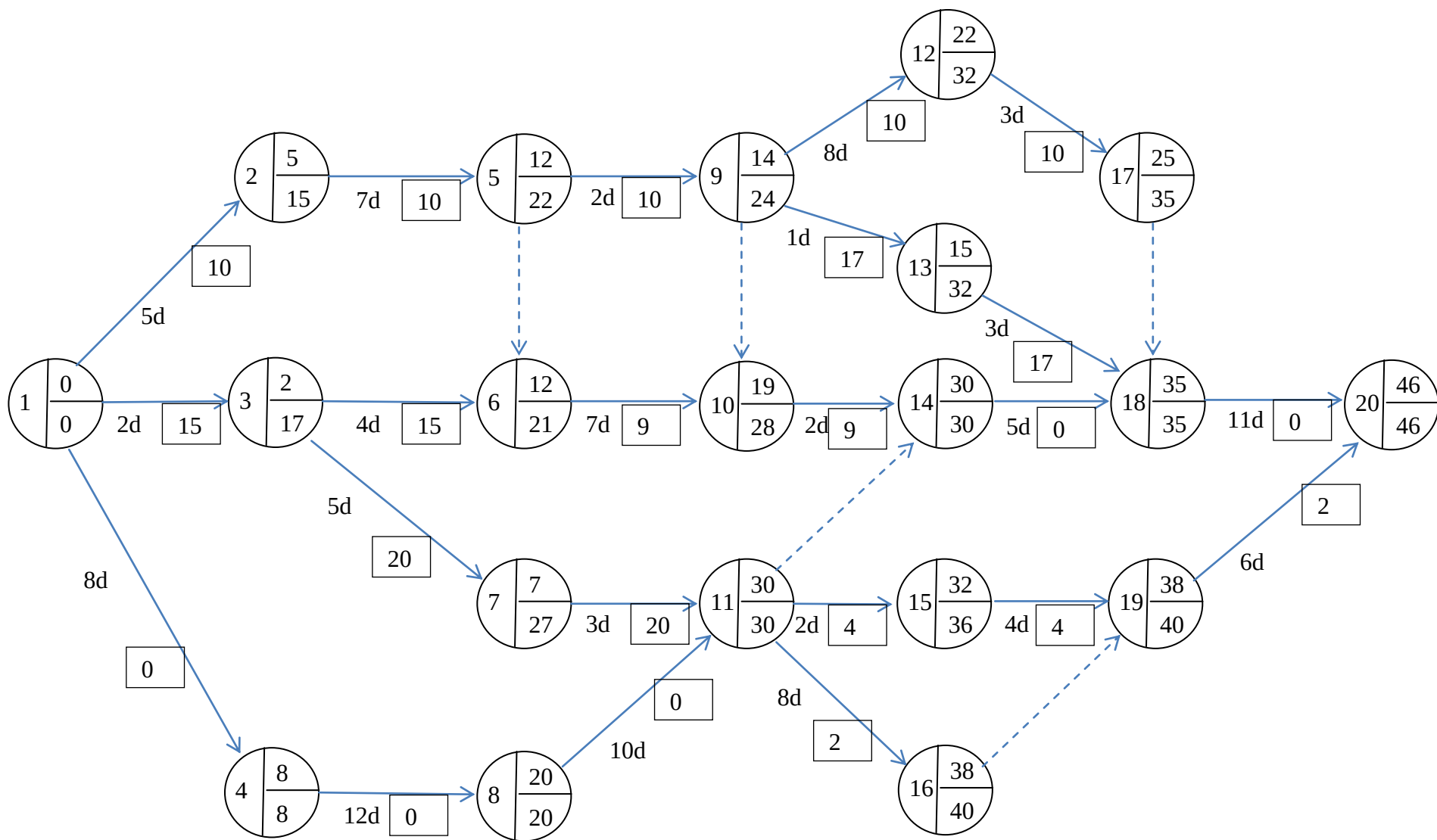


RESOURCE SMOOTHING. EXERCISE 3

Draw a network for the programme activities shown in table 1 and show the earliest and latest times for each activity, together with the float and the critical path.

Activity	Duration	Resource units
1-2	5 days	3
1-3	2 days	5
1-4	8 days	4
2-5	7 days	3
3-6	4 days	1
3-7	5 days	4
4-8	12 days	3
5-9	2 days	4
6-10	7 days	2
7-11	3 days	6
8-11	10 days	3
9-12	8 days	5
9-13	1 day	4
10-14	2 days	3
11-15	2 days	3
11-16	8 days	2
12-17	3 days	1
13-18	3 days	5
14-18	5 days	4
15-19	4 days	3
18-20	11 days	5
19-20	6 days	3
Dummy relationships		
5-6		
9-10		
11-14		
16-19		
17-18		

The contractor also wishes to carry out some resource smoothing in order to reduce excessive “peaks” and “troughs” in the labour aggregate chart. Indicate on the graph paper provided, the adjustments you would make in order to meet the constructor’s wishes, and discuss the logic for this approach.



[illegible]

[illegible]

[illegible]