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**Course:** *Engineering Management (BSc)*  
**Subject:** *Complex economic*

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1. Concept and functions of management: Describe the concept and key issues of the management! Introduce the main areas and main functions of the management!
2. Management History and trends: Describe the main periods of management science! Introduce the main points of the work of Taylor, Fayol and Ford, and show theirs' influences on the modern management!
3. Planning: Define the following terms/concepts: philosophy of an organization, vision, mission! Describe the planning process! Describe different frameworks, for analyzing the macro and micro-environment, as strategy planning tools!
4. Organizations, organizational structure: Describe the main types of departmentalization of the organizations!
5. Leadership styles: Define the leadership style? Describe different leadership styles! What are the differences between the roles of leaders and managers?
6. Motivating Employees: How can managers motivate employees? Describe at least three motivation theories!
7. Business ethics, sustainability, social responsibility: Define the value-creating processes in case of companies! Define the concept of social responsibility! Does It Pay to Be Ethical?
8. What is today's interpretation of production management? Describe the importance of mass character of production in light of the development of a company. Describe the relationship between the mass character of production and the product life cycle (product-process matrix)!
9. Describe the types and possibilities of production forecasts! How does the product life cycle affect the usability of forecasting models?
10. Describe the possibilities of analysing the errors of forecasting models. What/Which methods help you determine whether a selected model fits consumer needs?
11. Describe the concepts and elements of short-term capacity planning! Describe the characteristics of absolute and relative capacity values! Which models help you develop a long-term corporate strategy?

12. Define the EOQ model and describe under what conditions it can be used. What differences can be made between pure inventory and manufacturer-inventory systems? Describe what stock levels can be differentiated in the model and when these levels can be applied
13. Describe the basic issues of production organization based on the comparison of MRP and JIT. Describe the structure and functions of enterprise resource planning (ERP) systems (the relationship between modular structure and functions)! What is LEAN management? What are its principles?
14. The purpose and the environment of organisations: Concept of companies, analysis of the macro level environment, analysis of the micro level environment, types of market competition, industrial environment, range of stakeholders.
15. General characteristics of organisations – organisational structure: The 7S model, division of labor, division of power, coordination, configuration.
16. Legal forms of organisations: Types, basic conditions of establishment and termination, general structure.
17. Operation of companies. Production: Value chain, design, preparation, product production, sales and follow-up activities.
18. Characteristics of companies: Profile, operational performance, capacity, total production per unit, verticality of production, mass, production, production systems, state-of-the-art production systems, time course of production.
19. Management of tangible assets, investments: Fixed assets, tangible assets, tasks of tangible asset management, lifetime of tangible assets, utilization of tangible assets, maintenance of tangible assets, investments.
20. Management and storage of current assets: Current assets, need for current assets and turnover rate, basics of inventory management, reduction of excess inventory.