1503240319

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, NOVEMBER – 2024

COMPUTER NETWORKS

[Maximum Marks : 100]   [Time : 3 hours]

PART – A
(Maximum Marks : 10)

I.   Answer **all** questions in one or two sentences. Each question carries 2 marks.

1. Define Ethernet.

2. List any two delays in a network.

3. Define socket address.

4. Name the components of URL.

5. Define proxy server.   (5x2=10)

PART – B
(Maximum Marks : 30)

II.   Answer any **five** of the following questions. Each question carries 6 marks.

1. Explain any two network topologies.

2. Describe the addressing used in various layers of TCP/IP protocol suite.

3. Explain any two network layer services.

4. Distinguish between unicasting and multicasting.

5. Explain flow control in transport layer.

6. Summarize the applications of user Datagram Protocol.

7. Describe the architecture of World Wide Web.

                                                                                                      (5x6=30)

PART – C
(Maximum Marks : 60)
(Answer **one full** question from each unit. Each full question carries 15 marks)

UNIT – I

III. (a) Explain TCP/IP protocol suite with a neat diagram. (8)

     (b) Describe the frame format of standard Ethernet. (7)

OR

IV. (a) Explain IEEE Project 802. (8)

     (b) Compare the architecture of Wired LAN and Wireless LAN. (7)

UNIT – II

V. (a) Explain Classless Addressing. (8)

     (b) Explain Distance-Vector Routing Algorithm. (7)

OR

VI. (a) Explain closed loop congestion control policies. (8)

     (b) Explain IPV4 datagram format. (7)

UNIT –III

VII. (a) Describe the different services provided by the transport layer. (8)

     (b) With a neat diagram explain TCP segment format. (7)

OR

VIII. (a) Explain Connection Establishment Process in TCP. (8)

     (b) Explain Stream Control Transmission Protocol. (7)

UNIT – IV

IX. (a) Explain Hyper Text Transfer Protocol. (8)

     (b) Describe File Transfer Protocol. (7)

OR

X. (a) Explain the E-MAIL architecture. (8)

     (b) Explain briefly on TELNET. (7)

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