

## **Civil Engineering (BSc)**

**Complex professional exam / Final Exam 20/20.**

### **CONSTRUCTION MANAGEMENT TOPIC**

(Civil engineering fields of specialization)

1. What's the difference between construction management and construction technology? What are the typical resources involved in construction management?
2. What is a bid package, and what are its main components?
3. Describe the different legal structures used in construction.
4. What is project planning? What are the nine major components involved in project planning?
5. Outline the project development cycle. What happens at each stage?
6. What are the different techniques used for project scheduling?
7. Explain the CPM (Critical Path Method). What are critical activities, and how is the critical path determined?
8. What is the difference between free float and total float?
9. What is project crashing? How is it performed?
10. What is resource allocation? How does resource management differ in time-constrained and resource-constrained projects?
11. What are the four key dates in project management? How is each one determined?
12. What are the main types of costs in construction management? How is the total project cost determined?
13. Explain project updating and controlling methods, with a focus on cost and schedule variance analysis.
14. What are the most common types of construction equipment? How are their costs and productivity calculated?
15. Describe the process of construction site preparation and organization. Why is it important?
16. Explain the spatial elements of construction work. What are the external and internal influencing factors?
17. Describe the types of construction auxiliary plants.
18. Safety in construction site planning, discuss the importance and key elements.