

## 第二章习题答案

1、  $A + \overline{BC} + \overline{BD}$        $\overline{C} + AB$        $L = \overline{C} + \overline{BD}$

2、  $\overline{AC} + \overline{BC} = \overline{\overline{AC} \overline{BC}}$        $\overline{BD} + \overline{BC} = \overline{\overline{BC} + BD}$        $\overline{AC} + \overline{BC} + \overline{BD}$

3、  $C_2C_1C_0=000$ ,  $L=x$ ;  $C_2C_1C_0=001$ ,  $L=x+y$ ;  $C_2C_1C_0=010$ ,  $L=x+\overline{y}$

$C_2C_1C_0=011$ ,  $L=1$ ;  $C_2C_1C_0=100$ ,  $L=xy$ ;  $C_2C_1C_0=101$ ,  $L=y$ ;  $C_2C_1C_0=110$ ,  $L=xy+\overline{xy}$ ;

$C_2C_1C_0=111$ ,  $L=\overline{x}+y$ .

4、  $F = A + E + CD$        $F = X_3 + X_2X_1 + X_2X_0$  (去掉)

5、  $F1 = A + \overline{C}$        $F2 = \overline{BC}\overline{D} + \overline{BCD} + B\overline{CD}$        $F3 = \overline{AC}\overline{D} + \overline{BC}\overline{D} + BCD$

6、  $F1 = \overline{BC} + \overline{AC}$        $F2 = \overline{AB} + \overline{AC}\overline{D} + BCD$        $F3 = \overline{BD} + \overline{BC} + \overline{CD}$

7、  $F1 = \overline{AC} + \overline{BD} + \overline{BCD}$        $F2 = \overline{AD} + \overline{BD} + BC + \overline{AB} + \overline{CD}$

8、 (2-1 重复)  $F1 = \overline{AC} + \overline{BC}$        $F2 = \overline{B} + \overline{CD} + CD$        $F3 = \overline{AD} + BC + \overline{BD}$

9、  $F1 = \overline{ABC} + \overline{ABD} + \overline{ABCD}$        $F2 = \overline{BCD} + \overline{BCD} + B\overline{CD}$  (5-2 重复)

$F3 = B + D + \overline{AC}$

10、  $F1 = A + \overline{C}$        $F2 = \overline{B} + \overline{CD} + CD$  (8-2 重复)