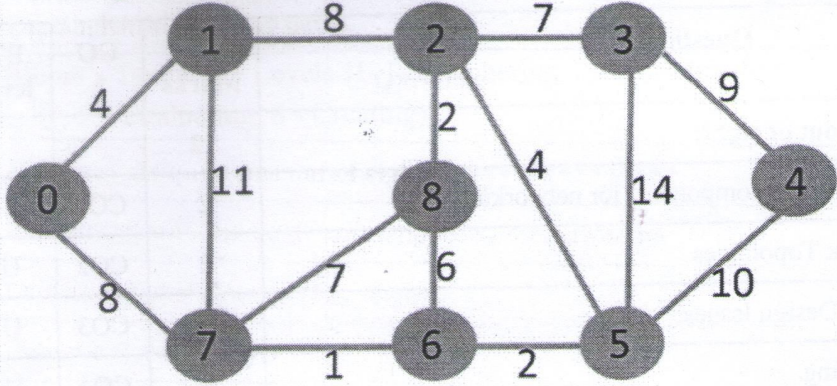


Nov - Dec 2022 B. Tech Program: Computer Engineering Examination: TY Semester: V Course Code: CEC503 and Course Name: Computer Network Max. Marks: 60 Duration: 2.5 Hours				
Instructions: (1) All questions are compulsory. (2) Draw neat diagrams wherever applicable. (3) Assume suitable data, if necessary.				
Sr. No.	Questions	Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight:	12		
i)	Explain software and hardware components for networking.	2	CO1	U
ii)	Explain different Network Topologies.	2	CO2	U
iii)	Describe Network Layer Design Issues.	2	CO3	U
iv)	Explain Classful Addressing.	2	CO4	U
v)	Describe Socket Programing in brief.	2	CO5	U
vi)	Explain the use of HTTP protocol in networking.	2	CO6	U
vii)	Differentiate between IPV4 and IPV6 protocol.	2	CO3	U
viii)	Describe Close Loop Congestion Control	2	CO4	U
Q.2	Solve any four questions out of six.	16		
i)	Explain different types of topologies.	4	CO1	U
ii)	Explain different Error Control techniques with example.	4	CO2	U
iii)	Differentiate between Classfull and Classless Addressing.	4	CO3	An
iv)	Explain different QoS parameters for Network Layer.	4	CO4	U
v)	Differentiate between TCP and UDP Protocols.	4	CO5	AN
vi)	Explain SMTP and FTP protocols.	4	CO6	U
Q.3	Solve any two questions out of three.	16		
i)	Explain different Switching Techniques for networking.	8	CO1	An

ii)	Explain ARP and NAT protocols in detail.	8	CO4	U
iii)	Differentiate between Sliding Window and Stop-and-Wait Protocol.	8	CO5	An
Q.4	Solve any two questions out of three.	16		
i)	Find the CRC Code for the message $m=11001$ and $g=1010$.	8	CO2	An
ii)	Find the shortest path for the following graph using Dijkstra's algorithm considering 0 as a start node and 4 as a destination node. 	8	CO3	An
iii)	Describe different types of protocols at Application Layer.	8	CO6	U
