

## 1993 Paper 7 Question 6

### Specification and Verification of Hardware

Describe the simple switch model of CMOS transistors. [5 marks]

Draw a circuit diagram of a CMOS inverter and give a proof that it is correct in the simple switch model. [2 + 3 marks]

Describe the unidirectional model of NMOS transistors. [5 marks]

Draw a circuit diagram of an NMOS inverter and give a proof that it is correct in the unidirectional model. [2 + 3 marks]