



II B.Tech I Sem Regular End Examination, February-2022

Computer Networks**(CSC)****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) | Name the four basic network topologies, and cite an advantage of each type? | 2M | CO1 | BL1 |
| b) | What is the difference between a port address, a logical address, and a physical address? | 2M | CO1 | BL1 |
| c) | What is cyclic redundancy check (CRC)? | 2M | CO2 | BL1 |
| d) | What is IEEE 802.3? | 2M | CO2 | BL1 |
| e) | Justify Internetwork. | 2M | CO3 | BL1 |
| f) | Give the need of ICMP protocol. | 2M | CO3 | BL1 |
| g) | Describe TCP segment. | 2M | CO4 | BL1 |
| h) | What is congestion control? | 2M | CO4 | BL1 |
| i) | What is DNS service? | 2M | CO5 | BL1 |
| j) | Discuss SMTP. | 2M | CO5 | BL1 |

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

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|-------|---|----|-----|-----|
| 2. a) | Enumerate the differences between OSI model and TCP/IP model? | 5M | CO1 | BL5 |
| b) | Explain the different types of transmission modes? | 5M | CO1 | BL4 |

OR

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|-------|--|-----|-----|-----|
| 3. | What is multiplexing? Explain the different types of multiplexing techniques? What are circuit switched networks? Explain its working? | 10M | CO1 | BL4 |
| 4. a) | Define error detection and describe the several common techniques of achieving it? | 5M | CO2 | BL2 |
| b) | Discuss about data link layer in HDLC? | 5M | CO2 | BL2 |

OR

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|----|--|-----|-----|-----|
| 5. | Explain the carrier sense multiple access protocols? | 10M | CO2 | BL4 |
|----|--|-----|-----|-----|

- 6 a) Describe the strategies of transition from IPv4 to IPv6? 5M C03 BL2
b) Explain the working of IGMP protocol? 5M C03 BL4
- OR**
- 7 With an example network, explain the Distance Vector routing algorithm? 10M C03 BL4
- 8 a) Explain the services provided by transport layer? 5M C04 BL4
b) Discuss about congestion control in transport layer? 5M C04 BL2
- OR**
- 9 Explain the features, services and operation of UDP? 10M C04 BL4
- 10 a) Discuss the working of domain naming system? 5M C05 BL2
b) Write short notes on file transfer protocol(FTP)? 5M C05 BL1
- OR**
- 11 In detail, explain the working of simple network management protocol(SNMP)? 10M C05 BL4

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