Q) What is Congestion? Explain Congestion control techniques?.
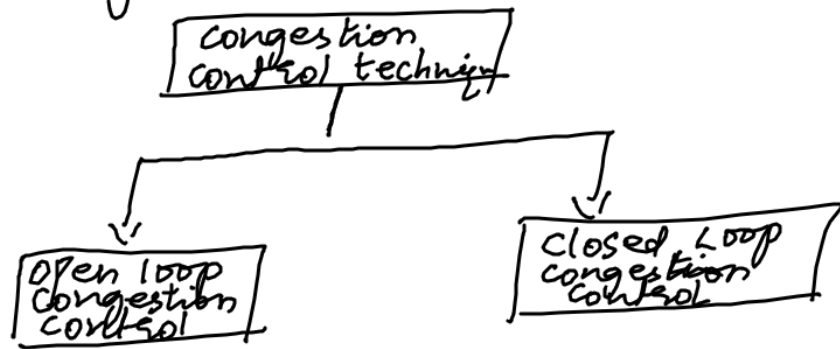
Ans:- **Congestion:** Congestion is a situation in a network.

The congestion takes place when the number of packets sent to the network is greater than the capacity of the net work. The congestion is a part of network are present.

Congestion control: The congestion control is the technique used for preventy or controlling congestion.

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        │ congestion          │
        │ control techniq     │
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   │ open loop│         │ closed loop │
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✓ **open Loop congestion control:**
- These techniques are used to prevent congestion before it happens.

(i) **Retransmission Policy:**
- This policy is used to control retransmission of packets.
- Generally, a sender retransmit the packet if he feels that the packet is lost or corrupted.
- This retransmission may create congestion in the network.
- To prevent congestion, a timer must be designed.

(ii) **Window Policy:** There are two types of windows that can be used at sender side: "Go-back-n window" and "Selective Repeat window". In Go-back-n window, the packets are resent which may be duplicates. where as in Selective Repeat Window only sends lost packets.

(iii) Discarding policy: In this policy, a router can discard the packet. A good discard policy can prevent congestion control.

(iv) Acknowledgement policy: The acknowledgement policy can also create congestion. For example, if