

ii) Explain phase modulation. [4]

b) Compare FDM and TDM. [8]

OR

Q4 a) Explain BPSK and QAM. Draw constellation diagram of it. [8]

b) Explain the concept of multiplexing. Explain TDM, FDM and WDM [8]

Q5 Write short notes on:

i) Unguided media [6]

ii) Virtual Circuit Network [6]

iii) Modem standards [6]

OR

Q6 a) Compare any two types of the guided transmission media. [6]

b) Explain ADSL modem. [6]

c) Explain structure of circuit switches. [6]

SECTION-II

Q7 a) What is HDLC? Explain with the help of its frame format. [8]

b) Explain any two sliding window protocol. [8]

OR

Q8 a) Explain error detection and error correction in block coding. [8]

b) Explain point-to-point protocol (ppp) [8]

Q9 a) Explain pure and slotted aloha [8]

b) Compare FDMA, TDMA and CDMA [8]

OR

Q10 a) Describe different controlled access protocol mentioned below in [8]

Short i) Reservation ii) Polling iii) Token passing

b) Describe gigabit Ethernet with reference to the following: [8]

i) MAC sublayer ii) Frame bursting iii) Topology

Q11 a) Draw and explain SONET layers in detail. [6]

b) Explain the terms: i) passive hubs ii) Active hubs iii) Repeaters [6]

c) Write short note on Bridges. [6]

OR

Q12 a) Write short note on “Backbone Network” [6]

b) Explain two-layer and three-layer switches. [6]

c) Discuss how an STS multiplexer is different from an add/drop [6]

multiplexer