

Vezetés és szervezés mesterszak záróvizsga tételék

1. The concept and functions of management
 - What is the definition of management and what do the functions mean? What is the definition of a manager and what levels of management can we identify by classification?
 - Describe Mintzberg's classification of managerial roles: define categories and list the roles.
 - What are the three types of skills that managers need and what do they mean?
2. Structural characteristics of organizations and main organizational structures
 - Explain the six elements of organizational design.
 - Define Simple, Functional, and Divisional structures, highlighting their strengths and weaknesses
 - Describe why the Team and Matrix structure are specific.
3. Defining marketing
 - What are the value and scope of marketing?
 - Introduce the new marketing realities: the three forces and the new consumer and company capabilities through practical examples.
 - What are the holistic marketing dimensions?
4. Market segmentation, targeting, and positioning
 - Introduce the ways a company can divide the consumer and the business market into segments
 - List the requirements for effective segmentation. Introduce the different levels of segmentation (target market strategies) and give example for at least two different levels
 - Explain the competitive frame of reference and perceptual map for positioning, and point out their application
5. Formalized Quality Management Systems
 - General features and main principles of ISO 9001.
 - Sector-specific quality management systems in production.
 - Sector-specific quality management systems in services.
6. Current Quality Management Trends
 - The relationship between Six Sigma, Lean Management and TQM.
 - Self-assessment and its role in the improvement of the organizational operation.
 - The main criteria of the EFQM model.

7. Process management in practice
 - Basics of process management, process improvement models.
 - Possibilities to identify and describe processes.
 - Methods assuring the optimal, error-free implementation of processes.
8. Quality management methods and tools
 - Classification of quality management tools.
 - Quality management tools for data collection and analysis related to processes.
 - Quality management tools focusing on failure analysis.
9. Fundamentals of project management
 - Concepts (definition of project & programme, phases, international organizations and certifications, life cycle analysis)
 - Interpretations of project success
 - Project portfolio management
10. Visualization and analysis of project plans
 - Traditional techniques (Gantt-diagram, Elemental Trend Analysis)
 - CPM, MPM
 - PERT, GERT
11. Project planning
 - Develop schedule
 - Graph theory algorithms for management
 - Schedule compression (crashing algorithm, fast tracking)
12. Tools and techniques for realization
 - Project risk management process
 - Performance measurement with the Earned Value Management (EVM)
 - Performance measurement with ES technique
13. Describe the most important forecasting methods and their practical applications.
 - Classification of forecasting methods. Basic components of the demand pattern.
 - Projective forecasting methods – methods used for forecasting constant demand, and demand with trend and seasonality.
 - Evaluation of the forecasting error. Monitoring the forecasting model (tracking signal).
14. Describe what you learned about capacity planning and analysis.

- Capacity definitions, most important capacity indices and their application.
- Short-term capacity planning – difference between demand and capacity management, classical methods.
- Application of the learning curves in capacity analysis – theory, conclusions.

15. Describe the calculation of the economic order quantity in inventory management and the difficulties of the practical application.

- Operation of classic inventory control mechanisms – application, similarities, differences.
- Deterministic (EOQ, EPQ) and stochastic models (safety stock) in inventory management – the principles of the models, managerial decisions and challenges.
- Discounts depending on the quantity ordered.

16. How can aggregate production planning be done with linear programming, and what are the most important outcomes for management?

- The basics of aggregation – levels, reasons, necessary information set, challenges
- Management decisions based on the results of linear production planning models. Finding and evaluating the optimal solution.
- Sensitivity analysis of objective function coefficients and right-hand side parameters.