Ans to the ques no:- 01

Given function,

$f(w,x,y,z) = (w + x' + yz)(x+z)$

$= (w+x'+y)(w+x'+z)(x+z)$

$= (w+x'+y+zz')(w+x'+z+yy')(x+z+ww')$

$= (w+x'+y+z)(w+x'+y+z')(w+x'+z+y)$
$(w+x'+z+y')(x+z+w)(x+z+w')$

$= (w+x'+y+z)(w+x'+y+z')(w+x'+y'+z)$
$(x+z+w+yy')(x+z+w'+y.y')$

$= (w+x'+y+z)(w+x'+y+z')(w+x'+y'+z)$
$(x+z+w+y)(x+z+w+y')(x+z+w'+y)$
$(x+z+w'+y')$

$= (w+x'+y+z)(w+x'+y+z')(w+x'+y'+z)$
$(w+x+y+z)(w+x+y'+z)(w'+x+y+z)$
$(w'+x+y'+z)$

$= \Pi(4,5,6,0,2,8,10)$

$= \Pi(0,2,4,5,6,8,10)$