

20/12/22

K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai-22

(Autonomous College Affiliated to University of Mumbai)

End Semester Exam

Nov/Dec 2022

(B.Tech/M.Tech.) Program: Electronics and Telecommunication

Examination: TY Semester: VI

Course Code: 1UEXC604 and Course Name: Computer Communication Networks

Duration: 03 Hours

Max. Marks: 60

Instructions:

- (1) All questions are compulsory.
- (2) Draw neat diagrams wherever applicable.
- (3) Assume suitable data, if necessary.

Q No.	Questions	Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight.	12	-	-
i)	What is public IP address?	2	CO4	R
ii)	Describe UDP	2	CO5	U
iii)	What is a gateway? Is there any difference between a gateway and router?	2	CO4	R
iv)	Write about HTTP and which port does it use?	2	CO6	U
v)	What makes a network effective and efficient?	2	CO1	R
vi)	What is a UTP cable?	2	CO2	R
vii)	Define Unicasting, Broadcasting, Multicasting and Anycasting	2	CO1	R
viii)	What are the responsibilities of Data Link Layer?	2	CO3	R
Q.2	Solve any four questions out of six.	16		
i)	Describe Go-Back-N ARQ	4	CO3	U
ii)	Explain Repeater, Hub, Bridge, Switch, Gateway	4	CO1	U

iii)	What is IP addressing? Explain IPV4 datagram format?	4	CO4	U
iv)	Describe TCP header with diagram.	4	CO5	U
V)	Explain the different guided and unguided transmission media	4	CO2	U
Vi)	Explain DNS in detail	4	CO6	U
Q.3	Solve any two questions out of three.	16		
i)	Explain CSMA Protocols. How are collisions handled CSMA/CD	8	CO3	U
ii)	Explain FTP in detail. Mention its limitation and justify how these limitations are overcome in TFTP.	8	CO6	U
iii)	Explain Dijkstra Algorithm with one example	8	CO4	Ap
Q.4	Solve any two questions out of three.	16		
i)	Explain congestion control in TCP.	8	CO5	U
ii)	What is ALOHA? Derive the expression for the slotted and pure ALOHA.	8	CO3	U
iii)	Explain OSI reference model	8	CO2	U