1998 Paper 7 Question 1

VLSI

Give the circuit for a CMOS inverter. [4 marks]

Give layouts for CMOS inverters of the following types:

(*a*)   basic design using one layer of metal

(*b*)   basic design using two layers of metal

(*c*)   an advanced design for driving large loads

[4 marks each]

What is the purpose of a buffer chain when distributing the clock? [4 marks]