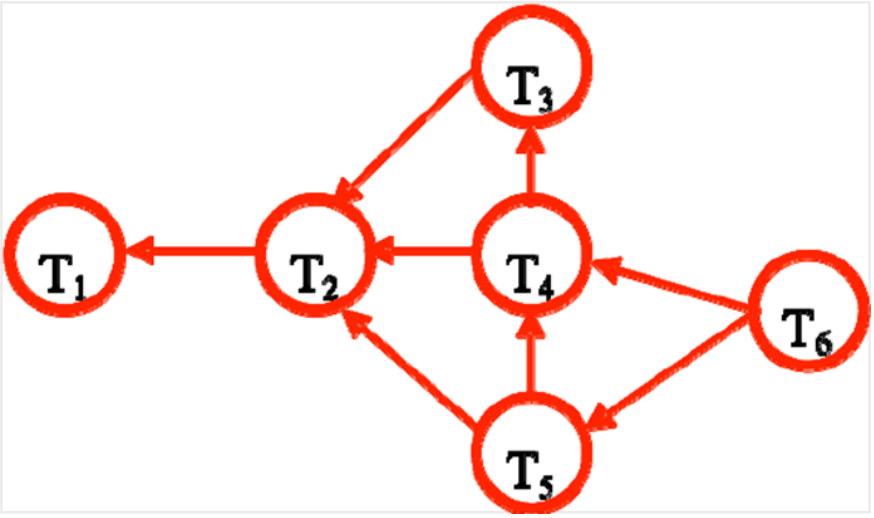
Chp 3 - Exercise 1 - Individual



•For the following task dependency graph:

1. What is the critical path if each task takes the same amount of time?
2. What is the critical path length if the odd numbered tasks take 10 time units and the even numbered tasks take 5 time units?

Grading Rubric:
_____ (2 Points) Answer #1 with explanation.
_____ (2 Points) Answer #2 with explanation.

Answer:

**note: T6 we start from here and ends at T1

1. **Same amount of time**

T4 to T3 route option would be T4,T3,T2,T1 so 4
T4 to T2 option would be T4,T2,T1 so 3
T5 option would be T5,T2,T1 so 3

If they are all have the same amount of time then T4 with route through T4 to T3 would be the critical path since it is the most expensive (4 units of time).

2. **Different amount of time units based on task numbering being odd or even**

T4 to T3 route option would be T4,T3,T2,T1 so 5,10,5

T4 to T2 option would be T4,T2,T1 so 5,5
T5 option would be T5,T2,T1 so 10,5

So the Critical path would be T4 to T3 route since it would cost **20(5(T4) + 10(T3) + 5 (T2) = 35 time units**