

GIET UNIVERSITY, GUNUPUR - 765022

B. Tech (Sixth Semester Regular) Examinations, May – 2024

21BCMPC36001 - Computer Networks

(CSE - AIML)

Time: 3 hrs Maximum: 70 Marks (The figures in the right hand margin indicate marks)

PA	RT – A	(2 x 5 =	= 10 Ma	arks)
Q.1. Answer <i>ALL</i> questions			CO#	Blooms Level
a. V	Vhat is throughput of a network?		CO1	K1
b. F	and the parity of the data words "10101" and "0000".		CO2	К3
c. V	Vhat is Piggybacking?		CO2	K1
d. V	Vhat is the difference between multicasting and broadcasting?		CO3	K2
e. V	Vhat is port address? How many bits are used for it?		CO4	K2
PART – B		$(15 \times 4 = 60 \text{ Marks})$		
Answer ALL questions		Marks	CO#	Blooms Level
2. a.	Define topology? Write different types of topologies used in computer network and its advantages.	12	CO1	K1
b.	Differentiate between Digital and Analog signal. (OR)	3	CO1	K1
c.	Draw and explain OSI model of computer network.	12	CO1	K1
d.	How many links are required to make mesh topology if number of nodes are 13?	3	CO1	K1
3.a.	Using Hamming code to show the position of error if data is sent 110011 and data is received 111011.	10	CO2	K2
b.	Write a brief notes on HDLC protocol. (OR)	5	CO2	K1
c.	What is flow control? Discuss different type of flow control mechanisms.	10	CO2	K1
d.	Explain CSMA/CA and CSMA/CD in random access protocol.	5	CO2	K1
4.a.	Draw the IPv4 Datagram format and define the role of each field.	10	CO3	K1
b.	Distinguish between IP v4 address from IP v6 address. (OR)	5	CO3	K2
c.	Describe the IPv6 packet format.	10	CO3	K1
d.	Write short notes on Bluetooth wireless network.	5	CO3	K1
5.a.	Describe FTP role in application layer.	8	CO4	K1
b.	Briefly explain the functions of application layer. (OR)	7	CO4	K2
c.	How is DNS used to access the internet?	8	CO4	К2
d.	Write short notes on HTTP.	7	CO4	K2
	End of Paper			