

Q1. Convert:

d. $(1011.001)_2 = (\dots\dots\dots)_{10}$

e. $(0.65625)_{10} = (\dots\dots\dots)_2$

f. $(2AB)_{16} = (\dots\dots\dots)_2$ (3)

Q2. write VHDL code for the function $Y = A.B.C$ (2)

Q3. Design $F = \overline{(A.B) + (C.D)}$ using CMOS. (2)

Q4. Find :

c. 1's complement of 10011011

d. 2's complement of 10011110 (1)

Q5. Explain :

c. Fan out

d. Power dissipation (2)