

**Field of study: Economics and IT Applications**  
**1st level studies**

**Questions for the field of study**

1. Describe types of econometric models and deliver an example of the model that could be used for analysing a chosen economic phenomenon
2. Define annuity and continuous payments Give formula and the relationship between them
3. Provide classification and general interpretation of basic summary statistics
4. Describe stages of statistical hypotheses verification process
5. Explain the approaches to valuation What are the philosophical bases and information needed to use each of them in investment decisions?
6. Clarify the term: multimedia
7. List and explain the basic constructs of structured programming
8. E-commerce - what is it and how is it better than traditional commerce?
9. Components of financial statements and the scope of information that are presented in them
10. Provide a description of the core functions of an accounting module
11. What is Geographic Information Systems
12. What are the benefits of using statistical packages?
13. Capabilities and limitations of computer simulation method in the analysis of the business
14. Describe three main components of Decision Support Systems
15. Does the capital structure affect the company's value and the cost of capital under the Modigliani-Miller theory?
16. Name at least three different types of information system used in organizations and describe one of them
17. Interpret the role of SQL in database development
18. Describe the role and influence of information systems on enterprise functionality
19. List and briefly describe major components of a typical database environment
20. Characterise System Dynamics as a technique of continuous simulation
21. What is information security and why is it important?
22. How would you value the cost of capital? What are the methods recommended in the finance literature?
23. Explain the meaning of statistical estimation in economics
24. Describe the role and influence of information systems on enterprise functionality
25. Based on WACC (weighed average cost of capital), ROIC (return on invested capital) and EVA (economic value added) when do we know that the company creates value?
26. Describe steps of the extended Simon's decision making model
27. The main objective, functions and instruments of the Central Bank
28. What phases of the business cycle do you know? List them and describe their characteristics
29. Describe sources of public revenues and their costs (collection, compliance, demoralisation, excess burden)
30. The essence of the company's financial liquidity. Indicators of its evaluation

**Module course: Market research methods**

1. Describe types of formations technical analysis
2. Name and describe criteria for evaluating quality of secondary data in marketing research
3. Sources and methods of financing innovative projects

4. Describe criteria for success of innovative projects funded by private sector
5. Characterize quantitative and qualitative methods of supporting investment decisions

**Module course: IT engineering in business**

1. What UML diagrams are used in the IS analysis phase? Name at least four and describe the role and the basic concepts of one of them
2. Discuss the 7 layers of the Open Systems Interconnection (OSI) reference model
3. Describe concepts of usability and user experience design in the context of mobile applications
4. Name and describe four concepts associated with object-oriented analysis and design
5. Describe techniques used in process of designing mobile applications providing great user experience

**Module course: Real estate markets**

1. Describe features of the real estate market
2. What (and why) is the highest form of real property ownership?
3. Describe and compare methods of creating real estate management plans
4. What is a Real Estate Appraisal?
5. Describe the tools supporting the work of a real estate agent

**Module course: IT in business**

1. What is the business process model and how it can be used for e-Business?
2. Concisely describe essence and importance of IT tools in marketing
3. What is a responsive web design, and what are its advantages?
4. Name the most important steps that you need to take to start selling online
5. What are the most effective digital marketing communication channels?