

## IMPORTANT QUESTIONS

### DATA COMMUNICATION

Q1: Write a short note on Internet Security.

Q2: What is a firewall? Explain proxy firewall in detail.

Q3: Explain various classes of IP addressing. Where are class D and class E addressing used?

Q4: What is multiplexing? Differentiate statistical and synchronous TDM.

Q5: Draw and explain AT & T's hierarchy .

Q6: Describe the DS hierarchy .How are T lines related to D service?

Q7: Assume a data rate of 10110111. Draw the following line coding of data

Manchester, differential Manchester , Pseudorandom, Alternate mark inversion

Q8: Write a short note on

- (a) ISDN
- (b) PSTN

Q9: Describe briefly about the following in context with the ISDN network.

- (a) BRI & PRI
- (b) NT 1 & NT 2
- (c) TE 1 & TE2

Q10: Explain OSI model in detail. Differentiate between OSI & TCP/IP model.

Q 11: List the name of all synchronous & asynchronous protocols. What is the difference between bit oriented & byte oriented protocol.

Q12: Differentiate between synchronous & asynchronous modem.

Q13: Explain the need of modem synchronization in data communication.

Q14: What is the effect of limited bandwidth on digital signal.

Q15: Define and explain probability error rate.

Q16: Explain RS-232 in detail.

Q17:Construct the hamming code for the bit sequence 10011101.

Q18 :Given a remainder of 111, a data unit of 10110011 and a divisor 1001 ,is there any error in the data unit.

Q19: Describe in detail data communication circuit with block diagram.

Q20: Differentiate between ASK , FSK & PSK.

Q21: Draw and explain the DPSK transmitter & receiver.

Q22: Write a short note on clock recovery & carrier recovery.

Q23: How is QAM related to ASK and PSK.

Q24: Write a short note on centronics parallel interface .

Q25: What are the various data communication codes?