Max Marks: 50

Time:3 Hrs.

1. What is Open System Interconnection? CO1 K2 2

2. What is baud rate? CO2 K1 2

3. Define router. CO3 K4 2

4. Which transport layer feature is used to establish a connection-oriented session? CO4 K3 2

5. Differentiate between POP3 and IMAP. CO5 K4 2

SECTION-B(16 Marks)

6. Define topology and mention the types of topologies. CO1 K3 5

7. Explain Phase Modulation technique using graphical representation. CO2 K4 5

8. Illustrate the use of Hamming Code for Error detection and correction? CO6 K6 6

SECTION-C (24 Marks)8Marks each

9. Discuss about a) GO BACK N ARQ and b) Selective repeat ARQ. CO3 K4 8

10.

What is cryptography? Distinguish between symmetric and asymmetric key

cryptography.

CO4 K5 8

1. Define signals. CO1 K2 2

2. Which is faster between digital and analog data transmission? CO2 K1 2

3. Define ARQ. CO3 K4 2

4. What allows TCP to detect lost segments? CO4 K3 2

5. Explain the term WWW. CO5 K4 2

SECTION-B(16 Marks)

6. Differentiate between propagation delay and transmission delay. CO1 K3 5

7. Explain the terms Line Coding, Block Coding and Scrambling. CO2 K4 5

8. Compare FTP and SSH. CO6 K6 6

SECTION-C (24 Marks)8Marks each

9. Explain the protocols in Data link layer. CO3 K4 8

10. Explain the concept of Remote Procedure Calls in computer networks. CO4 K5 8

11.

How do you implement a leaky bucket algorithm for congestion control? Illustrate with

an example.

CO5 K5 8

1. Define switching. CO1 K2 2

2. What is the best modulation technique? CO2 K1 2

3. What is more difficult among error detection and error correction? Explain. CO3 K4 2

4. What are the responsibilities of network layer? CO4 K3 2

5. List the request methods used by HTTP. CO5 K4 2

SECTION-B(16 Marks)

6. Differentiate between Analog and Digital signals. CO1 K3 5

7. Explain Delta Modulation. CO2 K4 5

8. Explain various IEEE standards for LAN protocols. CO6 K6 6

SECTION-C (24 Marks)8Marks each

9.

Calculate the Cyclic Redundancy Code(CRC) for data word: 110010101 with Generator

= 10101.

CO3 K4 8

10. Discuss TCP-Window Management System? CO4 K5 8

11. Describe the three protocols used to deliver email over the Internet. CO5 K5 8