

COMP2012 Quiz 3
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1. (a)

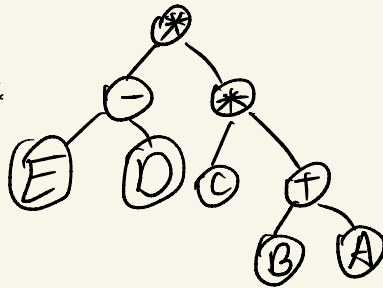
inorder: DBEAFCG

preorder: ABDECFG

postorder: DEBFGCA

(b)

Binary Tree:



Prefix: $*-ED*C+BA$

Infix: $(E-D) * (C * (B+A))$

2.

(a)

$(A \text{ NAND } C) \text{ OR } (A \text{ AND } (\text{NOT } B \text{ OR NOT } C))$

(i) $\overline{A \cdot C}$

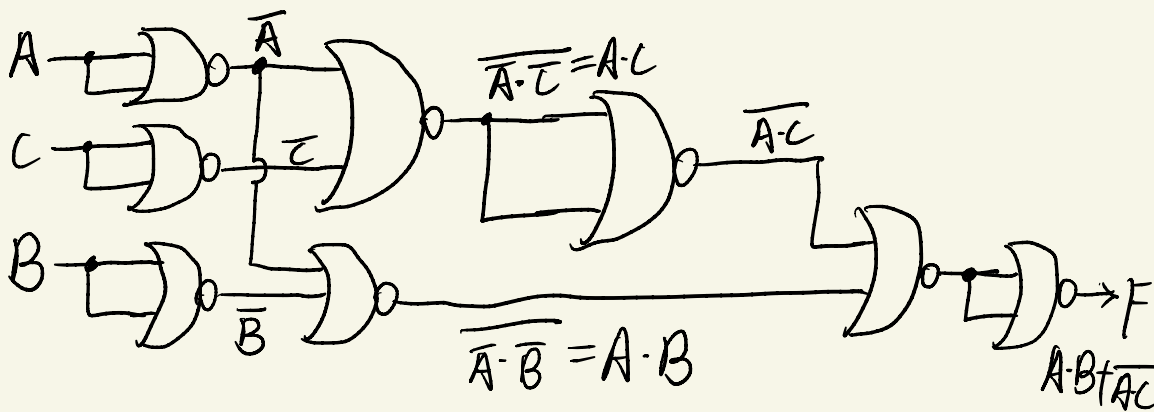
(ii) \overline{B}

(iii) \overline{C}

(iv) $\overline{B} + \overline{C}$

(v) $(\overline{A \cdot C}) + (A \cdot (\overline{B} + \overline{C}))$

(b)



(C)

	AB	$A\bar{B}$	$\bar{A}\bar{B}$	$\bar{A}B$
C	1	1	1	1
\bar{C}	1	0	0	0

$$F(A, B, C) = AB + C$$