Code No: 5C448 **Date: 17-Aug-2023 (FN)**

B.Tech II-Year II- Semester External Examination, Aug - 2023 (Supplementary)
DATA COMMUNICATIONS (CSE and IT)

Time: 3 Hours   **Max.Marks:75**

Note:
a) No additional answer sheets will be provided.
b) All sub-parts of a question must be answered at one place only, otherwise it will not be valued.
c) Missing data can be assumed suitably.

Bloom's Cognitive Levels of Learning (BCLL)

Remember	L1	Apply	L3	Evaluate	L5
Understand	L2	Analyze	L4	Create	L6

Part - A   Max.Marks:25
ANSWER ALL QUESTIONS

		BCLL	CO(s)	Marks
1	Recall the definition of network.	L1	CO1	[2M]
2	What is the difference between analog and digital signal?	L1	CO2	[2M]
3	What is unguided media?	L1	CO3	[2M]
4	Recall the function of block coding.	L1	CO4	[2M]
5	What is random access?	L1	CO5	[2M]
6	How virtual LAN works?	L2	CO6	[3M]
7	Draw the TCP/IP protocol suite.	L1	CO1	[3M]
8	How switch works in a network?	L2	CO3	[3M]
9	Explain about fast ethernet.	L2	CO6	[3M]
10	Define protocol and recall the elements of protocol.	L1	CO4	[3M]

Part – B   Max.Marks:50
ANSWER ANY FIVE QUESTIONS. EACH QUESTION CARRIES 10 MARKS.

			BCLL	CO(s)	Marks
11.	a)	Discuss about brief history of Internet.	L2	CO1	[5M]
	b)	Explain OSI reference model.	L2	CO1	[5M]
12.	a)	Explain about Analog to digital conversion in physical layer.	L2	CO2	[5M]
	b)	Illustrate about Multiplexing and spreading.	L3	CO2	[5M]
13.	a)	How datagram networks operates in transmission media?	L3	CO3	[5M]
	b)	Discuss in detail about virtual circuit networks.	L2	CO3	[5M]
14.	a)	Write a short note HDLC protocol.	L2	CO4	[5M]
	b)	How cyclic codes works in datalink layer?	L4	CO4	[5M]
15.	a)	Explain in detail about gigabit ethernet.	L2	CO5	[5M]
	b)	Write a short note on IEEE 802.11 standard.	L2	CO5	[5M]
16.	a)	Discuss in detail about backbone networks.	L2	CO6	[5M]
	b)	Write a short note on ATM LANs.	L2	CO6	[5M]
17.	a)	What is the role of addressing in data communications?	L2	CO1	[4M]
	b)	Illustrate about Transmission impairment.	L3	CO2	[3M]
	c)	Explain the concept of guided media.	L2	CO3	[3M]
18.	a)	Differentiate Noiseless channels and Noisy channels.	L2	CO4	[4M]
	b)	What is working principle of Bluetooth?	L2	CO5	[3M]
	c)	What is the function of ATM?	L1	CO6	[3M]

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