

12 Principles of Communications (jac22)

- (a) Describe max-min fair share allocation of resources, explaining what it can be used for. [10 marks]
- (b) The Transmission Control Protocol (TCP) can be seen as a distributed optimisation of the dynamic resource allocation problem.

Describe how capacity at bottlenecks (congested points in the network) is effectively allocated in proportion to demands, and how this is equivalent to the joint optimisation of user and network utilities. [10 marks]