

Q1. Suppose all end hosts pump data into the network at a constant rate. Would you prefer packet-switching over circuit switching in this case?[3]

Answer: Yes/No? _____

Reason:

Q2. Suppose all the end hosts send data in periodically i.e. they do not constantly send data into the network.. Would you prefer packet-switching over circuit switching in this case? [3]

Answer: Yes/No? _____

Reason:

Q3: (a) Suppose N packets arrive simultaneously to a link at which no packets are currently being transmitted or queued. Each packet is of length L and the link has transmission rate R . What is the average queuing delay for the N packets? Show calculations to prove your answer.

(b) Now suppose that N such packets arrive to the link every LN/R seconds. What is the average queuing delay of a packet? Give reason to support your answer.