1999 Paper 12 Question 3

Digital Communication I

Compare packet switching and circuit switching with particular reference to the following issues:

(a) how multiplexing is performed in each

(b) how addressing is performed in each

(c) functions which must be performed by a switch in each case

(d) situations in which each is advantageous   [15 marks]

"As communication bandwidth becomes less and less expensive, the efficiency of packet switching will become less important than the simplicity of implementation and guarantees offered by circuit switching." Discuss.   [5 marks]