

Assignment # 06

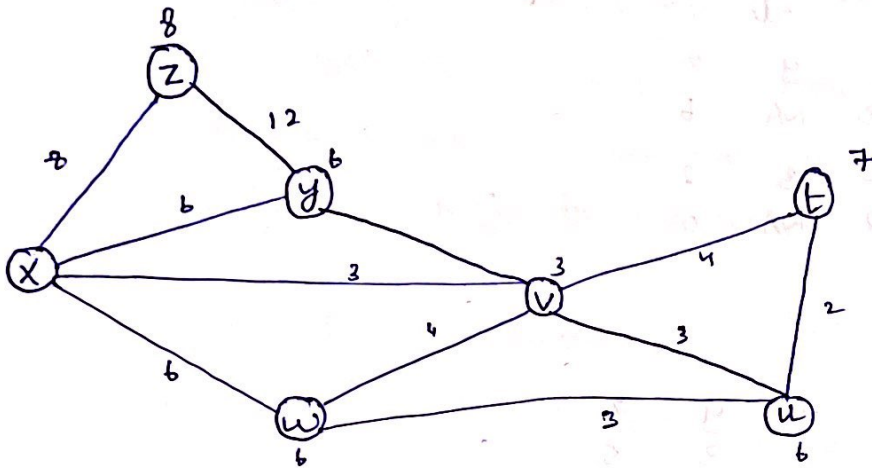
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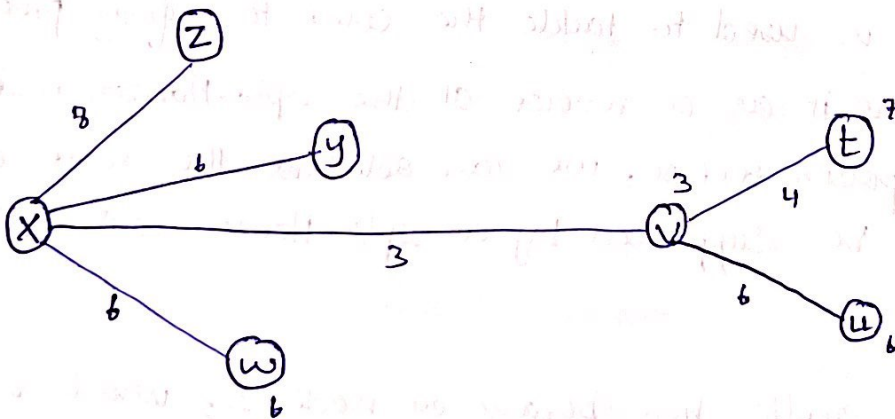
Section: 5C

Q1:-

The shortest path from x:-



Final:-



Q2:-

Distance vector table for node z from network diagram.

	u	v	x	y	z
v	NA	NA	NA	NA	NA
x	NA	NA	NA	NA	NA
z	NA	6	2	NA	0

updating table with costs of neighbouring nodes

	u	v	x	y	z
v	1	0	3	NA	6
x	NA	3	0	3	2
z	NA	6	2	NA	0

Updated table:

	u	v	x	y	z
v	1	0	3	3	5
x	4	3	0	3	2
z	6	5	2	5	0

- b, Poison tackle is used to tackle the count to infinity problems and one can imagine it as a reverse of the split-horizon method. With help of poison reverse, we can advertise the route advertisement which would be suppressed by a split-horizon with distance of infinity.

Poison Reverse applies here because at node z, which is not connected to all other nodes in network.

Q3:- EGP:-

External BGP runs between routers in different AS.

IBGP:-

Internal BGP runs between routers in the same AS.

- a:- EBGP: Router 3c learns about x from EBGP.
- b:- IBGP: Router 3a learns about x from IBGP.
- c:- EBGP: Router 1c learns about x from EBGP.
- d:- IBGP: Router 1d learns about x from IBGP.

Question Number: 4# ,.

SDN: Software defined networking is an approach to networking that uses software-based controllers or application programming interface to communicate with underlying hardware infrastructure and direct traffic to network.

Open flow: It is considered one of the first SDN standard. It originally defined the communication protocol in SDN architecture that enable the SDN controller to directly interact with forwarding plane of networking devices such as switches and routers.

- b) SDN encompasses several types of technologies including functional separation, network virtualization and automation through programmability.

