TED (15) – 6131

(REVISION — 2015)

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2019

COMPUTER NETWORKS

[*Time* : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

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

1. Define topology of network.

2. What is routing ?

3. Mention the purpose of SCTP.

4. List any two transport layer protocols.

5. Define SMTP.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Define Virtual LAN and State its advantages.

2. Explain Standard Ethernet and Fast Ethernet.

3. Describe distance-vector routing algorithm.

4. Describe IPv4 address.

5. Describe Port numbers of Transport Layer.

6. Explain the URL.

7. Compare POP and IMAP.

(5×6 = 30)

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[P.T.O.

Marks

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

III (a) Explain the Layers in the TCP/IP Protocol Suite with diagram.   8

    (b) Explain about the Connecting devices that can operate in different layers of the Internet model.   7

OR

IV   Compare the architecture of wired and wireless LANs.   15

UNIT — II

V (a) Explain Internet Protocol.   7

    (b) Describe Class full Addressing of IPV4   8

OR

VI (a) Describe the methods used to measure the performance of a network.   9

    (b) Explain how we can improve the performance of a network.   6

UNIT — III

VII (a) Explain User Datagram Protocols and its applications.   9

    (b) Explain flow control in Transport Layer.   6

OR

VIII (a) Describe the services offered by TCP to the processes at the application layer.   6

    (b) Explain stop and wait protocol with diagram.   9

UNIT — IV

IX (a) What is electronic mail ? Describe the process of transferring mail messages.   7

    (b) Explain about the FTP protocol.   8

OR

X (a) Explain about the architecture of WWW.   8

    (b) Describe the purpose of the DNS with diagram.   7

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