

Exercise on Scheduling (PERT and CPM)

The tables below show the tasks involved in a project, with their durations and dependencies. Use this information to:

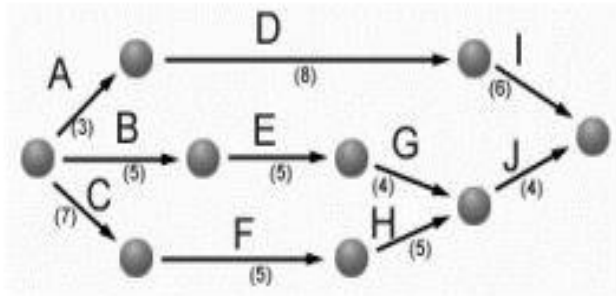
1. Draw an activity network diagram.
2. Find Critical Path and Critical Activities.
3. Slack time of each Activities.

A) Project 1

Task	Predecessors Tasks (Dependencies)	Duration
A	-	3
B	-	5
C	-	7
D	A	8
E	B	5
F	C	5
G	E	4
H	F	5
I	D	6
J	G, H	4

B) Project 2

Task	Duration (days)	Dependencies
T1	8	
T2	15	
T3	15	T1 (M1)
T4	10	
T5	10	T2, T4 (M2)
T6	5	T1, T2 (M3)
T7	20	T1 (M1)
T8	25	T4 (M5)
T9	15	T3, T6 (M4)
T10	15	T5, T7 (M7)
T11	7	T9 (M6)
T12	10	T11 (M8)



Attempt the following question by using the above activity on arrow network diagram:

1. Identify activities that needs special attentions.
2. Find the shortest time for completing the project.
3. What is the activity slack time of Task E and F?
4. The person working on task G tells the project manager he can't start work until one day after the scheduled starting date. What impact would this have on the completion date of the project? Why?