COMPUTER SCIENCE TRIPOS Part IB – 2017 – Paper 5

6 Computer Networking (AWM)

(*a*) Describe *on-off* flow control. In what circumstances is it appropriate?

[4 marks]

(*b*) Describe the operation of *window-based* flow control. [4 marks]

(*c*) What happens if a flow using window-based flow control passes through a highly-loaded switch or router? You may assume the switch or router does not participate in the flow control protocol. [4 marks]

(*d*) How is this addressed in the TCP protocol? [4 marks]

(*e*) What are the advantages and disadvantages of having Internet routers participate in window-based flow control of every TCP connection? [4 marks]