

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

April – May 2023_ (B.Tech) _ Electronics and Telecommunication Scheme II Examination: TY Semester: VI Course Code: EXC604 Course Name: :Computer Communication Network		
Date of Exam:	19/5/2023	Duration: 2.5 Hours Max. Marks: 60 M

Instructions: (1)All questions are compulsory. (2)Draw neat diagrams wherever applicable. (3)Assume suitable data, if necessary.				
		Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight:	12		
i)	What is piggybacking in the context of networking?	02	CO2	BL2
ii)	What are the limitations of CSMA/CD in high-speed networks?	02	CO3	BL1
iii)	What is the role of subnetting in IP addressing?	02	CO4	BL2
iv)	What are the differences between connection-oriented and connectionless protocols in the transport layer?	02	CO5	BL1
v)	List down the network Hardware devices with respect to each layer of model	02	CO1	BL3
vi)	What is Quality of Service (QoS) in computer networks, and why is it important?	02	CO4	BL2
vii)	Describe the significance of SMTP in application layer protocol	02	CO6	BL2
viii)	what are different types services provided by network layer towards data link layer?	02	CO3	BL2
Q.2	Solve any four questions out of six.	16		
i)	What is DNSP? And how does it work?	4	CO6	BL2
ii)	Compare media access control protocol like ALOHA and slotted ALOHA	4	CO3	BL2

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iii)	Explain Distance vector algorithm	4	CO4	BL2
iv)	Explain Three way handshaking in TCP protocol.	4	CO5	BL2
v)	What Are Different Reasons For Transmission Impairments In Commuter Communication Systems?	4	CO2	BL2
vi)	Explain the functions of repeaters ,hubs,bridges,routers and switches in detail and mention in which layers they work.	4	CO1	BL2
Q.3	Solve any two questions out of three.	16		
i)	Compare physical/logical/ port/socket addressing	8	CO1	BL2
ii)	Explain path vector OR link state routing algorithm in detail.	8	CO4	BL4
iii)	Explain application layer protocol like TELNET and SSH	8	CO6	BL2
Q.4	Solve any two questions out of three.	16		
i)	What is DSL and HFC ? Describe in details	8	CO2	BL2
ii)	Compare sliding window protocols like stop and wait,go back n ARQ and selective repeat ARQ.	8	CO3	BL2
iii)	Explain network layer services and functions in detail.	8	CO5	BL2

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