TED (10) – 4075

Reg. No ....

(REVISION — 2010)

Signature ....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

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. What is a computer network ?

2. Define a subnet.

3. What is DNS ?

4. What is a bridge ?

5. What is piconet ?   (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain the different types of Ethernet cabling.

2. What is framing ? Explain the bit stuffing method.

3. Explain the header structure of IPv4.

4. What is multicast routing ?

5. Explain the need of multiplexing in the transport layer.

6. Differentiate MACA and MACAW.

7. Compare the protocols TCP and UDP.   (5×6 = 30)

[306]

[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 ISO-OSI reference model in detail.   8

      (b)   Explain about static and dynamic channel allocation.   7

OR

IV   (a)   Write notes on :

         (i)   Switched Ethernet

         (ii)   Fast Ethernet   8

      (b)   Discuss about the collision free protocol in CSMA.   7

UNIT — II

V   Explain the different IP addressing modes.   15

OR

VI   (a)   Explain the techniques for achieving good quality of service.   8

      (b)   Compare virtual circuit with diagram subnets.   7

UNIT — III

VII   Explain the elements of transport layer protocol.   15

OR

VIII   What is an e-mail ? Explain the e-mail architecture and services.   15

UNIT — IV

IX   Explain in detail the bluetooth protocol.   15

OR

X   Write notes on the following :

    (i) Router   (ii) Switches   (iii) Gateways   15