CSC 355
A2

Q6.a) $E = \Sigma m(1,2,4,6) = \Pi M(0,3,5,7)$
$F = \Sigma m(0,2,4,7) = \Pi M(1,3,5,6)$

b) $\bar{E} = \Sigma m(0,3,5,7)$
$\bar{F} = \Sigma m(1,3,5,6)$

c) $E + F = \Sigma m(0,1,2,4,6,7)$
$EF = \Sigma m(2,4)$

d) $E = \bar{x}\bar{y}z + \bar{x}y\bar{z} + x\bar{y}\bar{z} + xy\bar{z}$
$F = \bar{x}\bar{y}\bar{z} + \bar{x}yz + x\bar{y}z + xyz$

e)

$E =$

x \ yz	00	01	11	10
0		1		1
1	1			1

$E = y\bar{z} + x\bar{z} + \bar{x}\bar{y}z$
$= \bar{z}(x+y) + \bar{x}\bar{y}z$

$F =$

x \ yz	00	01	11	10
0	1			1
1	1		1	

$F = \bar{y}\bar{z} + \bar{x}\bar{z} + xyz$
$= \bar{z}(\bar{x}+\bar{y}) + xyz$