CIE485 Construction Management
Homework #2
Due: Wednesday, March 21, 2012

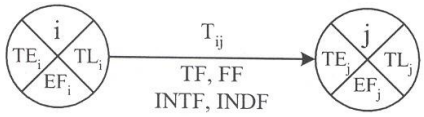
Problem I

For the activity on arrow (AOA) network information given below:

a. Construct an arrow diagram.

b. On the diagram, compute the early and late event times (TE and TL) and event float (EF) for each node. Use event times to determine the four floats (TF, FF, INTF, INDF) for each activity. Identify the activities on the critical path and the project duration.

Calculate and show results on the diagram in the following form:



i	j	ACT	T_{ij}	i	j	ACT	T_{ij}
2	4	A	3	18	22	M	10
2	6	B	4	18	24	N	6
4	8	d1	0	20	26	P	9
4	12	G	7	20	28	d4	0
6	10	E	6	22	28	d5	0
6	14	F	1	22	30	d6	0
8	12	C	3	24	30	Q	8
10	12	d2	0	26	32	R	8
10	14	d3	0	28	32	S	5
12	16	H	2	28	34	T	6
14	18	J	5	30	34	V	2
16	20	K	3	32	36	U	3
16	22	L	4	34	36	W	9

Problem II

For the network information given below:

a. Construct a precedence diagram.

b. On the diagram, compute the four schedule dates (ESD, EFD, LSD, and LFD) and the four floats (TF, FF, INTF, and INDF) for each activity, and the lag for each link. Identify the critical path.

c. Calculate and show results on the diagram in the following form:

No	ACT	DUR	PREDECESSORS
5	B	5	-
10	M	4	B
15	N	9	B
20	P	8	B
25	L	6	M
30	F	5	M,N
35	C	8	N,P
40	K	6	P
45	G	7	L,F,C
50	A	3	F,C
55	D	7	C,K
60	E	9	K
65	H	3	G,A
70	J	2	D,E,H