

Cs601 Mid term

Topic 1 to 113 cover in this quiz

Orange Monkey Team

1. At the application layer, object/information is in the form of _____.

Message...confirm

2. _____ is the first step in PCM technique

Sampling...confirm

3. Communication between two user in a cellular (Mobile) network is an example of ___ communication

Full duplex....confirm

4. Transmission medium are of _____ types.

Two....confirm

5. A frequency is called ____ if sine wave changes with time

Infinte frequency...confirm

6. A frequency is called ____ if sine wave does not change with time

Zero frequencyconfirm

7. Open system interconnection (OSI) has ___ number of layers.

7...confirm

8. In unidirectional antenna, the common point where all the lines intersect each other is ____.

Focus...confirm

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

Shannon....confirm

10. Television broadcast where user can only view the information sent in the form of video is an example of _____ communication.

Simplex

11. $N = S * r$ is the formula for finding

Baud rate.....confirm

12. TCP/IP protocol suit has _____ layers.

5....confirm

13. Unit of phase is _____.

Degree....confirm

14. For a noiseless channel theoretical formula to calculate the data rate was developed by.

Nyquist.....confirm

15. In context of bandwidth-delay product the cross section of the pipe represents the _____.

Bandwidth...confirm

16. Uni polar Polar and Bipolar are types of _____ coding scheme.

Line...confirm

17. In ____ scheme the voltages are on both sides of the time axis and voltage level for 0 can be positive and the voltage level for 1 can be negative.

Polar....confirm

18.In _____ transmission medium start and stop bits are used

Asynchronous....confirm from net

19.In layered architecture of network logical connection between layers means.

They are connected in peers.....confirm

20.OSI stands for _____.

Open system interconnection....confirm

21.Quadrature Amplitude Modulation is the mechanism of _____ conversion.

Digital to analog...confirm

22.Writing used for transmission modes depends upon _____.

Data stream...confirm

23.The maximum bandwidth required for QAM transmission is the same as that required for _ and _____ transmission.

ASK, PSK

24.In optical fiber cable the ratio of the diameter of their core to the diameter of their cladding, both expressed in _____.

Micrometers...confirm

25.Radio waves are propagated in _____ whenever they are transmitted by an antenna.

All direction ...confirm from net

26._____ component of data communication governs the overall communication on the network.

Transmission medium...confirm

27. In binary ASK, the peak amplitude of one signal level is 0 and the other is the same as the _____.

Amplitude

28. In _____ scheme, all the signal levels are on one side of the time axis, either above or below.

Unipolar...confirm from net

29. Simple sine wave can be used to send.

Amplitude

30. Paging system in data communication uses _____ waves.

Radio waves...confirm from net

31. Multipoint channel can be shared in _____ manner.

Both temporal and spartial...confirm

32. _____ is an example of multipoint topology

Bus...confirm

33. Bandwidth can be measured in _____.

Bps...confirm

34. In _____ encoding scheme, we use three levels positive negative and zero

Bipolar...confirm from net

35. Header size _____ while moving down the layers at sending side

Decreases

36. _____ signals have limited number of discrete value

Digital....confirm

37. _____ is a block coding method

NRZ-1....confirm

38. Technique that allows the simultaneous transmission of multiple signals across a single data link, is known as _____.

Multiplexing....confirm

39. Simultaneous transmission of multiple signals across a single data link is called.

Multiplexing...confirm

40. Minimum bandwidth required for Manchester line coding scheme is _____.

1Mhz...confirm

41. AMI is a popular _____ encoding method.

Bi-polar....confirm

42. TCP/IP was presented by _____ in a research paper

Vin Cerf and bob Kahn...confirm

43. Among the following cables given below _____ cable has the cost as compared to others.

Medium....confirm

44. Among the following cables given below _____ cable has the lowest cast as compared to others.

Coaxial cable...confirm

45. Among the following cables given below _____ cable has the highest cast as compared to others.

Fiber optic cable...confirm

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

n-1....confirm

47. A twisted pair cable consists of _____ conductors

2confirm

48. Packets travel in ____ layer of TCP/IP protocol suit
Networkconfirm from net

49. HDB3 falls under which coding scheme?

Bipolar...confirm

50. According to the Nyquist theorem, the sampling rate must be at least ____ times the highest frequency contained in the signal.

2.....confirm

51. _____ protocol suit is being used by the modern internet communication

TCP/IP...confirm

52. LF (low frequency) band is used in _____ propagation

Ground....confirm

53. _____ is a type of serial transmission in which data bits are transmitted as a continuous stream in time with a master clock, start bits, stop bits and gaps are not used. Transmitter and receiver time is sync.

Synchronous....confirm

54. Identify the correct formula to calculate Propagation time.

Propagation time= Distance/ propagation speed....confirm

55. The communication of the application, transport and network layer is

Physical...confirm

56. Frames travel in _____ layer of TCP/IP Protocol suite.

Data link

57. Manchester encoding scheme achieves the same level of synchronization as _____.

RZ.....confirm

58. In Manchester and differential Manchester encoding schemes, the signal rate is _____ than that of NRZ.

Double...confirm from net

59. In a bidirectional communication each layer performs two _____ tasks in each direction.

Opposite...confirm

60. _____ is composed of thousands of interconnected networks expanded over large geographical area.

Local area network

61. Time taken by a periodic signal to complete one cycle is called.

Period...confirm from net

62. There are ___ common scrambling technique

Twoconfirm

63. The bipolar encoding scheme was developed as an alternative of _____.

NRZ...confirm from net

64. FSK stands for _____.

Frequency shift keying....confirm

65. In ___ encoding scheme, the voltage level oscillates between a positive and a negative value although it may remain at zero level between the two values.

Polar...confirm from net

66. _____ is an example of transmitter.

Modem

67. The material used for conduction in twisted pair cable is _____.

Copper

68. RG-11 having impedance of 50 ohm is used in _____ Ethernet

Thin....confirm

69. _____ encoding scheme is somewhat a combination of the RZ and NRZ-I scheme

Manchester encoding...confirm from net

70. _____ has less electromagnetic interference as compared to other guided medium.

Unshielded Twisted Pair

71. Electromagnetic waves ranging in frequencies between _____ are called microwaves.

1 to 300 GHz

72. Switch is a _____ layer devices

Data link...confirm

73. _____ is Shannon capacity formula to determine highest theoretically data rate for a noisy channel.

Capacity = Bandwidth * $\log_2(1+SNR)$confirm

74. _____ is the range of frequencies contained in a composite signal.

Bandwidth...confirm

75. In PCM technique Quantization is an _____ process

Un-balanced

76. In Ring topology, each node has a point to point dedicated link with.

Exactly 2 nodes....confirm

77. In _____ modulation process is used by the transmitting devices to shift their data to a specific carrier frequency for multiplexing.

Fdm...confirm

78. Five stations will have _____ full duplexed dedicated links among them to be connected in a Mesh topology.

10....confirm

79. Which of the following technique(s) is used for Analog-to-Digital Conversion.

Both Pulse Code Modulation(PCM) and Delta Modulation(DM)...confirm

80. The human voice normally frequency range from _____.

0 to 3000Hz

81. The layer of TCP/IP protocol suite which is on the top is known as _____ layer.

Application...confirm

82. In _____ type of error, two or more bits in the data unit will be changed.

Burst....confirm

83. _____ is the process of converting digital data to digital signal.

Line coding.....confrim

84. Manchester encoding scheme uses and inversion at the _____ of each bit.

Middle....confirm

85. FF:FF:FF:FF:FF:FF is a _____ link layer address.

Broadcast.....confrim

86. A3 34 45 11 92 F1 is a _____ link layer address.

Data, unicast....confirm

87. High-Level Data Link Control (HDLC) defines _____ types of frames to deal with the transfer modes.

3.....confirm

88. _____ is the number of bits sent in 1 second

Bit rate(bps)...confirm

89. _____ Time required to send 1 single bit.

Bit interval...confirm

90. _____ are used to transport user data and control information relating to user data

Information frams(I-frames).....confirm

91. _____ are used only to transport control information

Supervisory frames(S-frames).....confirm

92. _____ are reserved for system Management

Unnumbered frames(U-frames).....confirm

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

U-frames....confrim

94. In order to find Hamming distance between two pair of words _____ logical operation is used.

XOR....confrim

95. Data Link layer receives services from the _____ layer.
Physical

96. The _____ is the number of signal elements sent per unit time.

Bit rate.....confrim

97. In order to resolve link layer address of the next node, the first generated ARP request is always in _____ mode.

Broadcast

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

Data words.....confirm

99. To control and manage the transfer of data, a protocol called point to point (PPP) is used at the _____ layer

Data Link

100. In character oriented protocol, each character of frame is encoded using _____ coding system.

ASCII

101. Error detection and correction are the services provided by _____ layer.

Data link layerconfirm from net

102. _____ is used in the stop-and-wait protocol to overcome the issue of duplication.

Frame sequencing and Acknowledgment numbering...confirm from net

103. Stop-and-weight protocol is used for _____.

Both flow and error control....confirm

104. Error correction is more _____ than the error detection
Difficult...confirm from net

105. Payload field of the PPP frame is of variable size and it can carry maximum data up to _____.

1500 bytes....confirm from net

106. 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 from net

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

PPP...confirm

108. In linear Block codes _____ of two valid code words creates another valid code word.

XOR...confirm

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

Presentation

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

false

111. In OSI model headers are added at layer _____.

6,5,4,3,2 only

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

Polling

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

Light...confirm from net

114. PSK is susceptible to the noise degradation.

False

115. What is the frequency of a sine wave if it completes one cycle in 5 seconds?

0.2

116. Which one is not the function of data link layer?

Line discipline

117. Error detection and correction are the services provided by _____ layer.

Data link layer

118. _____ is not a function of Data Link Control.

Modulation

119. No matter whether the link is dedicated or broadcast, data link control (DLC) layer provides services between _____.

Two adjacent nodes

120. The inversion of the level represents a 1 bit in _____ encoding

NRZ-I

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

FDM...confirm

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

Stop-and-Wait

123. Each computer on the Internet has a unique numeric address called a(n) _____.

IP address

124. WDM stands for _____.

Wave Division Multiplexing

125. A fiber -optic cable transmit signals in the form of _____.

Light

126. CDMA stands for _____.

Code Division Multiple Access

127. Quantization is a method of assigning _____ values in a specific range to sampled instances.

Integral

128. STP is more expensive than UTP and is less susceptible to noise.

True

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

Delay....confirm

130. Which level of the TCP/IP reference model routes data/information across a network channel?

Network Layer

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

Channel

132. Digital signals are referred to be _____.

Discrete

133. BSC supports _____ transmission using _____ flow control.

Half-duplex, Stop and wait ARQ

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

Amplitude

135. The original Ethernet technology with the data rate of 10 Mbps is called _____?

Standard Ethernet

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

16

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

Amplitude...confirm

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

Redundant bits

139. Which of the following sublayer resolves the contention for the shared media.

MAC

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

PPP...confirm

141. Media Access Control (MAC) and Data link (DLC) constitute _____ layer

Data Link....confirm

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

Slotted ALOHA

143. What is the period of a Sine wave having frequency of 10 Hz?

0.1

144. Is there any difference between Data communication and telecommunication are network?

No

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

Packetizing

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

$N-1$

147. Following characteristics fully describe _____,
Amplitude
Period/Frequency
Phase

Sine Waves

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

0.2

149. The inversion of the level at 1 bit is called as _____.

NRZ-I

150. In _____, both peak amplitude and frequency remains constant as the phase changes.

PSK

151. At the CRC generator, _____ added to the data unit before the divisional process.

0s are

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

Two times

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

Data words

154. Analog refers to something that is continuous in _____.

Time

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

Frequency spectrum

156. _____ encoding is almost obsolete today

Unipolar

157. Which of the following is most affected by noise?

ASK

158. In _____, a signal is directed straight from antenna to antenna.

Line of sight propagation

159. To control and manage the transfer of data, a protocol called Point to Point Protocol (PPP) is used at the _____ layer.

Network

160. The level of signal is always positive in NRZ encoding.

false

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

Analog....confirm from net

162. _____ is sometimes called the bit rate.

Data rate...confirm from net

163. _____ contains a repeater.

Active hub

164. _____ is/are un-reliable protocol(s).

UDP

165. Low pass channel has _____ bandwidth between two stations.

Shared...confirm from net

166. The message 1110 sent by a source is received by a destination as 1011. This is _____ type of error.

Burst

167. TROPOSHERE is the layer of atmosphere above the troposphere but below space

False

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

Two times

169. Asynchronous transmission is _____.

Slow

170. Radio is an example of _____ signal conversion.

Analog to analog

171. Which error detection method consists of a parity bit for each unit as well as an entire data unit of parity bits?

Longitudinal Red Check (LRC)

172. Session layer is responsible for _____.

Maintaining the connection

173. 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

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

Control

175. In ASK, both _____ and _____ remain constant.

Frequency, Phase

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

Digital-to-Digital Conversion

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

Network

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

$B=(1+d)S$confirm

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

Slotted ALOHA

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

Polling

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

DTE, DCE

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

Frame sequencing and Acknowledgement numbering

183. Transmission Control Protocol is a(n) _____ layer protocol.

Network

184. The Internet is _____.

a global network of computers networks

185. We can have _____ different groups with a 4 bit block.

8

186. Analog To Analog Conversion Methods include _____.

AM, PM and FM

187. DLC in Data Link Layer stands for _____.

Data Link Control

188. What is the Bandwidth of a periodic signal if it is decomposed into 4 sine waves with frequencies 200, 400, 600 and 800?

600

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

RG-58....confirm

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

RG-8, RG-9, RG-11confirm

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

RG-8, RG-9, RG-11confirm

192. _____ category of coaxial cable is used for Cable TV

RG59....confirm

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

TDMA

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

10BASE-T Ethernet

195. Time domain plot show changes in signal phase with respect to time.

false

196. dB is negative if a signal is _____.

Attenuated

197. Which of the following is not a characteristic of a sine wave?

Segmentation...confirm

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

900

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

Large

200. A sine wave is defined by _____ characteristics.

3

Switch is a network device which operates on the _____ layer of the TCP/IP protocol suite.

Data link

201. In even parity check code, the value of syndrome is _____ if the number of 1s is even.

0

202. 4Collisions in CSMA/CA are avoided through _____.

All of the given

203. Human voice is example of _____ signal.

Analog

204. Time domain shows changes in _____.

signal amplitude w.r.t time

205. Normally the value of Kmax in pure ALOHA is _____.

15

206. Central Hub in a Tree is an _____.

Active hub

207. In selective-reject ARQ, only the specific damaged or lost frame is _____.

Retransmitted

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

false

209. At the CRC checker, _____ means that the data unit is damaged.

A nonzero remainder

210. Digitizing an Analog Signal is called _____.

Analog-to-Digital Conversion

211. WDM stands for _____.

Wavelength Division Multiplexing

212. What was the main draw back in ALOHA Random-Access method?

All of the given

213. YMODEM has _____ Byte of data unit.

1024

214. Like Data link layer, _____ is also responsible for Flow control.

a. Transport Layer

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

Equal to

216. RZ stands for _____.

Return of Zero

217. Line Configuration refers to the way two or more devices attach to a _____.

Link

218. The flag in PPP is a byte that needs to be _____ whenever it appears in the data section of the frame.

Escaped

219. At the Application layer, object/information is in the form of _____.

Packet

220. The term _____ means that only one bit of a given data unit is changed from 1 to 0 or from 0 to 1.

Single Bit Error

221. What is the frequency of a sine wave if it completes one cycle in 2 seconds?

0.5

222. POST stand for _____?

Plain Old Telephone Service

223. To make sure that source does not overwhelm destination by sending data faster than it can be handled and processed is called?

Flow Control

224. If a digital signal has "L" number of levels. _____ is the number of bits required to represent each level.

Log base 2 L....confirm

225. In ASK, Noise usually affects the _____.

Amplitude

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

28

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

CSMA

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

Reservation

229. By using _____ system, change in the file contents during file transmission can be avoided.

Error Detection and Correction

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

Five

231. A broadcast signal is received by the orbiting satellites which rebroadcasts _____.

none of the given

232. What is the period of a Sine wave having frequency of 2 Hz?

0.5

233. _____ mode of serial transmission guarantees fixed rate of data.

Isochronous...confirm from net

234. Time division multiplexing is used in _____ systems.

Digital....confirm from net

235. The most common type of connector used by coaxial cable is _____.

BNC

236. Which of the following statement is correct?

Digital signals are less prone to Noise

237. In an analog hierarchy to carry voice channels, a group can carry _____ voice channels.

12(4kHz)....confirm

238. In an analog hierarchy to carry 12 voice channels, 5 group _____

48kHz....confirm

239. In an analog hierarchy to carry 60 voice channels, a 10 super group _____ bandwidth

240kHz....confirm

240. In an analog hierarchy to carry 600 voice channels, a 6 Master group _____

2.52Mhz....confirm

241. In an analog hierarchy to carry 3600 voice channels, a Jumbo group _____

16,984MHzconfirm

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

EOT

243. Data is transmitted using light through a _____ cable.

fiber-optic

244. Data Link layer provides services to the _____ layer.

Network

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

$\neq 0$

246. _____ is responsible for governing node to node communication.

Data Link layer

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

Metropolitan Area Network

248. In frequency shift keying, _____ remain(s) constant.

Both Peak amplitude and Phase ...confirm

249. In Amplitude shift keying, _____ remain(s) constant.

Both frequency and phase...confirm

250. In Phase shift keying, _____ remain(s) constant.

Both peak amplitude and frequency...confirm

251. Analog signals are refers to be _____

Continuous

252. Baud rate is greater than or equal to the bit rate.

False

253. In statistical time division multiplexing, number of slots in frame are less than _____.

Input lines.....confirm

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

U-frames

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

DTE

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

Passive, Active, Intelligent

257. Which of the following consist of just one redundant bit per data unit?

Simple Parity Check

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

None of given option

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

Difficult

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

0 to 63

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

Hybrid transmission

262. In Synchronous TDM, Time slots are not same in number as input devices.

False

263. In analog transmission, the base signal is called the _____.

Carrier Signal

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

Circuit switching

265. Which one of the following is a Random-Access protocol?

CDMA/CD

266. A _____ modem is used to connect two DTEs directly.

NULL

267. The flag in PPP is a byte that needs to be _____ whenever it appears in the data section of the frame.

Escaped

268. _____ is an Authentication Protocol, which is used by the PPP to authenticate passwords.

PAP

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

Zero

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

Global...confirm from net

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

PAP

272. Possession of TOKEN gives the station the right to _____.

Send the data

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

communication channel

274. Latency is made of _____ components.

Four....confirm

275. Sampling means measuring _____ of signal at equal intervals

Amplitudes

276. Which error detection method uses one's complement arithmetic.

Checksum

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

Shannon.....confirm

278. To calculate the data rate for noiseless channel _____ formula is used.

Nyquist....confirm

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

Any

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

FDMA

281. Flow control is needed to prevent _____.

Overflow of the receiver buffer

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

FSK, PSK

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

Bus

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

Token-passing

285. Two or more computers connected so that they can communicate with each other and share information is called a _____.

network

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

Direct....confirm from net

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

Contention Window

288. _____ relative measures the strength of two signals.

Decibalconfirm

289. A sine wave is _____.

periodic and continuous

290. There are _____ types of guided media.

3

291. AM signal requires _____ the BW of original signal

Twice

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

Three-way

293. There are _____ types of serial transmission.

2

294. There are _____ basic categories of multiplexing.

3

295. Congestion Control is a feature of layer(s).

All mentioned

296. Most commonly used connector for twisted pair cable is _____.

RJ-45....confirm from net

297. _____ does not happen until all the data is transferred and all of the resources are freed.

Switching

298. A local telephone network use _____ network.

Circuit switched...confirm from net

299. Microwaves are _____.

Unidirectionalconfirm

300. _____ have established standards for using these signals for communication between devices such as keyboards, mice, PCs and printers

Infrared waves...confirm from net

301. Datagram approach and virtual circuit approach are two popular approaches which lead us to _____.

Circuit switching....confirm

302. In circuit switching when two end devices 'A' and 'B' connects with each other they send _____ request.

Acceptance

303. In optical fiber a glass or plastic core is surrounded by a _____.

Cladding...confirm

304. _____ are used for multicast communication, such as radio and television.

Radio waves...confirm

305. DLC in data link layer stands for _____

Data Link control....confirm

306. In virtual Circuit network all packets follow _____ path

Dedicated

307. Multi mode technology has _____ main types for light propagating.

Two

308. If the message is going to pass through a packet-switched network. It can be divided into packets of _____.

Both fix and variable size

309. According to state, fewer than _____ crossbar points can be used at once.

25%

310. _____ and _____ are the two types of addressing in virtual circuit approach.

Local, Global

311. Cable TV networks use _____ cables

Coaxial....confirm from net

312. The size of the packet is determined by the network and _____.

Governing Protocol

313. In circuit switching total delay is combination of connection time. Data transfer time and _____

Connection tear down time

314. Which one of the following is not among the required phases for the actual communication in a circuit-switched network?

Protocol

315. Electromagnetic waves ranging in frequencies between 1 and 300 GHz are called _____.

Microwaves

316. If we increase the data rate of a transmission over noisy channel, fixed noise duration will cause _____ number of bits being impacted by the noise.

Less

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

Higher

318. In baseband transmission, a digital signal is transmitted as _____.

Analog signal....confirm from net

319. _____ Cable is used in wavelength division multiplexing.

Fiber optic....confirm from net

320. The _____ technique expands the bandwidth of a signal by replacing each data bit with n bits using a spreading code.

DSSS...confirm from net

321. When the bandwidth of a link is greater than combined bandwidths of the

Frequency division....confirm from net

322. According to the Fourier analysis, frequencies obtained after decomposition of no period.

Continuous.....confirm from net

323. Router is a network device which operates on the __ layer of the TCP/IP protocol.

Network...confirm from net

324. Uni polar, polar and bipolar are the types of _____

NRZ-I....confirm from net

325. According to stats, lower than _____ crossbar point can be used at once .

25%....confirm from net

326. In _____ TDM, slots are dynamically allocated to the connected stations to improve bandwidth efficiency.

Statistical...confirm from net

327. In star based network comprising of four computers and on switch, total number of cables needed will be _____

4...confirm from net

328. The conversion of analog sample of the signal into digital form is called _____ process.

Sampling and quantizing...confirm from net

329. On a communication link, different channels are separated by unused strips of bandwidth called as _____.

Guard band

330. _____ is an example of host in a network.

Computer...confirm from net

331. In _____ TDM, each input connection has an allotment in the output even if is not sending data.

Synchronous ...confirm

332. _____ coding scheme are useful for LAN but not for long ranges

Biphase...confirm

333. In _____ signal changes its shape or form.

Distortion...confirm

334. _____ Protocol suite is being used by the modern internet communication.

TCP/IP...confirm from net

335. in NRZ-1 the signal is inverted if _____ is encountered.

1...confirm from net

336. Simultaneous transmission of multiple signal across a single data link is called _____

Multiplexing..confirm from net

337. Two stations are connected via a secure link in which messages are encrypted from source to the destination message is called _____

Protocol

Which one of following is a scrambling coding technique?

- B8ZS

According to the Fourier analysis, frequencies obtained after decomposition of digital signals are _____.

Discrete

_____ is the heart of blocking code.

- Coding

Wireless transmission can be divided into _____ broad groups.

Three...confirm from net

Wiring used for transmission modes depends upon _____.

- Latency

If a digital transmission system is sending five bits in every half a second, the bit-rate of the system.

- 10 bps...confirm

If the message going to pass through a packet-switched network, it can be divided into packets of _____.

- Both fix and Variable size

In an analogue hierarchy to carry voice channels, a group can carry _____ voice channels.

12

In optical fiber a glass or plastic core is surrounded by a _____.

- Cladding

In transmission impairments _____ noise occurs from other source like

Induced...confirm

_____ is a digital process that allows connections to share the high bandwidth of a link.

- TDM

Bandwidth in hertz in the range of _____ contained in a composite signal.

- Frequencies

LAN stands for _____.

• **Local Area Network**
Demultiplexer is a _____ device.

- One to many

Mr. Asif while sitting in Lahore is linking with his friend in Dubai through Skype is a _____.

• **Wide Area Network**
In _____ modulation, frequency and amplitude remain constant.

• **Amplitude**
In TDM based digital hierarchy used by the Telephone companies, DS-1 is a single digital channel of _____.

- 1.544 Mbps...confirm

In TDM based digital hierarchy used by the Telephone companies, DS-2 is a single digital channel of _____.

6.312 Mbps...confirm

In TDM based digital hierarchy used by the Telephone companies, DS-3 is a single digital channel of _____.

44.376MBps...confirm

In TDM based digital hierarchy used by the Telephone companies, DS-4 is a single digital channel of _____.

274.176 MBps.....confirm

The bandwidth-delay product defines the number of bits that can fill the _____.

- Link

If a digital-signals has four levels, then we need _____ bits to represent each level.

- 2

Routing is a function of _____ layer.

- Network

_____ relatively measures the strength of two signals.

- Decibel

Taking off the header from the message is called _____.

- Encryption

In frequency domain plot, which value is replaced with frequency?

- Wavelength

_____ is the process of converting binary data to a digital signal.

- Line coding

Low pass channel with _____ bandwidth is not real and is used for theoretical modeling.

- Narrow or wide...both are confirm

Unit of phase is _____.

- Degree

BFSK stands for _____.

- Binary Frequency Sift Key

_____ is NOT an example of connecting device.

- TCP

Coaxial cables are categorized by their _____ ratings.

Radio Government (RG)...confirm

Which one of the following is not among the required phases for the actual communication in a circuit switched network

- Protocol

A common bipolar encoding scheme is called _____.

- AMI

A telephone line analog signal has got the bandwidth of _____.

4 kHz...confirm

In _____ systems, resources are allocated on demand.

- Circuit switching

A fiber-optic cable transmit signals in the form of _____.

- Light

Composite wave can be used to send _____.

- Frequency

Routing is the function of _____ layer.

- Network

A virtual-circuit network operates on _____ layer.

- Datalink

In TCP/IP model, the Physical Layer exchanges data in the form of _____.

- Bits...confirm

_____ signal completes certain pattern in a specific amount of time.

- Periodic

If a digital signal has four levels, the we need _____ bits to represent.

- 2

We can have combination of _____ possible codes with a 5-bit code.

- 32

There are _____ categories of multiplexing.

- 3

Top most organization that provides support for the Internet Standard process is called _____.

- IETF

If the message is going to pass through a packet-switched network, it can be divided into packets of _____.

- Both-fix and variable size

_____ data moves faster and timing errors are less frequent because the transmitter and receiver time is synced.

Synchronous...confirm

In frequency modulation, the frequency of the oscillator changes according to the _____.

- Input Voltage

Binary Amplitude Shift Keying also called as:

- On-Off Keying

Bi-polar uses _____ voltage levels.

Two

In serial data transmission _____ data transmission mode can be cheap but slower.

- Asynchronous

In star-based network comprising of four computers and one switch, total number of cable needed will be _____.

- 4

Parabolic antenna is used for _____ communication.

- Microwave...confirm

In circuit switching total Delay is combination of Connection Time and _____.

- Connection tear down time

Datagram switching is done on _____.

- Network Layer

Token Ring was devised by _____.

- IBM...confirm

In TDM based digital hierarchy used by the Telephone companies, DS-0 is a digital channel of _____.

- 64 kbps...confirm

_____ can be published using Request for Comments (RFCs).

- Internet Draft....confirm

In transmission impairments _____ noise occurs from the random motion of electrons in a wire.

- Thermal noise...confirm

Which one of the following is among the required phases for the actual communication in a circuit switched network?

- Data transfer

According to the Fourier analysis, frequencies obtained after decomposition of non-periodic digital signals are _____.

- Bit length

The most common type of connector used by the coaxial cable is _____.

- BNC

When data is sent or received using _____ the data bits are organized in a specific order, since they can only be sent or received one after another.

Serial data transmission

_____ have established standards for using these signals for communication between devices such as keyboards, mice, PCs, and printers.

- Infrared waves

In case of Frequency shift key, the difference between two frequency is represented as _____.

- 2 delta....confirm

_____ category of coaxial cable is used for thin Ethernet.

- RG-58

Cellular telephone uses _____ waves for communication.

Radio waves

_____ layer is responsible for the creating of the datagrams.

- Network

In virtual circuit approach when a frame enters a switch and when it leaves a switch its VCI always _____.

- Remain the same

According to stats, fewer than _____ crossbar points can be used at once.

- 25%

Data format used at Transport layer of TCP/IP protocol suit is called _____.

- Packet

A virtual circuit network operates on _____ layer.

- Application

If 32 bits are sent in two seconds then the bitrate for that signal is _____.

- 64 bps
- _____ normally used for long-distance data transfer.
- Both parallel and Serial data transmission

_____ is a block coding method.

- 8B\10B

TCP\IP was chosen to be the official protocol of internet _____.

- 1983

To measure the data rate _____ theoretically formula(s) were developed.

- Four

In FSK, Baud rate is less than or equal to _____ rate.

Bit rate.....confirm

_____ signal is represented by the discrete values.

- Digital

Electromagnetic waves ranging in frequencies between 3 kHz and 1 GHz are called _____.

- Radio waves

Suppose a signal is amplitude then the value of decibel will be _____.

- Positive

_____ technique does not follow analog conversion.

- QAM

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

- Amplitude

_____ is the sub type of Time Division Multiplexing Technique.

- Statistical TDM

Modulation of analog signal is needed if the medium is _____ in nature.

- Bandpass

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

ASK-FSK

There _____ components of data communication system.

5...confirm

QPSK stands for _____.

- Quadrature phase shift key

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

- Shannon

Binary Amplitude Shift Keying(ASK) is also called as:

- On-Off Keying....confirm

Some manufacturers provide a special port called the _____.

- IrDA

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

- Nyquist

Two PCs and one printer are connected in a network within a room, it is an example of _____.

- LAN...confirm from net

Analog the following cables given, _____ cable provides highest bandwidth and less attenuation.

- Fiber optical

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

- Shannon

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

- Delay

Polar encoding scheme uses _____ voltage level.

- 2....confirm

TCP/IP protocol suit consists of _____ layers.

- 5.....confirm

Bandwidth in hertz is the range of _____ contained in a composite signal.

- Frequencies....confirm

_____ is an example of a host in a network.

- Computer

Set of rules to be followed for effective communication is called _____.

- Protocol

_____ is NOT an example of a connecting device.

- TCP

When an antenna transmits radio waves, they are propagated in _____.

- Only up and down direction

Which one of the following is not a bipolar encoding level?

- One

_____ and _____ are the two types of addressing in virtual circuit approach.

- Local, Global

In transmission implements _____ noise occurs from the effect of one wire on the other

- Cross talk...confirm

In computer network the stations are connected to each other in such a way that each station is connected to every other station through dedicated links. This makes _____.

- Bus

In scrambling coding scheme, the number of pulses replacing the bits will be _____?

- Equal to pulses.....confirm

In the context of analog to analog signal conversation technique. "PM" Stands for _____.

- Phase modulation

_____ relatively measurement the strength of two signals.

- Decibel

Datagram approach and circuit approach are two popular approaches which lead us to _____.

- Packet switching

In virtual circuit approach when frame enters a switch and when it leaves a switch its VCI always _____.

- Remain the Same

_____ means loss of energy in signal.

Attenuation

A local telephone network use _____ network.

Circuit switched

In Amplitude Shift Keying. _____ of the signal is/are changed.

- Amplitude

In frequency domain plot, which value is plot on Y-axis?

- Amplitude....confirm

In pulse code modulation the term sampling can also be referred as _____.

- Pulse Amplitude Modulation

In analog transmission of digital data, the required bandwidth is always proportional to the signal rate expect in _____ a digital to analog conversion technique.

- ASK

WDM stands for _____.

- Wavelength Division Multiplexing

_____ does not follows analog to analog conversion.

- QAM

On a communication link, different channels are separates by unused strips of bandwidth called as _____.

- Guard band

_____ layer converts frames coming from Data Link Layer into bits and sends

Them on the transmission medium.

- Physical

Wavelength binds the _____ of a simple sine wave to the propagation speed of the medium.

Period of the frequency

book page 61

The bandwidth delay product define the number of bits that can fill the _____.

Network

The size of the packet determined by the network and _____.

Governing protocol

To improve the performance of line coding _____ coding was.....?

- Block coding...confirm

Which one of the following is not a sampling technique?

- Neutral sampling

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

Hybrid transmission

In a computer network, five stations are connected to each other in such a way that each station is connected to every other station through dedicated links. This makes _____ topology.

Mesh...confirm

Some manufacturer provide a special port called the _____ port that allows a wireless keyboard to communicate with a PC.

- IrDA

Current technology supports _____ modes for propagation of light.

- Two

We quantize the sampling output into certain levels based on range of _____ and required accuracy.

- Amplitude....confirm

_____ is the Nyquist bit rate formula for noiseless channel.

- $BitRate = 2 * Bandwidth * \log_2 L$...confirm

A frequency is called _____, if the rate of change in sine wave is instantaneous.

- Infinite frequency book page 59

Which multiplexing technique involves signals composed of light beams?

- WDM....confirm

_____ is a multiplexing technique which shifts each signal to a different carrier frequency.

- FDM...confirm

Entire band in United States is regulated by _____ authorities.

- FCC

