

TED (15)-6131  
(Revision-2015)

**N21-02542**

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

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE –NOVEMBER -2021.

**COMPUTER NETWORKS**

(Maximum Marks : 75)

[Time : 2.15 hours]

**PART-A**

Marks

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

1. Define computer network.
2. List any two network architectures.
3. What is subnetting.
4. What is pushing.
5. What is WWW?

[3x2=6]

**PART - B**

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

1. Briefly explain different types of network.
2. Explain the architecture of virtual LAN.
3. List the mechanisms used in closed loop congestion control system.
4. Differentiate unicasting, multicasting and broadcasting.
5. What is user datagram? Explain its packet format with a neat figure.
6. Briefly explain the HTTP request message format.
7. Explain the phases of transferring a mail.

[4x6 =24]

## PART - C

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

### UNIT I

- III** (a) Explain TCP/IP protocol suite with neat diagram. (9)  
(b) Describe any 3 Ethernet implementations. (6)

### OR

- IV** (a) Compare the architecture of wired and wireless LAN (9)  
(b) Explain the characteristics of wireless LAN (6)

### UNIT- II

- V** (a) Explain the factors affecting network layer performance. (9)  
(b) Define pen loop congestion control and list the policies used to prevent this congestion (6)

### OR

- VI** (a) Explain classful Addressing (9)  
(b) Explain Link state algorithm. (6)

### UNIT- III

- VII** (a) Explain transport layer services. (10)  
(b) Explain Connection less service in Transport layer. (5)

### OR

- VIII** (a) Explain Go Back-N protocol. (9)  
(b) Draw the format of a TCP segment and briefly explain. (6)

### UNIT-IV

- IX** (a) Explain the architecture of Electronic mail. (9)  
(b) Briefly explain URL and its components. (6)

### OR

- X** (a) What are the steps needed to map host name to an IP address?  
Explain with a neat diagram. (8)  
(b) Explain resolution and its types. (7)

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