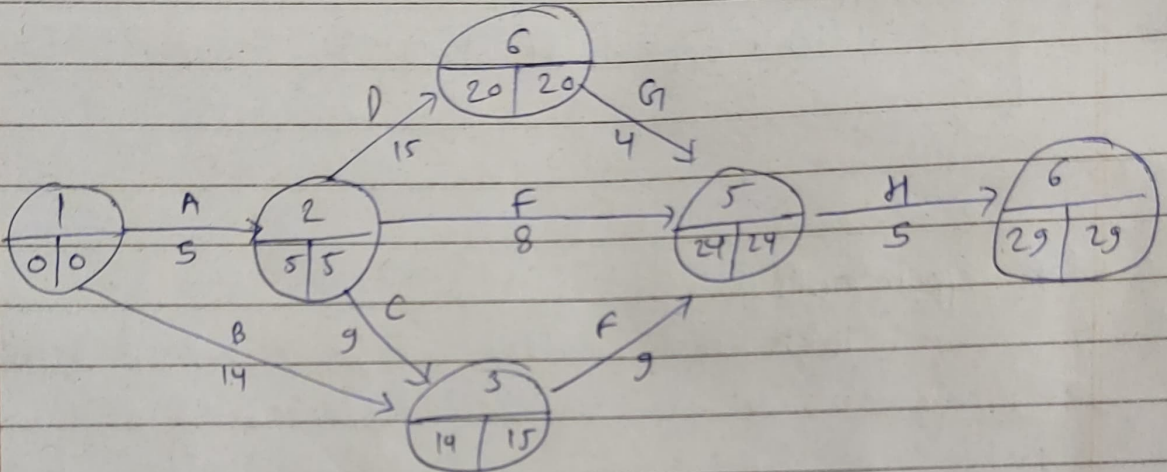Name — Ankit Goyal
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Numerical Problem PERT

Solⁿ:-

(i) earliest time $t_e = \dfrac{a + 4m + b}{6}$

variance of each activity $\sigma_t^2 = \left(\dfrac{b-a}{6}\right)^2$

Pert Network Diagram

(ii) ### Activity schedule

Activity	Time estimates			t_e	$(\sigma_t)^2$	Earliest time		latest time	
	a	m	b			start	finish	start	Finish
A	2	4	12	5	25/9	0	5	0	5
B	10	12	26	14	64/9	0	14	1	15
C	8	9	10	9	1/9	5	14	6	15
D	10	15	20	15	25/9	5	20	5	20
E	7	7.5	11	8	4/9	5	13	16	24
F	9	9	9	9	0	14	23	15	24
G	3	3.5	7	4	4/9	20	24	20	24
H	5	5	5	5	0	24	29	24	29

14. The critical path of the project is 1-2-4-5-6. critical activities being A, D, G, and H.

Expected project length $= 5 + 15 + 4 + 5$
$$= 29 \text{ weeks.}$$