

ITS323 – Quiz 6

Name: _____ ID: _____ Marks: _____ (10)

Question 1 [5 marks]

(a) Draw a LAN connecting 6 stations using a bus topology. Label each station with a letter, e.g. A, B, C, ... [3 marks]

(b) If the LAN has instead 40 stations and uses a switch-based star topology, how many cables are needed in the LAN? [2 marks]

Question 2 [5 marks]

(a) Explain the rules for a reservation-based, centralised MAC protocol. [3 marks]

(b) Explain an advantage of the above MAC protocol compared to a round-robin, centralised MAC protocol. [2 marks]