1998 Paper 10 Question 13

Digital Electronics

In the context of digital logic, what is a *multiplexer*?   [5 marks]

Sketch the design of an 8-bit to 2-bit multiplexer.   [5 marks]

Suppose you had to implement an arbitrary function of seven variables and were provided with nine 8-bit to 1-bit multiplexers and an inverter. How would you implement the function?   [10 marks]