

ENGR 301/4 SS - Assignment 1

Assignments must be submitted ON-LINE on the course website (using Moodle)

due 17:30 (5:30 pm), Monday Jan 30, 2012

The next page shows the Activity on the Node network diagram for the project having the following set of activities:

Activity			
Number	Description	Duration	Predecessors
1	Activity A	6	--
2	Activity B	2	--
3	Activity C	3	A
4	Activity D	2	B
5	Activity E	4	B
6	Activity F	1	C
7	Activity G	3	C,D
8	Activity H	6	D,E
9	Activity I	3	F,G
10	Activity J	1	G,H
11	Activity K	1	H
12	Activity L	2	I,J
13	Activity M	3	K
14	Activity N	4	L,M

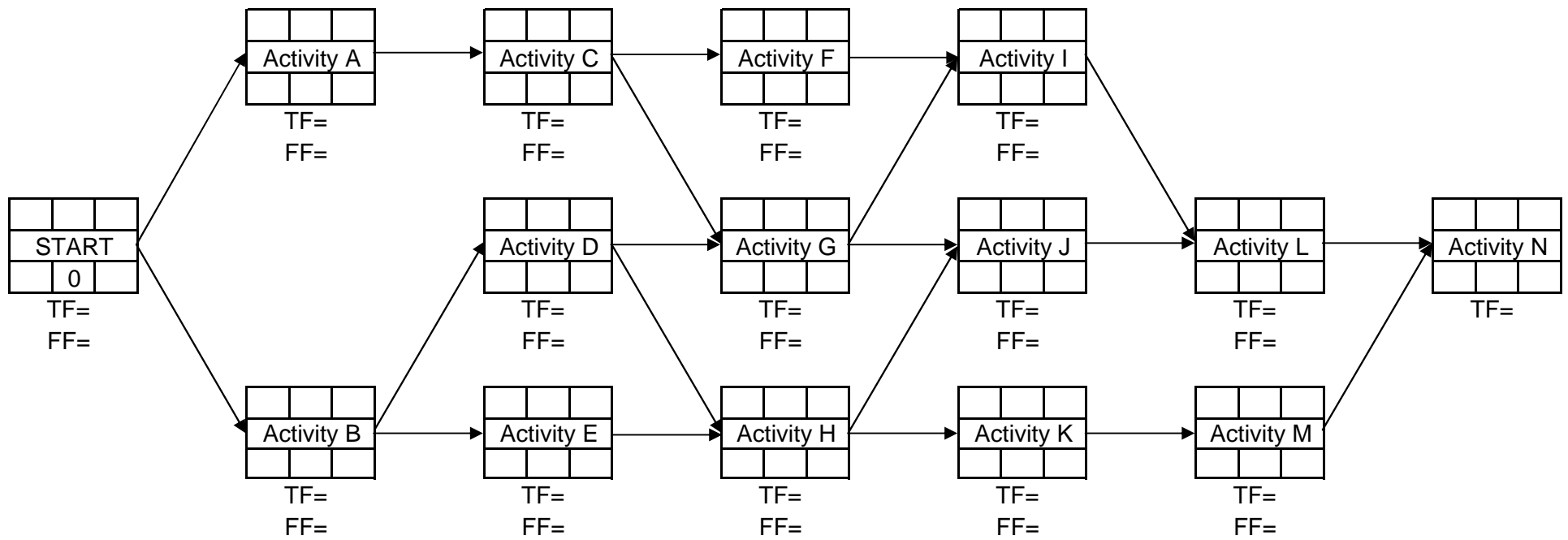
Note that a dummy node START, with duration 0, is introduced to allow for a common start of activities A and B.

Find ES, EF, LS, LF, TF and FF for all the activities in the diagram and answer the following questions:

- 1-1. What is EF of activity G?
- 1-2. What is ES of activity H?
- 1-3. What is the total project duration?
- 1-4. What is LF of activity J?
- 1-5. What is LS of activity D?
- 1-6. What is TF of activity J?
- 1-7. What is TF of activity F?
- 1-8. What is FF of activity E?
- 1-9. What is FF of activity D?
- 1-10. How many critical paths are there?

All questions are of equal value, 1 mark each.

Precedence Diagram (AON - Activity On Node)



Legend:

ES		EF
Activity Description		
LS	D	LF
TF= FF=		

- ES: earliest start
- EF: earliest finish
- LS: latest start
- LF: latest finish
- D: duration
- TF: Total Float (or Total Slack)
- FF: Free Float (or Free Slack)

ENGR 301/4 SS – Assignment 1 – Answer sheet

This is the answer sheet that will be shown on the course website on Moodle

Check the *correct* answer for the following questions:

Question 1-1	<input type="radio"/> 5	<input type="radio"/> 7	<input type="radio"/> 9	<input type="radio"/> 11	<input type="radio"/> 13	<input type="radio"/> other
Question 1-2	<input type="radio"/> 2	<input type="radio"/> 4	<input type="radio"/> 6	<input type="radio"/> 8	<input type="radio"/> 10	<input type="radio"/> other
Question 1-3	<input type="radio"/> 17	<input type="radio"/> 19	<input type="radio"/> 21	<input type="radio"/> 31	<input type="radio"/> 40	<input type="radio"/> other
Question 1-4	<input type="radio"/> 12	<input type="radio"/> 13	<input type="radio"/> 14	<input type="radio"/> 15	<input type="radio"/> 30	<input type="radio"/> other
Question 1-5	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> other
Question 1-6	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> other
Question 1-7	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> other
Question 1-8	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> other
Question 1-9	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> other
Question 1-10	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> other

Notes: Other means that none of the answers given is correct and that the correct answer is other than the answers given.

Each question is 1 mark.

Follow these instructions when submitting the assignment:

- 1 The answers must be submitted on the course website using Moodle.
- 2 Only submissions on Moodle will be considered.