

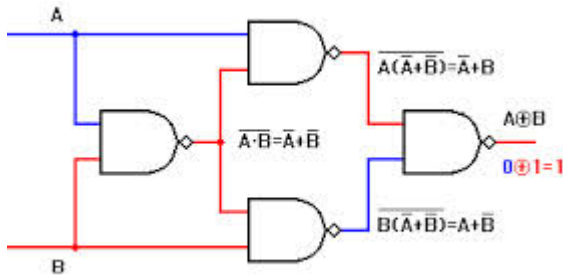
Switching Theory and Digital Design (CS 2300)

DEPT. OF COMPUTER SCIENCE AND ENGINEERING
Indian Institute of Technology Madras

TUTORIAL 1 (Time allowed: 55 minutes)

NOTE: Answers

1. (a) $(580)_{10}$, (b) $(260)_{10}$, (c) $(22.3125)_{10}$, (d) $(22.3125)_{10}$
2. (a) $(00010011)_{BCD}$, (b) $(11101)_2$
3. (a) $(1100)_{XS-3}$, (b) $(01100111)_{BCD}$.
4. (a) $(0001)_2$, (b) $(1011011)_2$, (c) $(101)_2$
5. (a) $(1151)_7$, (b) 2053_6 .
6. (a) 1100, (b) 1111
7. (a) 1.D, 1.8125 (b) E.8, 14.5. Right shift 3 place = Multiply $2^3 = 8$ times.
8. (a) (i) $(A + B)C$, (ii) $(\bar{A}B)(\bar{C} + \bar{D})$, (b) $\bar{B}C$



9.

10. (b) $y'z + xy + wy$