L-1

Seat Number: - _____

Duration: 2 1/2Hrs H45A23CN Marks:- 75

Note:- 1) All questions are compulsory.
2) Figures to the right indicate maximum marks.

Q1. Attempt any "Four" of the following: (20)

1. How do bus and star topologies compare to each other? (CO1-A)
2. Draw and explain the layers of TCP/IP protocol suite. (CO1-A)
3. How would you define noise, and what are its types? (CO1-U)
4. Write a short note on IP. (CO1-U)
5. How would you define signal and what are its types? (CO1-U)
6. What is a network and what are the various types of networks? (CO1-U)

Q2. Attempt any "Four" of the following: (20)

1. How do serial and parallel transmission compare to each other? (CO1-U)
2. What is modulation and explain the types of analog to analog conversion (AM,PM,FM)? (CO1-U)
3. Define transmission media and explain its types. (CO1-U)
4. What is the difference between unicast, multicast and broadcast addresses? (CO1-U)
5. How do message, circuit and packet switching compare to each other? (CO1-A)
6. Explain the sampling theorem for low pass filters in detail? (CO1-A)

Q3. Attempt any "FOUR" of the following: (20)

1. What are the various types of transport protocols. (CO2-U)
2. Define routing and what are the different types of routing? (CO2-U)
3. What is broadcasting and what are the methods used for it? (CO2-R)
4. Provide a brief explanation of path vector routing. (CO2-U)
5. What are the duties of the transport layer explain them in detail? (CO2-U)
6. Draw and explain the UDP header format in detail. (CO2-A)

Q4. Attempt any "FIVE" of the following: (15)

1. WDM. (CO1 –R)
2. Broadband Transmission. (CO1-U)
3. HUB. (CO2-A)
4. Band width. (CO1-U)
5. FDMA . (CO2-U)
6. Routers. (CO2-A)