Packet switching

- Packet switching is a method or technique in which data is transferred in the form of manageable small chunks called packets.
- It also means that a single block can tie up a router-router line for minutes, rendering message switching useless for interactive traffic.
- It has the ability to send data packets over any path rather than fixed as in circuit switching because when data s divided into packets then those packets find their own path.

Packet switching operation

- Data are transmitted in short packets. Typically an upper bound on packet size is 1000 octets.
- If a station has a longer message to send ,it breks up into a series of small packets.
- The control information should at least contain:
  - Destination
  - Source address
- Store and forward: Packets are received,stored briefly and pass onto the next node.

Advantages of Packet switching

- Line efficiency
  - Single node to link can be shared by many packets over time
  - Packets queued and transmitted as fast as possible
- Data rate conversion
  - Each station connects to the local node at its own speed
  - Nodes buffer data if required to equalize rates
- Packets are accepted even when networks is busy
  - Delivery may slow down
- Priorities can be used