

Reg.No.:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]
Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code: 60024

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – JAN. 2026

Sixth Semester

Information Technology

U19IT621 - COMPUTER COMMUNICATION NETWORKS

(Regulation 2019)

Time : Three Hours

Maximum : 100 Marks

Answer ALL the questions

Knowledge Levels	K1 – Remembering	K3 – Applying	K5 - Evaluating
(KL)	K2 – Understanding	K4 – Analyzing	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Mark	KL	CO
1.	Define Computer Networks.	2	K1	CO1
2.	List out the functionalities of datalink layer.	2	K2	CO1
3.	Define Giga Ethernet.	2	K2	CO2
4.	Sate the term Automatic Repeat Request (ARQ).	2	K1	CO2
5.	Write the two mechanisms that defined to help in transition from IPv4 to IPv6.	2	K3	CO3
6.	Infer congestion control in network layer.	2	K2	CO3
7.	What is meant by connection less operation and connection oriented operation?	2	K1	CO4
8.	List the advantage of Go-Back-N protocol.	2	K1	CO4
9.	Compare SMTP and SNMP.	2	K2	CO5
10.	Write the usage of TELNET.	2	K1	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Mark	KL	CO
11. a)	Elaborate the various characteristics of layers present in OSI model with suitable diagram.	13	K2	CO1
	(OR)			
b)	Explain about multiplexing and its types with example.	13	K2	CO1
12. a)	Explain the following:		K2	CO2
	i. Flow control & Error control.	7		
	ii. HDLC.	6		
	(OR)			
b)	What do you mean by channelization? Also explain FDMA and TDMA.	13	K2	CO2
13. a)	With neat diagram explain the general format of ICMPv4 message.	13	K2	CO3
	(OR)			
b)	Explain about RIP and OSPF protocols.	13	K2	CO3
14. a)	i. Explain TCP segment format in detail.	7	K2	CO4
	ii. Outline send window and receive window structure for selective-repeat protocol.	6		
	(OR)			
b)	Demonstrate about UDP with neat diagram.	13	K2	CO4
15. a)	Elaborate the backend process helps in sending an E-mail from one person to another.	13	K2	CO5
	(OR)			
b)	Explain about Software Defined Network (SDN).	13	K2	CO5

PART – C

(1 x 15 = 15Marks)

Q.No.	Questions	Mark	KL	CO
16. a)	To control the occurrence of congestion in a network, what are the possible methods used to control TCP congestion?	15	K3	CO4
	(OR)			
b)	“Ethernet in different types offers a simple user interface that helps to connect various devices easily, such as switches, routers, and computers.” Justify each types of Ethernet.	15	K5	CO2