

1.

(a)  $(10000)_{16} = A F 3 B = 5 0 C 5$  (b) 1010 1111 0011 1011

(c) 0101 0000 1100 0101

2.

$$\begin{aligned} (b) & x' + x(x+y')(y+z') \\ &= (x'+x)[x' + (x+y')(y+z')] = (x'+x+y')(x'+y+z') \\ &= x' + y + z' \quad (\text{Both forms}) \end{aligned}$$

\*因為 sum of products 必須為最簡化,所以寫 minterm 不給分

\*如果只寫出  $x'+y+z'$  而沒寫出 both form 或是註明它同時是 SoP 和 PoS 的答案  
當做只寫出一個答案,扣一半

3.

		$y \ z$		
		00	01	$\overline{11} \ \overline{10}$
$w \ x$	00	1		1
	01		1	1
	11		1	1
	10	1		1
		$\underbrace{\hspace{2cm}}$		$\underbrace{\hspace{2cm}}$

$$\begin{aligned} (c) F(w, x, y, z) &= \\ &= (0, 2, 5, 7, 8, 10, 14, 15) \end{aligned}$$