

ROLL No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total number of pages:[1]

B.Tech. || CSE || 4th Sem
Computer Networks-I
Subject Code: BTCS403A
Paper ID:

Time allowed: 3 Hrs

Max Marks: 60

Important Instructions:

- All questions are compulsory
- Assume any missing data

PART A (10x 2marks)

Q. 1. Short-Answer Questions:

- a) What is a Layered Architecture?
- b) What is packet switching?
- c) Differentiate between LAN and WAN.
- d) What is CSMA/CD?
- e) What is TCP/IP?
- f) What is WWW?
- g) What do you mean by Three-way Handshaking?
- h) What is the function of a Router? Why is it used in a LAN?
- i) What is a Nyquist Formula?
- j) What is the difference between Broadcasting and Multicasting?

PART B (5×8marks)

- Q. 2. Differentiate between TCP/IP model and OSI model. CO 1
OR
Explain the functions of various layers of OSI model. CO 1
- Q. 3. Explain Selective Repeat ARQ Data Link layer protocol CO 2
OR
Explain Go-Back-N Data Link Protocol. Why is it used? CO 2
- Q. 4. Differentiate between Distance vector and Link state routing algorithms. CO 3
OR
What is Congestion Control? Explain Leaky bucket algorithm. CO 3
- Q. 5. Explain various design issues of Network layer. CO 4
OR
What is Error Detection and Correction? Explain in detail the Hamming error correction method. Also find the CRC using a polynomial, P : 110011 ,for a given data, M: 11100011 CO 4
- Q. 6. Write short notes on need of Network Security. CO 5
OR
Write short notes on Domain Name System (DNS) and FTP CO 5