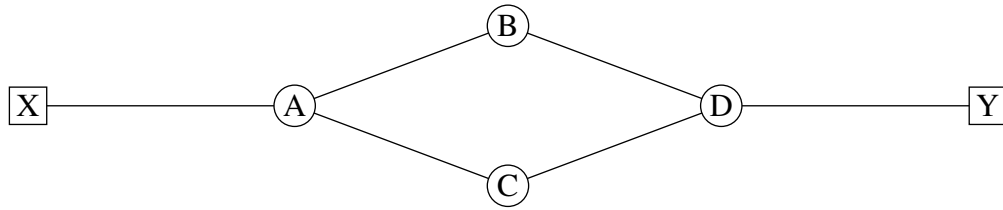# 1996 Paper 12 Question 3

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]