

12 Principles of Communications (JAC)

(a) Describe the alpha and beta models of graphs that allow for small-world and clustering characteristics. [10 marks]

(b) Researchers have proposed using coding of multiple blocks of data together to provide protection against packet loss, rather than relying on timeout and subsequent retransmissions. Describe how this idea can be integrated into TCP with codes instead of retransmits. Describe how the redundancy level is chosen, and also, explain role of acknowledgements in the modified TCP.

[10 marks]