

ITS413 – Quiz 4

Name: _____

ID: _____ Mark: _____ (out of 10)

Question 1 [8 marks]

True or false (circle the most accurate answer for the statement):

- a) In the Internet, congestion mainly occurs at TCP destination hosts. TRUE FALSE
- b) If an ACK is not received when expected, a TCP source assumes the TCP receivers buffer is full. TRUE FALSE
- c) TCP is a connection-oriented protocol. TRUE FALSE
- d) Flow control involves limiting the sending rate of a TCP source so that fairness is achieved amongst applications. TRUE FALSE
- e) The number of outstanding bytes a TCP source may have is limited only by the Advertised Window. TRUE FALSE
- f) If the buffer size of a router is infinite, then packets will be dropped by the router if the total incoming data rate of its links is larger than the total outgoing data rate of its links. TRUE FALSE
- g) End-to-end congestion control does not require explicit feedback from routers. TRUE FALSE
- h) For congestion control, TCP assumes the source sending rate is proportional to the RTT. TRUE FALSE

Question 2 [2 marks]

For the descriptions in parts (a) to (d) , select one from the 6 mechanisms/parameters that is most closely related. [½ mark for each]

Additive Increase
Slow Start Phase

Multiplicative Decrease
Maximum Segment Size

Congestion Window
Advertised Window

- a) Slow increase in sending rate _____
- b) Fast increase in sending rate _____
- c) Limits the sending rate to avoid congestion _____
- d) Response when congestion is detected _____