1997 Paper 12 Question 1

Digital Communication I

Compare the multiplexing aspects of packet switching and circuit switching.

[5 marks]

ATM has been described as a compromise between circuit switching and packet switching. Explain this with respect to multiplexing. [5 marks]

Consider a generic switch with multiple inputs and outputs. Describe the functions that are performed in moving information from an input to an output in (a) a circuit switch and (b) a packet switch. How is contention for output transmission capacity resolved in each case? [10 marks]