



MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

III B.Tech I Sem Supply End Examination, August 2022

Computer Networks

(CSE)

Time: 3 Hours.**Max. Marks: 70**

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part – A, answer all questions which carries 20 marks.

3. In Part – B, answer any one question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

PART- A**(10*2 Marks = 20 Marks)**

- | | | | | |
|-------|---|----|-----|-----|
| 1. a) | What are the applications of Internet? | 2M | C01 | BL1 |
| b) | List out the different guided transmission media used in computer networks? | 2M | C01 | BL1 |
| c) | What are the issues in data link layer? | 2M | C02 | BL1 |
| d) | Enumerate the difference between error correction and error detection? | 2M | C02 | BL3 |
| e) | Classify the network routing algorithms? | 2M | C03 | BL2 |
| f) | Why does congestion occur in networks? | 2M | C03 | BL1 |
| g) | What is the need of transport layer? | 2M | C04 | BL1 |
| h) | Why user datagram protocol is connection less? | 2M | C04 | BL1 |
| i) | What is WWW? | 2M | C05 | BL1 |
| j) | What is the role of DNS in the operation of Internet? | 2M | C05 | BL1 |

PART- B**(10*5 Marks = 50 Marks)**

- | | | | | |
|------|---|----|-----|-----|
| 2 a) | Describe wireless transmission media? | 5M | C01 | BL2 |
| b) | Explain the various components(both hardware and software) used in computer networks? | 5M | C01 | BL4 |

OR

- | | | | | |
|------|---|-----|-----|-----|
| 3 | Illustrate TCP/IP reference model with a neat diagram? | 10M | C01 | BL4 |
| 4 a) | Explain the dynamic channel allocation in LANs and MANs? | 5M | C02 | BL4 |
| b) | Explain the working of sliding window protocol using go-back-N? | 5M | C02 | BL4 |

OR

- | | | | | |
|---|---|-----|-----|-----|
| 5 | In detail, explain the various ALOHA protocols? | 10M | C02 | BL4 |
|---|---|-----|-----|-----|

- 6 a) Briefly explain the features of network layer in the Internet? 5M C03 BL4
b) Elaborate the general principles of congestion control? 5M C03 BL5
- OR**
- 7 Using an example network diagram, explain distance vector routing algorithm? 10M C03 BL4
- 8 a) Explain the connection establishment and release mechanisms in transport layer? 5M C04 BL4
b) Draw and explain the header format for a transmission control protocol. 5M C04 BL4
- OR**
- 9 What are the elements of transport protocols? Compare TCP with UDP? 10M C04 BL1
- 10 a) Describe the working of name servers in domain name system? 5M C05 BL2
b) Explain the video compression techniques? 5M C05 BL4
- OR**
- 11 With a neat block diagram, explain the components in the architecture of an electronic mail system? 10M C05 BL4

---oo0oo---