6(a) What is switching? 2

(b) Describe message switching and packet switching. 8

(c) Write down the application of switching. 4

Answer:

6(a): The process of forwarding packets from one port to another port is called switching. Communication systems are made of switches and nodes. Switches can be two types. Connectionless switch and Connection oriented switch.

6(b):

Message switching: In this switching the message is used as a data unit. This happened in the middle of circuit switching and packet switching. In this switching Sender sends the whole message. Receiver receives the message and buffers until there are resources available to tranfer it to the next hop. If the next soure is unable to accommodate then the message is stored there. This switching has several drawback too. Such as -

1. It needs enough storage to accommodate.
2. It is not the best solution for streaming Services.

Packet switching:- It is kind of similar to message switching. Though it is quite a bit different. In this switching the entire message is divided into smaller message, it is called packet. It is easy to transmit smaller packet because of it does not take too much storage. The internet uses packet switching technique. Packets are forwarded according to the proirity to provide better service.

5(e)

Switching is used to tranfer data from sender to receiver. It can be passed through packet data which are smaller in size. It is responsible for faster streaming services. Switching is heavily used in internet. Data transmission cannot be possible without switching. Buffering can be solved by using packet switching.