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

COMPUTER NETWORK

[*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 Protocol and what are the key elements.

2. Name any two Media Access Control Mechanism on LAN.

3. Name two services of network layer.

4. Define Subnet.

5. Define Flooding.   (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain dissimilarities between ISO-OSI and TCP/IP Protocol stack ?

2. Explain different topology.

3. Explain packetizing of network layers.

4. Differentiate between unicasting broad casting and multi casting.

5. Describe User Datagram Protocol.

6. Describe SCTP Protocol.

7. Explain architecture of world wide web.   (5×6 = 30)

[157]   [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) Which is the medium access control mechanism in Ethernet ? Explain its working.   10

    (b) Explain features and specification of Gigabyte Ethernet.   5

OR

IV (a) Explain the difference between Hub and Switch.   10

    (b) Explain frame format of IEEE802.11 wireless LAN.   5

UNIT — II

V (a) Explain the use of DHCP protocol.   5

    (b) Explain different class of IP Address.   10

OR

VI (a) Explain Link state routing algorithm.   10

    (b) Define the loop back address.   5

UNIT — III

VII (a) Explain different congestion control mechanism.   10

    (b) Define Stop and wait protocol, list its limitation.   5

OR

VIII (a) Explain the different TCP services.   10

    (b) Define the Go back-N, protocol, list its properties.   5

UNIT — IV

IX (a) Explain different URL identities.   8

    (b) Explain Telnet.   7

OR

X Writes notes on :

    (i) SMTP   (ii) FTP   (iii) DNS   15