



TED (21) 4132  
(Revision-2021)

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Reg.No.....

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**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, APRIL - 2023**

**COMPUTER COMMUNICATION AND NETWORKS**

[Maximum marks: 75]

(Time: 3 Hours)

**PART A**

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

**(9 x 1 = 9 Marks)**

		Module outcome	Cognitive level
1	List the components in a data communication system.	M1.01	R
2	..... number of channels required to connect ‘n-nodes’ in a mesh topology.	M1.02	U
3	List any two data link layer services.	M2.03	R
4	Define the term distortion in communication systems	M2.01	R
5	State True or False. Reliable file transfer applications uses TCP-based services.	M3.05	U
6	An IPv4 address contains ..... address and ..... address.	M3.01	R
7	The addressing scheme used in transport layer is called.....	M3.04	R
8	SMTP stands for.....	M4.03	R
9	.....is the data port number used in FTP	M4.03	R

**PART B**

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

**(8 x 3 = 24 Marks)**

		Module outcome	Cognitive level
1	Write different data flow methods with examples.	M1.01	U
2	Write the advantages of the layered approach model in network designing	M1.03	U
3	Write a note on different types of transmission impairments.	M2.01	U
4	Differentiate Analog and Digital data.	M2.01	U
5	Define framing.	M2.04	U
6	List the services offered by network layer.	M3.01	U
7	Write a note on IPv6 addressing	M3.02	U
8	List the name and usage of any three application layer protocols	M4.01	U
9	List the SSH components.	M4.03	U
10	Define URL and the components of a URL.	M4.03	U



**PART C**

**Answer all questions. Each question carries seven marks**

**(6 x 7 = 42 Marks)**

		<b>Module outcome</b>	<b>Cognitive level</b>
III	Compare TCP/IP and OSI Models <b>OR</b>	M1.04	U
IV	Describe various network topologies.	M1.02	U
V	Describe the synchronous transmission mode. <b>OR</b>	M2.01	U
VI	Describe the concept of CSMA/CD	M2.05	U
VII	Describe the random access protocol, ALOHA <b>OR</b>	M2.01	U
VIII	Compare guided and unguided transmission.	M2.02	U
IX	Summarize the transport layer services. <b>OR</b>	M3.04	U
X	Explain the IPv4 addressing scheme	M3.01	U
XI	Compare the features of transport layer protocols – TCP & UDP. <b>OR</b>	M3.05	U
XII	Describe link state routing with its advantages and disadvantages.	M3.02	U
XIII	Describe the electronic mail protocol, SMTP with its merits and demerits. <b>OR</b>	M4.03	U
XIV	Illustrate the working of DNS	M4.03	U

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