

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER - 2024**

COMPUTER NETWORK - I

[Maximum Marks : 75]

[Time : 3 hours]

PART-A

I. Answer **all** the following questions in one word or sentence. Each question carries 1 mark.

(9x1=9 marks)

		Module Outcome	Cognitive level
1	List different data representation forms.	M1.02	R
2	Define Computer Network.	M1.04	R
3	Define Bandwidth.	M2.02	R
4	Write any two multiplexing methods.	M2.06	R
5	Expand PCM.	M2.05	R
6	State whether the following statement is True or False. Optical fiber cables are used as guided as well as unguided media for communication.	M3.01	R
7	List any two switching methods.	M3.04	R
8is an example for Application layer Protocol.	M4.05	R
9	TCP/IP is a connection oriented protocol. Is it True or False?	M4.02	R

PART B

II. Answer **any Eight** questions from the following. Each question carries 3 marks.

(8x3=24 marks)

		Module Outcome	Cognitive level
1	What are the components in a data communication System?	M1.01	U
2	Define LAN, WAN and MAN.	M1.07	R
3	Differentiate between Analog and Digital signals.	M2.01	U
4	Write short notes on transmission impairments.	M2.03	U
5	Define Transmission media and list different types of transmission media.	M3.01	U
6	Define a Switch. Write two examples of Circuit Switches.	M3.06	R
7	Explain data gram switching network.	M3.04	U
8	List any three Application layer protocols.	M4.05	R
9	Draw the architecture of OSI reference model.	M4.01	U
10	Define IP addressing. What are the different types of IP addressing?	M4.06	R

PART C

Answer **all** questions from the following. Each question carries 7 marks.

(6x7=42marks)

		Module Outcome	Cognitive level
III	Explain Different Data flow methods. OR	M1.03	U
IV	Define Networks and its different attributes.	M1.05	U
V	(a) Define the terms Phase, time and frequency domains. (3 Marks) (b) Differentiate Analog and Digital Data. (4 Marks) OR	M2.02 M2.01	R R
VI	Explain Transmission modes.	M2.04	U
VII	Explain Time Division Multiplexing. OR	M2.06	U
VIII	(a) Define Multiplexing. (2 Marks) (b) List the Advantages of Multiplexing. (5 Marks)	M2.06 M2.06	R R
IX	Explain any two unguided media used for data transmission. OR	M3.02	U
X	Describe Circuit Switched Networks	M3.03	U
XI	(a) Draw the architecture of TCP model. (3 Marks) (b) Explain the physical layer and Application layer of OSI model. (4 Marks) OR	M4.02 M4.01	U U
XII	Write short notes on (a) ICMP (b) ARP (c) HTTP	M4.04 M4.04 M4.05	U U U
XIII	Explain the protocol UDP. OR	M4.02	U
XIV	Differentiate between Classful and Classless Addressing.	M4.06	U
