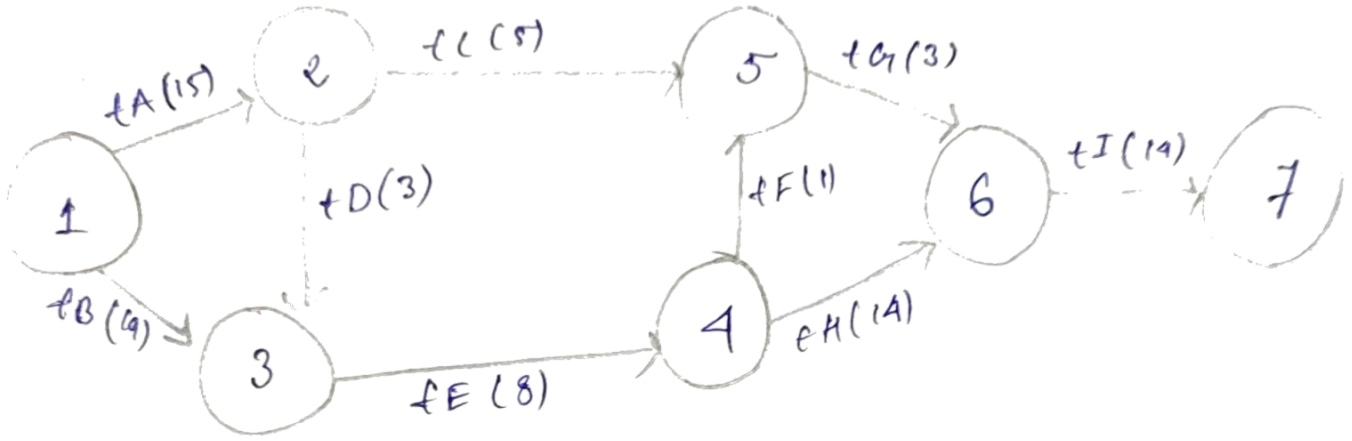
ACADEMY OF TECHNOLOGY

NAME - SK Asif Ali
DEPT - CSE 1
SEM - 5th ROLL - 37
SUB - Software Engineering Lab (ESC-591)

ASSIGNMENT - 5



1. Earliest possible Time

$E_1 = 0$

$E2 = E1 + tA = 0 + 15 = 15$

$E3 = E2 + tD = 15 + 3 = (18)$ ↳ Max $E3 = E1 + tB = 0 + 15 = 15$

$E4 = E3 + tE = 18 + 8 = 26$

$E5 = E2 + tC = 15 + 5 = 20$ $E5 = EA + tF = 26 + 1 = (27)$ ↓ Max

$E6 = E4 + tH = 26 + 14 = (40)$ ↓ Max $E6 = E5 + tG = 27 + 3 = 30$

$E7 = E6 + tI = 40 + 14 = 54$

Latest possible Time

$L7 = 54$

$L6 = L7 - tI = 54 - 14 = 40$

$L5 = L6 - tG = 40 - 3 = 37$

$L4 = L6 - tH = 40 - 14 = (26)$ Min $L4 = L5 - tF = 37 - 1 = 36$

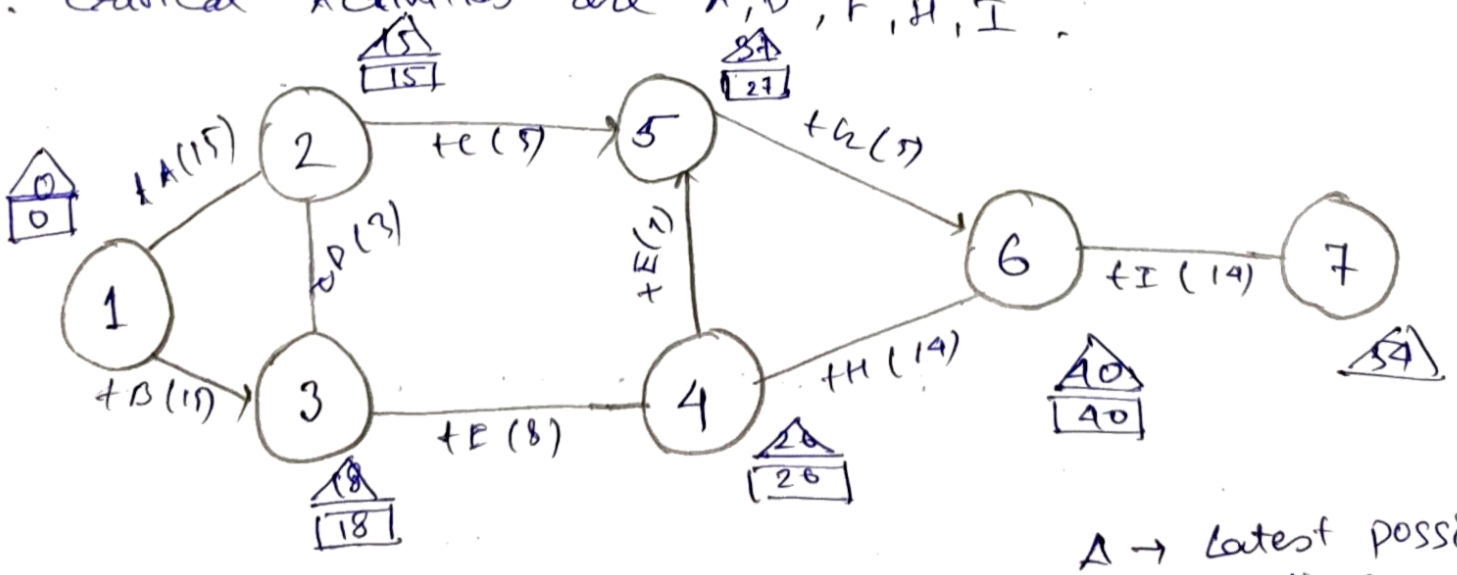
$L3 = L4 - tE = 26 - 8 = 18$

$L2 = L5 - tC = 37 - 5 = 32$ $L2 = L3 - tD = 18 - 3 = (15)$ → Min

$LJ = 12 - tA = 15 - 15 = (0)$ (Min) $\quad LS = 23 - tB = 18 - 15 = 3$

Activity	Normal Duration (t)	Earliest Start (ES)	Earliest Finish EF = ES + t	Latest Start (LS) LS = LF − t	Latest Finish (LF)	Total Float (TF) (LS − ES) / (LF − EF)
A	15	0	0+15 = 15	15−15 = 0	15	0 − 0 = 0
B	15	0	15	3	18	3 − 0 = 3
C	5	15	20	32	37	32 − 15 = 17
D	3	15	18	15	18	15 − 15 = 0
E	8	18	26	18	26	18 − 18 = 0
F	1	26	27	36	37	36 − 26 = 10
G	3	24	30	37	40	37 − 27 = 10
H	14	26	40	26	40	26 − 26 = 0
I	14	40	54	40	54	40 − 40 = 0

2. Critical Activities are A, D, F, H, I.



△ → Latest possible time

□ → Earliest possible time

——→ critical path.