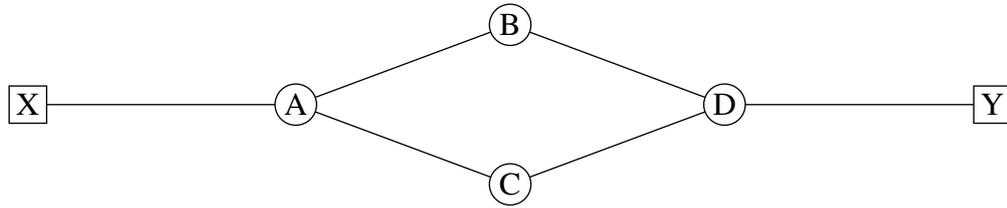


1996 Paper 5 Question 3

Digital Communication I



Hosts X and Y are communicating through the data network provided by the switches A, B, C and D and the links interconnecting them as shown above. Initially all packets are travelling through switches A, C and D.

- (a) A packet is corrupted on the link between C and D. Describe the events that take place to recover from the error when
- (i) an end to end flow and error control protocol is in operation [5 marks]
 - (ii) flow and error control are performed on a hop by hop basis [5 marks]
- (b) Switch C fails. Describe the events that follow to recover when
- (i) the network is a datagram network [5 marks]
 - (ii) the network is connection oriented [5 marks]