2009 Paper 8 Question 5

Digital Communication II

(*a*) Shared media networks make use of Media Access Control protocols to allocate resources.

    (*i*) Outline the use of CSMA/CD on Ethernets.   [5 marks]

    (*ii*) Outline the use of CSMA/CA on Wireless Ethernets.   [5 marks]

(*b*) Discuss the trade-offs between network resource pre-allocation and network resource contention-based schemes in terms of delays and throughput under varying traffic loads.   [10 marks]