TED (15) – 5151

(REVISION — 2015)

Reg. No..................................

Signature ....

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. What is the access method used by wireless LAN ?

2. Define Subneting.

3. List any two network layer services.

4. Specify which protocol (TCP/UDP) is used for

   (a) A File transferring   (b) Video streaming

5. What are the three main division of the domain name space ?   (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain with a neat diagram the frame format of Ethernet.

2. What is DHCP ?

3. Write notes on class full and classless addressing.

4. Give the comparison between Go back N and Selective Repeat protocol.

5. Compare TCP and UDP.

6. Explain POP3.

7. Write notes on TELNET.   (5×6 = 30)

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PART — C

(Maximum marks : 60)

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

Unit — I

15

III Give detailed description of TCP/IP and its Architecture.

Or

IV (a) Identify the features and functions of the following network connecting devices.

9

    (i) Hub   (ii) Switches   (iii) Routers

6

   (b) Write notes on BSS and ESS in wireless LANS.

Unit — II

9

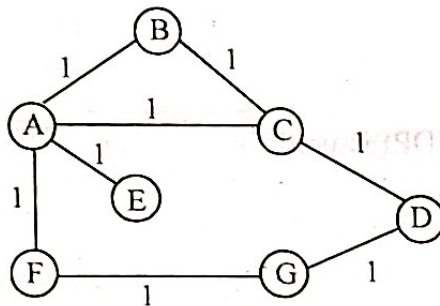V (a) With neat diagram explain IPV 4 Datagram format.

6

   (b) Compare unicasting, multicasting and broadcasting.

Or

VI Explain the concept of Distance Vector Algorithm. By applying the algorithm find the Routing table maintained at node B.

15.

Unit — III

VII (a) Explain the three-way handshake process used by TCP to establish a virtual circuit.

8

   (b) Summarize SCTP Services.

7

Or

VIII (a) With a neat diagram, explain UDP datagram and uses of UDP.

9

   (b) Both the TCP and UDP protocols use port numbers. What are these port numbers used for and what is meant by the term well-known port ? Give an example of a well-known port.

6

Unit — IV

IX (a) Explain control and data connection in FTP.

7

   (b) Give a brief description of DNS operation.

8

Or

X (a) Explain the architecture and services of Electronic Mail.

9

   (b) Explain the concept of WWW.

6