

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 hosts. TRUE FALSE
- b) Increased congestion in the Internet leads to increased queuing delays at routers.
TRUE FALSE
- c) TCP implements error control, flow control and congestion control. TRUE FALSE
- d) Flow control involves limiting the sending rate of a TCP source so that the network is not overflowed with packets. TRUE FALSE
- e) The number of outstanding bytes a TCP source may have is the maximum of the Advertised Window and Congestion Window. TRUE FALSE
- f) If the buffer size of a router is finite, 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 involves routers sending feedback packets to hosts.
TRUE FALSE
- h) For congestion control, TCP assumes the source sending rate is inversely proportional to the Congestion Window size. 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) Response when congestion is detected _____
- d) Limits the sending rate to avoid congestion _____