

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 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. Give the use of IEEE 802.11.
2. What is Tunneling ?
3. What do you mean by session routing ?
4. What is DNS ?
5. State the need of a switch.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain the features of point to point protocol.
2. Explain CSMA protocols.
3. Compare Virtual Circuit subnet and datagram subnet.
4. Explain the header structure of IPV4.
5. Describe MIME.
6. Explain the functions supported by e-mail system.
7. Explain 802.16 protocol stack.

(5×6 = 30)

## PART — C

(Maximum marks : 60)

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

## UNIT — I

- III (a) Differentiate between pure ALOHA and slotted ALOHA. 8  
 (b) Explain briefly about collision free protocols. 7

OR

- IV (a) Give a brief description of IEEE standard for LAN 802.3. 8  
 (b) Explain briefly about ATM reference model. 7

## UNIT — II

- V (a) Explain Distance Vector routing. 8  
 (b) Describe briefly about mobile IP. 7

OR

- VI (a) Explain different classes of IP address. 8  
 (b) Explain flooding. 7

## UNIT — III

- VII (a) Explain the way to establish a connection in transport layer. 8  
 (b) Explain buffering technique used in transport layer. 7

OR

- VIII (a) Explain briefly about crash recovery. 8  
 (b) Describe RFC 822 header field. 7

## UNIT — IV

- IX (a) Explain MAC sublayer protocols. 8  
 (b) Explain Blue tooth architecture. 7

OR

- X (a) Explain any four commonly used protocols. 8  
 (b) Explain virtual LAN. 7