

13 Principles of Communications (jac22)

- (a) In general, weighted fair queueing can be used to provide resource guarantees to packet flows in networks. Explain the problem with using a simple priority queue to do the same. Define weighted fair queueing. [5 marks]
- (b) The Data Centre environment often allows us to make some simplifying assumptions about traffic that mean we can employ a priority queueing system in switches, combined with some traffic regulation in end systems. *QJump* is one approach to this - describe the assumptions that allow this, and the mechanisms QJump uses to offer delay bounding for high priority traffic without resource starvation for bulk traffic flows. [15 marks]