

**Code No: 5C448**

**Date: 10-Aug-2022 (Fri)**

**B.Tech II-Year II- Semester External Examination, July/August-2022 (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.

**ANSWER ANY 5 OUT OF 8 QUESTIONS. EACH QUESTION CARRIES 15 MARKS.**

**Bloom's Cognitive Levels of Learning (BCLL)**

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

		BC LL	CO(s)	Marks
1.	a) Discuss the TCP/IP protocol suite on the basis of protocol layering principle.	L3	CO1	[8M]
	b) Write a short note on addressing.	L1	CO1	[7M]
2.	a) What are the parameters influence the network performance? Explain in detail.	L2	CO2	[8M]
	b) Describe the properties of an Analog signal.	L3	CO2	[7M]
3.	a) Explain the difference between step index and graded index fiber with figures.	L2	CO3	[8M]
	b) Compare twisted pair, Co-axial cable and fiber optic cable.	L2	CO3	[7M]
4.	a) Describe the HDLC.	L3	CO4	[8M]
	b) Explain the Point-to-Point Protocol.	L2	CO4	[7M]
5.	Explain:			
	a) Fast Ethernet.	L1	CO5	[8M]
	b) Giga bit Ethernet.	L1	CO5	[7M]
6.	a) Explain about ATM Networks.	L2	CO6	[8M]
	b) Describe about the virtual LANs.	L3	CO6	[7M]
7.	a) Write functions of each layer in OSI Model.	L1	CO1	[8M]
	b) Differentiate between Analog & Digital Transmission.	L3	CO2	[7M]
8.	a) A (7,4) hamming code received as 1010111. Determine the correct code when even parity is there.	L5	CO4	[8M]
	b) Explain about the Frame-relay networks.	L2	CO5	[7M]

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