

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2023**

COMPUTER NETWORKS - I

[Maximum Marks: 75]

[Time: 3 Hours]

PART-A

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

(9 x 1 = 9 Marks)

		Module Outcome	Cognitive level
1.	Define data communication.	M3.01	R
2.	List any one advantage of star topology.	M1.04	R
3.	Define bit length.	M2.03	R
4.	Mention any one analog to analog modulation schemes.	M2.05	R
5.	Define Datagram.	M3.04	R
6.	State True or False: Radio waves are used in guided medium.	M3.02	U
7.	ARP is used inLayer.	M4.04	R
8.	Define analog data.	M2.01	R
9.	SMTP stands for.....	M4.05	R

PART-B

II. Answer any *eight* questions from the following. Each question carries ‘three’ marks.

(8 x 3 = 24 Marks)

		Module Outcome	Cognitive level
1.	Explain different data flow methods.	M1.01	U
2.	Discuss about network attributes.	M1.05	U
3.	Describe ASK.	M2.05	U
4.	Define Peak Amplitude, Phase and Wavelength.	M2.02	R
5.	Discuss ground wave propagation method.	M3.02	U
6.	Differentiate circuit switching and packet switching.	M3.04	U
7.	Explain TCP.	M4.02	U
8.	Define the key elements of protocol.	M4.01	R
9.	Explain about baseband transmission.	M2.03	U
10.	Compare LAN and WAN.	M1.06	U

PART-C

Answer all questions from the following. Each question carries 'seven' marks

(6 x 7 = 42 Marks)

		Module Outcome	Cognitive level
III.	Explain the components of data communication system with a neat sketch.	M1.01	U
	OR		
IV.	Explain star and ring topologies.	M1.04	U
V.	Explain the components of packet switch.	M3.05	U
	OR		
VI.	Describe about twisted pair cables.	M3.01	U
VII.	Explain about Frequency Division Multiplexing.	M2.06	U
	OR		
VIII.	Discuss about transmission impairments.	M2.03	U
IX.	Compare ISO OSI and TCP/IP model.	M4.01	U
	OR		
X.	Briefly discuss about the classes in IPv4 addresses.	M4.06	U
XI.	Discuss about IGMP and ARP.	M4.04	U
	OR		
XII.	Explain the functions of data link layer and transport layer of ISO OSI model.	M4.01	U
XIII.	Briefly explain datagram networks.	M3.04	U
	OR		
XIV.	Discuss about infrared waves.	M3.02	U
