

TED (15) 6131  
(Revision-2015)

**N20-01390**

Reg.No.....  
Signature.....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER-2020

**COMPUTER NETWORKS**

[Maximum marks: 75]

(Time: 2.15 Hours)

**PART – A**

I. Answer any *three* questions in one or two sentences. Each question carries 2 marks

1. List the layers in TCP/IP protocol suite.
2. Explain the uses of ARP.
3. Explain port address.
4. What are segments in TCP layer?
5. What is Network Virtual Terminal in Telnet service?

(3 x 2 = 6)

**PART – B**

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

1. Explain any three LAN connecting devices in detail.
2. Describe VLANS.
3. Explain classless addressing.
4. Explain user datagram protocol(UDP).
5. Explain 10Base5,10Base2, 10BaseT Ethernet.
6. Describe the implementation of E-mail system using SMTP.

(4 x 6= 24)

**PART – C**

Answer *any of the three units* from the following. Each full question carries 15 marks

**UNIT –I**

- III. (a) Describe about the responsibilities of Data Link Layer. (8)  
(b) Explain classful addressing. (7)

**OR**

- IV.(a) Explain Hidden station problem and Exposed station problems (8)

(b) Explain ESS,BSS,AP in 802.11 standard. (7)

**UNIT-II**

- V. (a) Explain IPV4 datagram format in detail. (8)  
(b) Explain Distance vector routing (7)

**OR**

- VI. (a) Explain Path vector Routing. (7)  
(b) Explain Multicast Routing protocols. (8)

**UNIT-III**

- VII. (a) Explain TCP segment format in detail. (7)  
(b) Explain three-way handshaking process in TCP connection establishment. (8)

**OR**

- VIII. (a) Explain stop and wait, Go back N protocols in TCP layer (8)  
(b) Explain SCTP protocol in TCP Layer (7)

**UNIT-IV**

- IX. (a) Explain DNS service in application layer. (8)  
(b) Explain Telnet service. (7)

**OR**

- X. (a) Describe FTP (7)  
(b) Explain architecture of WWW and web documents. (8)

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