TED (15) 5151

(Revision-2015)

N21-06824

Reg.No............................

Signature.........................

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, NOVEMBER-2021

COMPUTER NETWORKS

[Maximum marks: 75]   (Time: 2.15 Hours)

PART – A

I (Answer any *three* questions in one or two sentences. Each question carries 2 marks)

1. Name any two LAN technologies.

2. Give two versions of IP protocol, how IP address is different in two versions.

3. Give any two application of UDP.

4. List the importance of DNS.

5. Write the expansion for SMTP, identify the layer in which this protocol works.   (3 x 2 = 6)

PART – B

II (Answer any *four* of the following questions. Each question carries 6 marks)

1. Define the functions of any two LAN connecting devices.

2. Illustrate IEEE 802.11 architecture.

3. Explain Routing and forwarding in network layer.

4. Define DHCP.

5. Explain Stop and wait protocol.

6. Explain the functions of TELNET protocol.

7. Describe HTTP.   (4 x 6= 24)

PART – C

(Answer *any of the three units* from the following. Each full question carries 15 marks)

UNIT –I

III. (a) Explain any three network topologies with diagram.   (9)

   (b) Describe standard Ethernet with frame format.   (6)

OR

IV.(a) Explain the layers in TCP/IP protocol suit.   (7)

1

(b) Explain virtual LAN with its architecture. (8)

UNIT-II

V. (a) Differentiate unicasting, multicasting and broadcasting. (6)

(b) Explain distance vector algorithm with example. (9)

OR

VI.(a) Describe IPV4 addresses (6)

(b) Explain IP datagram format in detail. (9)

UNIT-III

VII.(a) Briefly explain SCTP services. (7)

(b) Compare TCP and UDP. (8)

OR

VIII.(a) Explain services of transport layer in a network. (9)

(b) Compare Go Back N and selective repeat protocols. (6)

UNIT-IV

IX. (a) Explain email with architecture. (10)

(b) Briefly explain DNS messages. (5)

OR

X. (a) Explain control connections and data connections of FTP. (8)

(b) Discuss the services of application layer. (7)

****