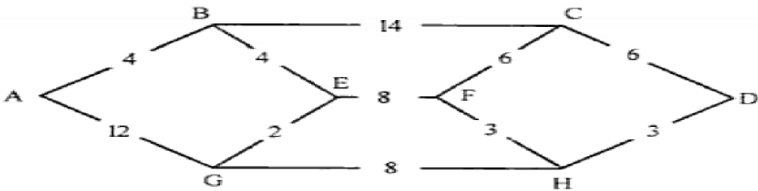
		<b>SAGAR INSTITUTE OF SCIENCE &amp; TECHNOLOGY</b>  <b>DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING</b>  <b><u>QUESTION BANK</u></b>		FORM NO	
BRANCH	CSE			REV. NO	
SEMESTER	Jan –June 2023			REV. DT	
NAME OF THE FACULTY: PROF. VISHAL CHOURASIA SUBJECT/CODE : COMPUTER NETWORKS / (CS-602)					

#### UNIT -4

S. No	Questions	Bloom's Taxonomy Level	COs
1	Explain the Bellman Ford routing algorithm. Discuss the drawback of count to infinity in Bellman-Ford algorithm.	2 (Understand)	CO2
2	Explain classless addressing. Given the CIDR representation 20.10.30.35 / 27. Find the range of IP Addresses in the CIDR block.	2 (Understand)	CO2
3	What do you mean by routing? Explain Hierarchical, Broadcast & Multicast Routing.	2 (Understand)	CO2
4	Differentiate between classful and classless addressing.	2 (Understand)	CO2
5	Explain the frame format of IPv4.	2 (Understand)	CO2
6	How does link state routing take care of the problem of wrapping of sequence numbers, crashing of routers and corruption of sequence number?	1 (Remember)	CO2
7	Write the difference between IPv4 and IPv6.	1 (Remember)	CO2
8	Explain Dijkstra algorithm. Apply Dijkstra's routing algorithm to calculate shortest path with source vertex 'A'. 	4 (Analyze)	CO2
9	What is IP Address? Categorize the IP addresses into various classes. Find the netid and hostid of the IP address: 117.34.3.8.	4 (Analyze)	CO2
10	If a class C, network on the Internet has IP address 192.17.163.139 and subnet mask 255.255.255.224. Then find the following: <ul style="list-style-type: none"> <li>The number of subnets possible and the number of hosts in each subnet</li> <li>The subnet id and subnet number</li> <li>The first subnet id</li> <li>The fourth subnet id</li> <li>The first host of 4<sup>th</sup> subnet</li> <li>The last host of 4<sup>th</sup> subnet</li> <li>The Direct Broadcast address of 4<sup>th</sup> subnet</li> </ul>	4 (Analyze)	CO2