2007 Paper 13 Question 3

Digital Communication I

(*a*) Define the term *flow control* as used in communication networks.   [4 marks]

(*b*) Describe on–off flow control, window-based flow control, and flow control used in circuit switching.   [9 marks]

(*c*) Consider a channel of capacity b and delay τ, over which packets of size p are sent. Compare the performance of window-based flow control protocols having:

(*i*)   a window size of one packet;

(*ii*) a window size of two packets; and

(*iii*) a window size of one packet, but with a packet size of $2p$.

[7 marks]