

CM1 theoretical questions for revision

The state and the environment of the construction site.

1. What type of information is needed about the construction site? (List at least 10)
2. Why do we have to gather information of the adjacent building? What information do we need?

Types of foundations.

3. How is a slurry wall created? (in writing and sketches - the steps of construction)
4. Introduce the different technologies of cast-in-place piles (in writing and sketches, some properties), and write the steps of constructing the pile foundation (any technology).

Construction equipment. Material supply.

5. Introduce the types of cranes (in writing and sketches - properties, advantages, disadvantages)
6. Introduce the different types of excavators (in writing and sketches - use, properties, advantages, disadvantages)

Basics of scheduling.

7. What are the steps of making a schedule?
8. List the types of schedule representations, write the advantages and disadvantages.

Site organization

9. Describe the purpose of the construction site plan (why engineers spend time to find the best solution)!
10. What kind of construction site drawings exist and what is the function of each? Make a list of things that must be marked at a general construction site drawing!
11. What kind of construction site drawings exist and what is the function of each? Make a list of things that must be marked at a construction site map!

Phases and participants of the construction process (roles and responsibilities)

12. Draw a typical connection network for a moderate office building! Introduce the main participants! What are their responsibility?
13. What kind of educated personnel is required in the different phases of the construction project? Describe their activities!

Technical preparation and controlling of the construction. Contracting process.

14. Describe the procedures of the preconstruction period!
15. Introduce the different levels of construction standards!

Building according to the plans. Supervision of the construction. Handover of the building.

16. What kind of data and criteria have to be defined by the construction documentation (drawings and written parts)?
17. What are the steps of a usual handover procedure? What kind of handover procedures are known?

Technologies of the construction project. Aspects of selecting technologies. Time-sequence of the construction process.

18. Introduce the different formwork systems used in case of monolithic reinforced concrete structures (vertical structures, horizontal structures, special cases)!
19. What is a construction activity? How has time sequence to be made for construction activities?