TED (15) – 5151

(REVISION — 2015)

Reg. No. .....

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. Name four network topologies.
2. Define ICMP.
3. Difference between ARP and RARP.
4. Define SCTP.
5. Define FQDN. (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Differentiate port address, logical address and physical address.
2. Explain hidden terminal and exposed terminal problem.
3. Describe the different forwarding techniques.
4. Explain the different classes of IPv4 addresses.
5. Explain SYN Flooding attack.
6. Explain URL and its components.
7. Difference between POP3 and IMAP4. (5×6 = 30)

Marks

PART — C

(Maximum marks : 60)

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

Unit — I

III (a) Explain TCP/IP Protocol suite. 8

(b) Explain the different categories of Standard Ethernet. 7

Or

IV (a) Explain the different categories of network connecting devices. 8

(b) Explain the architecture of IEEE 802.11. 7

Unit — II

V (a) Explain two intra domain routing protocols. 8

(b) Explain the structure of IPV4 header. 7

Or

VI (a) Difference between classful addressing and classless addressing in IPv4. 10

(b) Explain the network layer services. 5

Unit — III

VII (a) Explain the three way handshaking in TCP. 10

(b) Mention the uses of UDP. 5

Or

VIII (a) Compare TCP, UDP and SCTP. 7

(b) Explain the sliding window protocol used in TCP. 8

Unit — IV

IX (a) Explain DNS. 8

(b) Describe the tasks of a user agent in Electronic mail. 7

Or

X (a) Explain SMTP. 8

(b) Explain the architecture of WWW. 7