4. Integral**
- 42. _____ encoding is almost obsolete today**
1. Bipolar
 - 2. Unipolar**
 3. Polar
 4. None of the given
- 43. YMODEM has _____ Byte of data unit.**
- 1. 1024**
 2. 256
 3. 128
 4. 512
- 44. Like Data link layer, _____ is also responsible for Flow control.**

1. Transport Layer

2. Session Layer

45. In CRC there is no error if the remainder at the receiver is _____.

1. Equal to the remainder at the sender

2. Zero

3. Nonzero

4. The quotient at the sender

46. _____ is normally used where speed is priority in data transfer.

1. Serial data transmission

2. Hybrid data transmission

3. Parallel data transmission

4. Both parallel and serial data transmission

47. In Block coding scheme, number of code words is always _____ data words.

1. Less than

2. Equal to

3. Greater than

4. Same as

48. A portion of the path that carries TX between a given pair of devices is known as _____.

1. Direct Point

2. Bridge
 - 3. Channel**
 4. Access Point
- 49. What is the Bandwidth of a periodic signal if it is decomposed into 4 sine waves with frequencies 200, 400, 600 and 800?**
1. 100
 2. 500
 3. 300
 - 4. 600**
- 50. _____ is the process of converting digital data to digital signals.**
1. CSMA/CD
 2. CSMA/CA
 - 3. Line coding**
 4. Segmentation
- 51. _____ transmission technology (based on Ethernet) provides a data rate of 1 billion bits per second.**
1. Fast Ethernet
 2. Standard Ethernet
 - 3. Gigabit Ethernet**
 4. 10BASE-T Ethernet
- 52. Congestion Control is a feature of layer(s).**

1. Data Link
2. Network
3. Transport
- 4. All mentioned**

53. In Pure ALOHA, the vulnerable time is _____ the frame transmission time.

1. Same as
- 2. Two times**
3. Three times
4. Four times

54. What is the Bandwidth of a periodic signal if it is decomposed into 4 sine waves with frequencies 300, 600, 900 and 1200?

1. 100
- 2. 900**
3. 300
4. 600

55. _____ signal can take infinite levels of intensity over time.

1. Digital
2. Discrete
- 3. Analog**
4. Logical

56. Mr. Asif while sitting in Lahore is talking with his friend in Dubai through Skype is an example of _____.

1. Local Area Network

2. Metropolitan Area Network

3. Wide Area Network

4. Home Based Network

57. Which layer is concerned with the syntax and semantics of info exchange between two systems?

1. Physical

2. Application

3. Session

4. Presentation

58. Time domain shows changes in _____.

1. time w.r.t signal amplitude

2. signal amplitude w.r.t time

3. time

4. All of the given

59. In ASK, Noise usually affects the _____.

1. Amplitude

2. Phase

3. Sample

4. Frequency
- 60. In analog transmission, the base signal is called the_____.**
- 1. Carrier Signal**
 2. Analog signal
 3. Digital signal
 4. Modulated signal
- 61. Which of the following is most affected by noise?**
1. PSK
 - 2. ASK**
 3. FSK
 4. QAM
- 62. In Synchronous TDM, Time slots are not same in number as input devices.**
1. True
 - 2. False**
- 63. The flag in PPP is a byte that needs to be _____ whenever it appears in the data section of the frame.**
1. Duplicated
 2. Blocked
 3. Cleaned
 - 4. Escaped**

64. Guard bands are used in _____ multiplexing technique, to avoid overlapping of frequency bands assigned to each user.

1. PDM
2. CSMA
3. TDM
- 4. FDM**

65. DLC in Data Link Layer stands for _____.

1. Divide Line Communication
2. Data Line Code
- 3. Data Link Control**
4. Demand Link Coordination

66. In Pulse Code Modulation (PCM), the sampling is dependent on _____.

1. Time
2. Amplitude
3. Frequency
- 4. Signal Rate**

67. Digital signals are referred to be _____.

1. Continuous
- 2. Discrete**
3. All of the given

4. None of the given
- 68. Two or more computers connected so that they can communicate with each other and share information is called a _____.**
1. satellite
 2. protocol
 3. broadcast
 - 4. network**
- 69. Which error detection method uses one's complement arithmetic.**
1. Cyclic Redundancy Check (CRC)
 2. Longitudinal Red Check (LRC)
 - 3. Checksum**
 4. Simple Parity Check
- 70. WDM stands for _____.**
- 1. Wave Division Multiplexing**
 2. Wrong Division Multiplexing
 3. Well Division Multiplexing
 4. West Division Multiplexing
- 71. Analog refers to something that is continuous in _____.**
- 1. Time**
 2. Space
 3. Frequency

4. None of the given
- 72. What is the frequency of a sine wave if it completes one cycle in 5 seconds?**
1. 0.5
 2. 0.6
 3. 0.3
 - 4. 0.2**
- 73. In an analog hierarchy to carry voice channels, a group can carry _____ voice channels.**
1. 60
 2. 12
 - 3. 20**
 4. 10
- 74. STP is more expensive than UTP and is less susceptible to noise.**
- 1. True**
 2. False
- 75. Switch is a network device which operates on the _____ layer of the TCP/IP protocol suite.**
1. Application
 2. Transport
 3. Presentation

4. Data link

76. _____ are used to exchange session management and control information between connected devices.

1. I-frames

2. U-frames

3. S-frames

4. N-frames

77. The message 1110 sent by a source is received by a destination as 1011.

This is _____ type of error.

1. Burst

2. Single-Bit

3. Uni-Bit

4. Hamming