T805116

116/5 = 1

1. $f(A,B,C,D) = \Sigma(0,1,2,6,11,15)$

A	B	C	D	F		
0	0	0	0	1	F=B1	I_0
0	0	0	1	1		
0	0	1	0	1	F=D'	I_1
0	0	1	1			
0	1	0	0		F=0	I_2
0	1	0	1			
0	1	1	0	1	F=D'	I_3
0	1	1	1			
1	0	0	0	—	F=0	I_4
1	0	0	1			
1	0	1	0	—	F=D	I_5
1	0	1	1	1		
1	1	0	0		F=0	I_6
1	1	0	1			
1	1	1	0		F=D	I_7
1	1	1	1	1		

Ans,

18CS116

Now,
through 8*1 multiplexer: