

SOLUZIONE - PROVA SCRITTA

INFORM. GENERALE 24/05/2007

ES. 1.

$$f(A, B, C, D) = \bar{A}\bar{B}\bar{C}\bar{D} + \bar{A}\bar{B}C\bar{D} + \bar{A}B\bar{C}\bar{D} + \bar{A}BC\bar{D} + \\ + A\bar{B}\bar{C}D + ABCD + A\bar{B}C\bar{D} + A\bar{B}CD + A\bar{B}C\bar{D}$$

funzione ridotta $f'(A, B, C, D) = \bar{A}\bar{D} + AD + A\bar{B}C$

ES. 2

$$X = 7$$

ES. 3.

CPU				RAM	
PC	IR	R₀ R ₀	R ₁	0	1
2				4	10
3	LOAD R ₀ , 0	4		4	10
4	ADD R ₀ , 5	9		4	10
5	LOAD R ₁ , 1	9	10	4	10
6	STORE R ₀ , 1	9	10	4	9
7	STORE R ₁ , 0	9	10	4	9
8	HALT	9	10	10	9

ES. 4

1. FIFO: P₂(30) P₁(20) P₃(15)

SJF: P₂(30) P₃(15) P₁(20)

RR(10): P₂(10) P₁(10) P₂(10) P₃(10) P₁(10) P₂(10) P₃(5)

RR(5): P₂(5) P₁(5) P₂(5) P₁(5) P₃(5) P₂(5) P₁(5) P₃(5)
P₂(5) P₁(5) P₃(5) P₂(10)

2. $T_A(\text{FIFO}) = 0(P_2) + 39(P_1) + 25(P_3) = 64$

$T_A(\text{SJF}) = 0(P_2) + 19(P_3) + 40(P_1) = 59$

$T_A(\text{RR}_{10}) = 30(P_2) + 39(P_3) + 25(P_1) = 94$

$T_A(\text{RR}_5) = 35(P_2) + 29(P_3) + 25(P_1) = 89$