BSSE 0917
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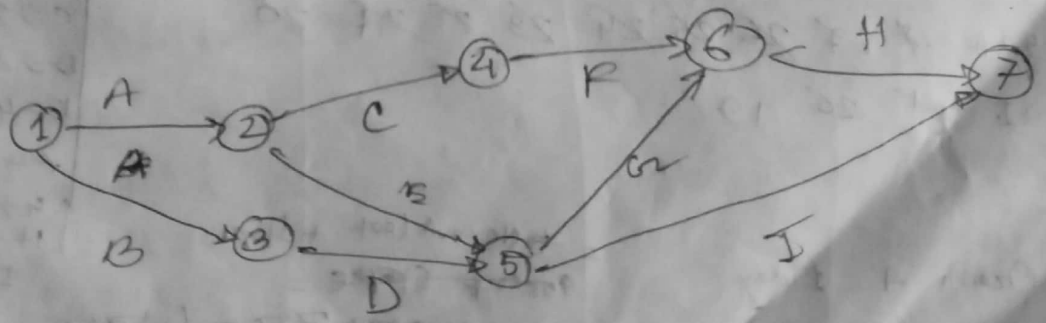
Activity	Time		Cost		Cost slope	Effective cost slope	Remaining days
	Normal	Crash	Normal	Crash			
A (1-2)	8	4	3000	6000	750	250	4
B (1-3)	5	3	4000	8000	2000	1000	2
C (2-4)	9	6	4000	5500	500	500	3
D (3-5)	7	5	2000	3200	600	300	2
E (2-5)	5	1	8000	12000	1000	500	4
F (4-6)	3	$2\frac{1}{2}$	10000	11200	2400	240	$-\frac{1}{2}$
G (5-6)	6	2	4000	6800	700	350	-4
H (6-7)	10	7	6000	8700	900	300	3
I (5-7)	9	5	4200	9000	1200	600	4
			45200	70,400			



A → C → F → H = 30

A → E → G → H = 29

A → E → I = 22

B → D → G → H = 28

B → D → I = 21

Activity	Path required reduction					Cost Slope	Expedited Cost Slope	Time reduction
	A→C→F→H	A→E→G→H	A→E→I	B→D→I	B→D→G→H			
A	4	4	4			750	250	4
B				2	2	2000	1000	2
C	3					500	500	3
D				2	2	600	300	2
E		4	4			1000	500	4
F	1/2					2400	2400	1/2
G		4			4	700	350	4
H	3	3			3	900	300	3
I			4	4		1200	600	4

(C.P)

A→C→F→H - 30 29 28 27 26 25 24 23 22 21 20 19 1/2

A→E→G→H - 29 28 27 26 25 24 23 22 21 20 19 18 1/2

A→E→I - 22 21 20 19 18

B→D→I - 21 20 19

B→D→G→H - 28 27 26 25 24 23 22 21 20 19 1/2

A → 4 3 2 1 0

B → 2

C → 3 2 1 0

D → 2 1 0

E → 4

F → 1/2 0

G → 4 3 2 1 1/2

H → 3 2 1 0

I → 4

① Crash A by 1 day 45200+750 = 45950₹

② Crash A by 1 day 45950+750₹ = 46700₹

③ two Critical path (A→C→F→H, B→D→G→H

Crash H by 3 day 46700 + 3×900
= 49400

④ Crash A, D by 1 day = 49400 + 750+600
= 50750

⑤ Crash A, D by 1 day = 50750+750+600
= 52100

⑥ Crash C, G by 1 day = 52100 + 500+700
= 53300

⑦ Crash C, G by 1 day = 53300+500+700
= 54500

⑧ Crash C, a by 1 day

$54500 + 500 + 700$

$= 55700$

⑨ Crash F, h by $\frac{1}{2}$ day $= 53700 + \frac{1}{2} \times 2400 + 700 \times \frac{1}{2}$

$= 57250$

∴ Total Crash $= 10\frac{1}{2}$ days:

Remains $= (30 - 10\frac{1}{2}) = 19\frac{1}{2}$ days

Indirect Cost $= 19\frac{1}{2} \times 2000 = 39000$

Total Cost $= 57250 + 39000 = 96250$

e

Premium Value calculation:

$4\frac{1}{2}$ days earlien:

Value $= 4\frac{1}{2} \times 50000$

$= 225000$ ₺