

B.Tech III Year II Semester (R20) Regular Examinations August 2023

COMMUNICATION NETWORKS

(Electronics & Communication Engineering)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- | | |
|--|----|
| (a) What do you mean by protocol layering? | 2M |
| (b) What is topology? | 2M |
| (c) What is the significance of Data link layer? | 2M |
| (d) Write about stop and wait ARQ. | 2M |
| (e) What is need of multicast routing? | 2M |
| (f) What is token ring? | 2M |
| (g) Define the term IPv6 and its advantages. | 2M |
| (h) What is an addressing and routing? | 2M |
| (i) What is Domain Name System (DNS)? | 2M |
| (j) What is a peer to peer network? | 2M |

PART – B

(Answer all the questions: 05 X 10 = 50 Marks)

- | | | |
|-----------|--|-----|
| 2 | Explain in detail about error detection and correction codes. | 10M |
| OR | | |
| 3 | (a) Write the advantages of packet switching in Networks. | 5M |
| | (b) Explain about DTE – DCE interface. | 5M |
| 4 | Explain the following: | |
| | (i) Sliding Window protocol. | 5M |
| | (ii) HDLC. | 5M |
| OR | | |
| 5 | Explain the details about the point -to- point Access. | 10M |
| 6 | (a) Explain various classes of IEEE 802.X Standard Ethernet. | 5M |
| | (b) Explain the advantages of wireless LANS. | 5M |
| OR | | |
| 7 | (a) What is the significance of Bridges? Explain the different types of Bridges. | 5M |
| | (b) Explain the working of CSMA Protocol. | 5M |
| 8 | (a) With an example explain the shortest path routing algorithms used in computer networks. | 5M |
| | (b) What are the general principles of congestion control? Explain. | 5M |
| OR | | |
| 9 | (a) With an example explain the Flooding, Hierarchical routing algorithms used in computer networks. | 5M |
| | (b) Explain about ICMP. | 5M |
| 10 | Write short notes on the following: | |
| | (a) DNS. | 5M |
| | (b) HTTP. | 5M |
| OR | | |
| 11 | Write short notes on the following: | |
| | (a) UDP. | 5M |
| | (b) WWW. | 5M |

B.Tech III Year II Semester (R20) Supplementary Examinations January 2024

COMMUNICATION NETWORKS

(Electronics & Communication Engineering)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- | | |
|--|----|
| (a) What do you understand by Digital data transmission? | 2M |
| (b) Explain about DTE-DCE interface | 2M |
| (c) What is the importance of Sliding window Protocol? | 2M |
| (d) What is PPP Stack? | 2M |
| (e) What are repeaters? | 2M |
| (f) What is Token Bus? | 2M |
| (g) Explain about Subnet. | 2M |
| (h) What is the need for congestion control? | 2M |
| (i) Expand HTTP and WWW? | 2M |
| (j) Explain about Socket Interface? | 2M |

PART – B

(Answer all the questions: 05 X 10 = 50 Marks)

- | | | |
|-----------|--|-----|
| 2 | (a) Explain the evaluation and types of Networks. | 5M |
| | (b) Explain any one of the error detection method in brief. | 5M |
| OR | | |
| 3 | Discuss the layering principles of ISO - OSI model of Communication Networks | 10M |
| 4 | Explain the following :
(i) HDLC,
(ii) Flow and Error Control. | 10M |
| OR | | |
| 5 | Explain the following :
(i) Stop – and - Wait ARQ,
(ii) Go – Back – N ARQ. | 10M |
| 6 | (a) Explain about Channelization. | 5M |
| | (b) Explain various classes of IEEE 802.X Standard Ethernet. | 5M |
| OR | | |
| 7 | (a) Explain the working of CSMA Protocol | 5M |
| | (b) Explain the advantages of wireless LANS. | 5M |
| 8 | Explain about Network layer Protocols. | 10M |
| OR | | |
| 9 | Explain about IP addressing. | 10M |
| 10 | (a) Write about Electronic mail in detail. | 5M |
| | (b) Discuss about the header format of UDP. | 5M |
| OR | | |
| 11 | Write short notes on the following:
(i) DNS. (ii) FTP. | 10M |
