

Kysymys 1

🚩 Merkitse kysymys

Kokonaispisteistä 10,00

Vastaus tallennettu

Please describe how production is controlled using LBMS or takt principles.

- what information is collected?
- what calculations are performed?
- how the information is used in decision making?

Kysymys 2

🚩 Merkitse kysymys

Kokonaispisteistä 15,00

Vastaus tallennettu

Four modern digital applications were introduced during the course and additionally you may know of other digital tools.

Please explain with examples how digital tools could improve production planning and control decisions and help decrease waste.

Give generic principles in the beginning and then dive deeper into a few selected specific examples.

Kysymys **3**

🚩 Merkitse kysymys

Kokonaispisteistä 10,00

Vastaus tallennettu

How can the variability in construction be reduced?

What can be done to protect the production system against variability that cannot be removed?

Kysymys 4

Merkitse kysymys

Kokonaispisteistä 15,00

Vastaus tallennettu

Which factors cause wasted effort in construction and how could waste be decreased?

Describe first generic principles in a few paragraphs and then dive deep into one or two example ways to decrease waste.

See the attached Flowline figure. (Right click and open in another tab)

[https://mycourses.aalto.fi/pluginfile.php/1260710/question/questiontext/1292916/3/2642565/production%](https://mycourses.aalto.fi/pluginfile.php/1260710/question/questiontext/1292916/3/2642565/production%6)

Task 1 has an optimum crew of 2 people and the task has 4 crews

Task 2 has an optimum crew of 1 person and the task has 4 crews

Task 3 has an optimum crew of 1 person and the task has 4 crews.

The overhead cost of each day of project is 1,000 EUR.

The average wage is 50 EUR / hour and working time is 8 hours / day

The project deadline is 43 days.

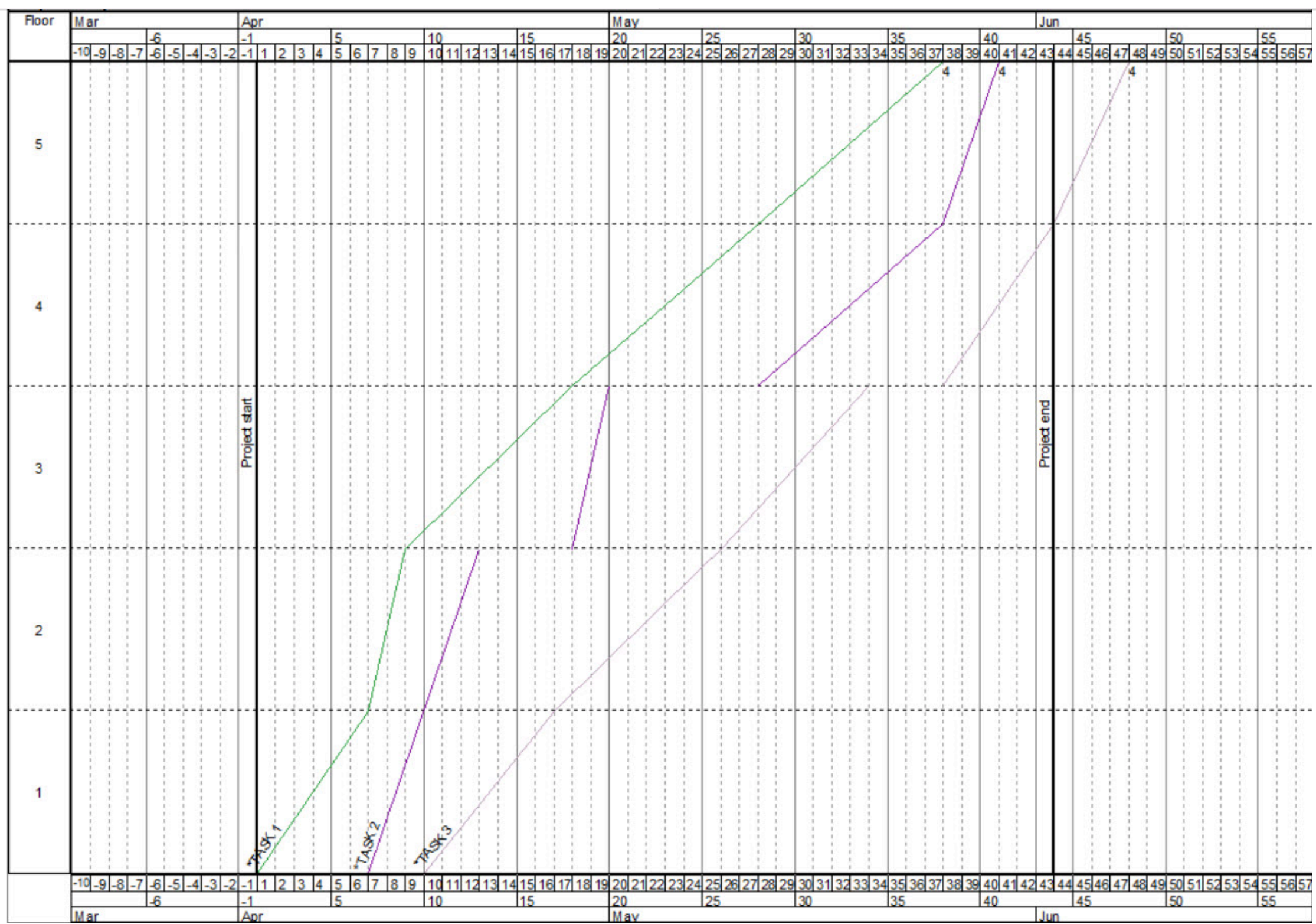
Calculate the production system cost assuming:

option a) Crews with no work demobilize, and the wasted time associated with each mobilization and demobilization is 2 hours.

option b) Crews with no work wait on site or slow down.

How would you optimize the schedule and what would be the production system cost of the optimized schedule?

What are the risks of each scenario (mob/demob, Wait, optimized)?



Kysymys 6

Merkitse kysymys

Kokonaispisteistä 10,00

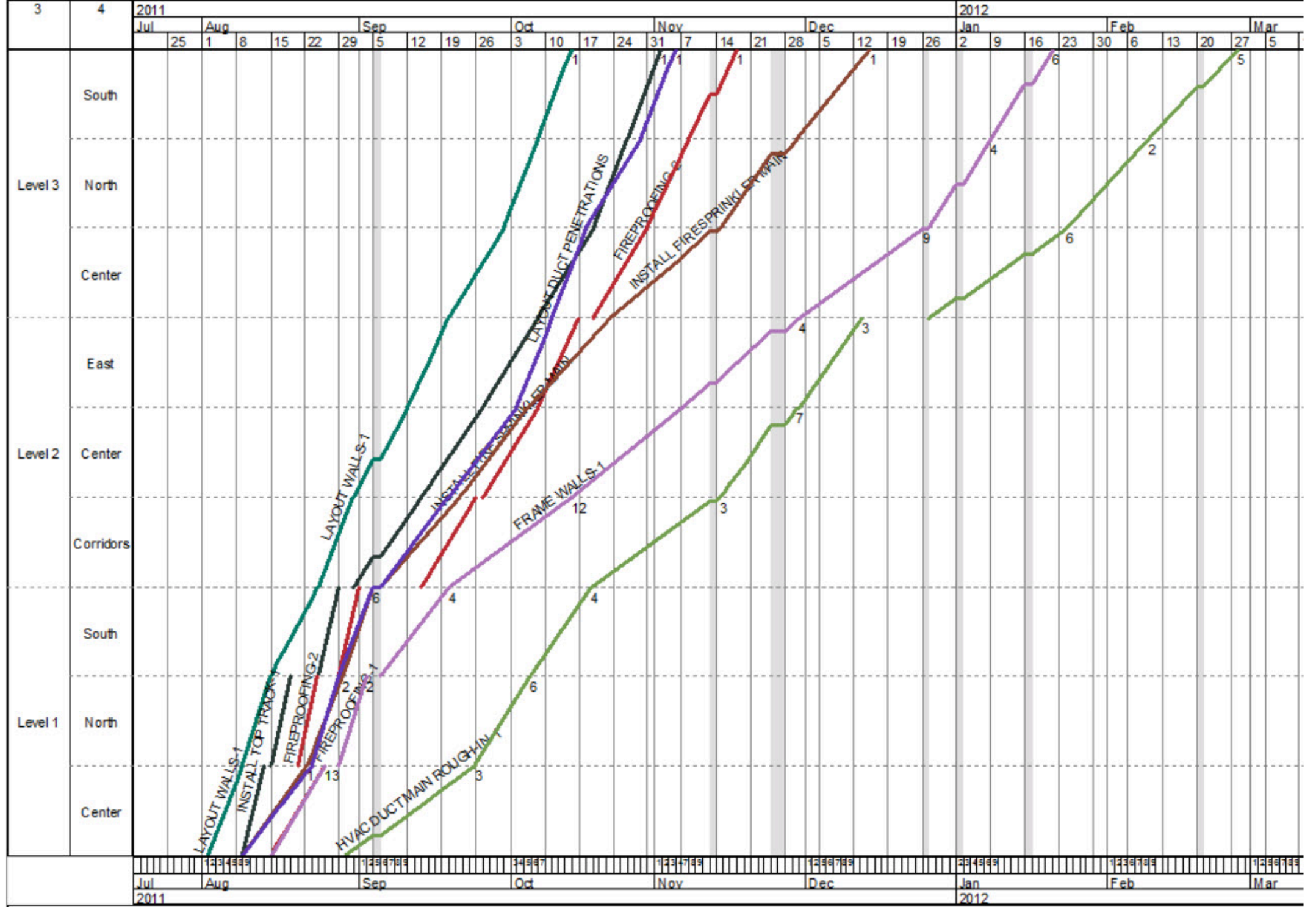
Vastaus tallennettu

Please open the attached file in a new tab:

<https://mycourses.aalto.fi/pluginfile.php/1260710/question/questiontext/1292916/9/2642571/schedule%20>

Which problems can you see in the schedule? The number of crews is shown as a number after each location.

How would you improve the schedule so that the current end date is not exceeded? Explain verbally, diagrams are not required.



Kysymys 7

Merkitse kysymys

Kokonaispisteistä 15,00

Vastaus tallennettu

What starting data is required to plan a location-based schedule?

How does the optimization of an LBMS schedule proceed and what are the most important things to remember when optimizing a schedule?

Kysymys **8**

🚩 Merkitse kysymys

Kokonaispisteistä 5,00

Vastaus tallennettu

What are the three flow types in construction and how do they impact construction projects?

Kysymys 9

Merkitse kysymys

Kokonaispisteistä 10,00

Vastaus tallennettu

What are the key similarities and differences between takt planning and control (TPTC) and location-based management (LBMS) approaches?

What are the potential benefits and drawbacks of each approach? What kind of projects are they most suitable for?