



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, December 2022

Data Communication and Computer Networks

(IT)

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)**

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| 1. a) List Different Types of Topologies. | 2M | C01 | BL1 |
| b) Define Multiplexing | 2M | C01 | BL1 |
| c) Define Framing | 2M | C02 | BL1 |
| d) Write a short note on error correction | 2M | C02 | BL1 |
| e) Define Tunneling | 2M | C03 | BL1 |
| f) List Uni-Cast Routing Protocols | 2M | C03 | BL1 |
| g) Define Congestion | 2M | C04 | BL1 |
| h) Differentiate Between TCP and UDP Protocols | 2M | C04 | BL1 |
| i) Explain File Transfer Protocol | 2M | C05 | BL4 |
| j) Explain the Working Mechanism of Electronic Mail | 2M | C05 | BL4 |

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

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| 2 a) Explain ISO/OSI Model with Neat Diagram | 5M | C01 | BL4 |
| b) Explain briefly about Transmission modes | 5M | C01 | BL4 |

OR

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| 3 a) Explain Different Datagram Networks | 5M | C01 | BL4 |
| b) Explain briefly about different types of Switching Techniques | 5M | C01 | BL4 |

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| 4 a) Explain CRC with example | 5M | C02 | BL4 |
| b) Explain about Flow control and error control | 5M | C02 | BL4 |

OR

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| 5 a) Explain about CSMA/CD with neat Diagram | 5M | C02 | BL4 |
| b) Explain the Architecture of IEEE 802.3 | 5M | C02 | BL4 |

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|-----------|--|----|-----|-----|
| 6 | a) Explain Different Multicast Routing Protocols. | 5M | C03 | BL4 |
| | b) Explain Different Addressing Mapping Techniques | 5M | C03 | BL4 |
| OR | | | | |
| 7 | a) Explain Logical Addressing with an Example | 5M | C03 | BL4 |
| | b) Differentiate Between IGMP and ICMP | 5M | C03 | BL2 |
| 8 | a) Explain about TCP with its architecture | 5M | C04 | BL4 |
| | b) Differentiate Between Integrated Services and Differentiated Services | 5M | C04 | BL2 |
| OR | | | | |
| 9 | a) Explain Different Congestion Control Techniques | 5M | C04 | BL4 |
| | b) Explain QoS in Switched Networks | 5M | C04 | BL4 |
| 10 | a) Explain about Domain Name Space with a diagram and DNS in Internet | 5M | C05 | BL4 |
| | b) Write a Brief Note on: | 5M | C05 | BL1 |
| | i. HTTP | | | |
| | ii. WWW | | | |
| OR | | | | |
| 11 | a) Explain Domain Name Space With an Example | 5M | C05 | BL4 |
| | b) Explain DNS in Ethernet | 5M | C05 | BL4 |

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CO - Course Outcome

BL - Blooms Taxonomy Levels