

Code No: 5C448

Date: 17-August-2024 (T.N)

B.Tech II-Year II- Semester External Examination, August - 2024 (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
ANSWER ALL QUESTIONS

Max.Marks:25

	BCLL	CO(s)	Marks
1 Recall the definition of network.	L1	CO1	[2M]
2 Distinguish between Baseband Transmission and broadband transmission.	L1	CO2	[2M]
3 What is unguided media?	L1	CO3	[2M]
4 What is hamming distance? What is minimum hamming distance?	L1	CO4	[2M]
5 What is random access?	L1	CO5	[2M]
6 What is the difference between hard handoff and soft handoff?	L2	CO6	[3M]
7 Draw the TCP/IP protocol suite.	L1	CO1	[3M]
8 Define switch and Describe the need for switching.	L2	CO3	[3M]
9 Explain about fast ethernet.	L2	CO6	[3M]
10 Define framing and the reason for its need.	L1	CO4	[3M]

Part - B
ANSWER ANY FIVE QUESTIONS. EACH QUESTION CARRIES 10 MARKS.

Max.Marks:50

	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) What are the different transmission impairments? Explain.	L2	CO2	[5M]
b) Write the advantages and disadvantages of digital transmission.	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) Discuss in detail about High level data link control (HDLC) protocol.	L2	CO4	[5M]
b) what are the services provided, frame format, transition states, PPP stack of point-to-point protocol.	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]