MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE NATIONAL AVIATION UNIVERSITY FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION DEPARTMENT OF AIR TRANSPORT ECONOMICS

METHODICAL RECOMMENDATIONS

for performing control work for part-time students

in the discipline "Intellectual And Internet Business"

Speciality 073 "Management"

Educational And Professional Programme "Management Of Foreign Economic Activity"

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Methodical recommendations wer	e rev	iewed and approve	a:
at the meeting of the Department of	Air T	ransport Economic	S
Minutes № from "_	"	201	p.
Head of the Department		Olena AREFIEV	A

Methodical recommendations for the implementation of the control work

Performing a control work in the course "Intellectual and Internet Business" is a component of the educational process aimed at intensifying the independent work of higher education students majoring in 073 "Management" of the educational and professional programme "Management of Foreign Economic Activity". The test is the basis for admission to the test.

The purpose of the control work is to master, consolidate and deepen the theoretical knowledge acquired by the student in the course of studying the course, to develop the ability to work independently with educational, special literature and statistical materials, to make generalisations and conclusions.

In the course of the test, the student must study legislative acts, literary sources, and periodicals that address the issues of the chosen topic.

The test consists of two parts: a textual (theoretical) and a calculation (practical) part.

The textual part covers all the questions provided for in the test paper. Coverage of the questions should be accompanied by an analysis of legislative acts, literary sources, periodicals, statistical data, and examples from the practice of business management. Each of the issues should be concluded with brief conclusions and suggestions.

In the calculation part of the test, you must provide an algorithm and justify the solution to the problem.

The form of assignment is the last digit of the student's academic record.

The work is to be done in Ukrainian on A4 sheets with 1-1.5 line spacing and up to thirty lines per page, font size - Times New Roman 12 or 14. The volume of work is 15-20 pages. Page dimensions: top margin - 20 mm; bottom margin - 20 mm; left margin - 30 mm; right margin - 10 mm.

Page numbering should be on the sheets and indicated in the table of contents - mandatory.

Each structural part of the paper (theoretical and practical parts, conclusions, list of references) should be started on a new page and should be in capital letters symmetrically to the text. Do not put a full stop at the end of the title. Paragraph headings should be written in lowercase letters (except for the first capital letter) with a paragraph indent.

Illustrations (diagrams, graphs, charts, etc.) and tables should be presented in the paper immediately after the text where they are mentioned for the first time or on the next page. Illustrations and tables that are placed on separate pages of the paper are included in the general page numbering. Illustrations are labelled with the word "Fig.", written in the middle directly below the illustration and numbered consecutively.

Tables are numbered consecutively in the upper right corner, and the word "Table" is placed above the corresponding table heading, followed by its number. When transferring a part of the table to the next sheet, the word "Table" and the number are indicated once on the right above the first part of the table, above the other parts, write "Continuation of the table" and indicate the table number, for

example: "Continuation of Table 2". Each table must have a title, which is placed above the table and printed symmetrically to the text. The title and the word "Table" are capitalised and not underlined.

The list of recommended references is attached. The student may use other literature and the Internet. However, they must include these sources in the bibliography. There should be no less than 5 sources.

The test paper should contain:

- 1. Title page (sample attached); 1st page.
- 2. Table of contents, including a list of questions, tasks and a list of references (sample attached); 2nd page.
- 3. Question number and title; the answers to the questions begin on the 3rd page.
 - 4. Conclusions (from a new sheet).
 - 5. List of references (from a new sheet). Last page.

Variants of control works Option 1

- 1. The essence and role of intellectual business in a market economy.
- 2. Franchising as a way to organise your own business.
- 3. Directions and prospects for the development of intellectual business in Ukraine.

Task. Distribute the examples of risk management that are typical for smart business, fill in Table 1.

Table 1.

Risk management that is characteristic of smart business

Risk.	Risk factors	Methods of
		risk
		management
Obtaining a negative result	Incorrect interpretation of the results and/or choice of	
during R&D (economic	the way to implement the fundamental research on	
risk)	which R&D is based; inability to implement the	
,	research results; calculation errors, deficiencies	
Lack of R&D results in due	Errors in estimating the timeframe for completing	
time (organisational)	R&D errors in estimating resources for completing	
	R&D	
Refusal to certify the result	Violation of standards and certification requirements;	
(legal)	violation of secrecy; lack of licences	
Obtaining an unpatentable	Availability of analogues; non-compliance with	
result (legal)	patentability requirements	
Late patenting (legal)	Patenting at an early stage, when no measures have	
	been taken to protect market positions, which can	
	lead to significant losses; patenting at a later stage can	
	lead to the emergence of patented analogues	
Rejection by the market	Availability of analogues; non-compliance with	
(economic)	consumer requirements; mistakes made in the	
	development of the innovation marketing concept	
	(incorrect price determination, incorrect choice of	

	target consumer groups, underestimation of competitors, design flaws)	
Low sales volumes	Rapid obsolescence of the innovation; emergence of	
compared to the planned	analogues; errors in the innovation marketing concept	
ones (economic)		

- 1. Analysing market conditions to identify new consumers of products; conducting patent research to analyse consumer requirements in the market for specific products, property insurance, and diversifying sales markets.
- 2. Tracking the legislative framework, creating and maintaining a regime of secrecy.
- 3. Diversification of the company's activities, creation of a product improvement strategy.
- 4. Work planning with due regard to the required resources, progress reports on the completion of each stage and adjustments to plans, creation of a reserve system and a plan for their use in crisis situations.
- 5. Conducting patent research to identify analogues in a timely manner, competitive intelligence, and intellectual property insurance.
- 6. Conducting patent research and forecasting the use of intellectual resources, an integrated system of work organisation with mandatory monitoring of the R&D process.
- 7. Creating a patent strategy, analysing patenting terms, drawing up a patent landscape, studying competitors, maintaining secrecy, and insuring intellectual property.

Option 2.

- 1. The legal framework of Ukraine and international agreements governing legal relations in the field of intellectual business.
 - 2. Concept, objectives and functions of intellectual business management.
 - 3. Assessment of intellectual business risks.

Tasks. Identify the following strategic risk management solutions: risk retention (limitation), risk transfer, self-insurance, risk sharing, diversification, limitation, hedging, insurance. Define these categories and fill in Table 1.

Table 1

Strategic risk management decisions

Risk management	Definition		
	setting thresholds for indicators in tactical decision-making		
	an effective way to reduce the risk of unfavourable changes in the price		
	environment by concluding futures contracts		
	risk reduction due to the possibility of compensating losses in one area of the		
	enterprise's activity with profits in another		
	organisation of project management that provides for collective responsibility for		
	the results of project implementation		

project management organisation that compensates for the occurrence of risk
situations involving third-party organisations. It is used in the implementation of
complex projects involving several companies that perform different stages of
work and assume the entire project risk at the time of their activities
delineation of the system of rights, powers and responsibilities so that the
consequences of risk situations do not affect the project implementation
a system of economic relations, including the formation of a special fund of funds
and its use to overcome and compensate for various kinds of losses and damages
caused by adverse events
creation of reserves that compensate for the consequences of risk situations

Option 3.

- 1. Classification and characteristics of intellectual business objects.
- 2. Venture capital business.
- 3. Economic security of intellectual business: essence, structure, functional components of economic security of the enterprise.

Task. Using the search engine of the database "Legislation of Ukraine" fill in Table 1.

Table 1. Provisions of regulatory documents of Ukraine related to the creation of intellectual products

Term	Regulatory documents of Ukraine	Definition of a
	5	scientific category
Innovation	The Law of Ukraine "On Innovation	<u> </u>
	Activity"	
Innovative activity	Law "On innovation activity"	
Innovative product	Law "On innovation activity"	
Innovative enterprise	Law "On innovation activity"	
Innovative infrastructure	Law "On innovation activity"	
Objects of intellectual property	Civil Code (Article 420)	
rights		
Invention (utility model)	Law on Protection of Rights to	
	Inventions and Utility Models	
Industrial design	Law on Protection of Rights to Industrial	
	Designs	
Scientific activity	Law "On Scientific and Scientific-	
	Technical Activities"	
Scientific and technical	Law "On Scientific and Scientific and	
activity	Technical Activities"	
Research (scientific and	Law "On Scientific and Scientific-	
technical) institution	Technical Activities"	
Technology park (technopark)	Law on Special Regime of Innovation	
	Activities of Technology Parks	
Patent purity	Law "On State Regulation of Activities	
	in the Field of Technology Transfer"	
High technology	Law "On State Regulation of Activities	
	in the Field of Technology Transfer"	

Intangible asset	Accounting Regulation (Standard) 8
	"Intangible Assets"

Option 4.

- 1. Features of smart business modelling.
- 2. System of motivation of intellectual activity at the enterprise.
- 3. Sources and forms of financing for the development of intellectual business.

Task. Distribute the characteristics of the stages of venture capital business development, fill in Table 1.

Stages of venture capital business development

Table 1

The stage of venture capital business development	Characteristics
SEED - "seed" stage	
STARTUP - "start-up" stage	
EARLY STAGE, EARLY GROWTH -	
early growth stage	
EXPANSION - the stage of "expansion"	
MEZZANINE - "intermediate" stage	

- 1. A venture capital company has a certain market position, becomes profitable, and needs to expand production and sales, conduct additional market research, and increase its fixed assets and capital. The product is reoriented towards the mass user and sales grow exponentially. Additional investments are attracted to improve the company's short-term performance, which leads to an overall increase in its capitalisation. Investors who expect a quick return on their investment invest in the company.
- 2. The company produces and commercialises finished products, although it does not yet have a sustainable profit, the number of customers is increasing, funds are being sought for the company's development, and the company's staff is being recruited. This stage is characterised by the "break-even point".
- 3. The stage of development of a venture capital company, which involves the creation of a public company, sale of the investor's share to another strategic investor (M&A), initial public offering or management buyout (the investor's share is bought out by the managers of the invested company at a price that suits the investor). As a rule, this stage is the exit point for venture capitalists. Sales at this stage are made at prices that are much higher than the initial investment, which allows investors to record significant amounts of profit.
- 4. The company is in the process of formation, there is only an idea or project, the process of creating a management team is underway, R&D and marketing research is being conducted, the business concept is being defined, initial financial resources are being raised, and a prototype is being created.
- 5. The company is newly established, has prototypes, is trying to organise production and market launch, is building a team, conducting competitive analysis,

searching for and attracting the first customers in the market, and is transitioning from a prototype to a working scalable product.

Option 5.

- 1. Features of virtualisation of the intelligent business.
- 2. Information support of intellectual business.
- 3. Methodological basis for determining the price and features of pricing of intellectual products.

Task. Fill in Table 1 using the definitions given below.

Table 1

Organisational structures	Characteristics
Research institute	
Innovative enterprise	
Technopark	
Technopolis	
Business incubator	
Venture capital fund	
Network organisations	
Shell organisations	
Strategic alliances	
Learning organisation	

- 1. An investment fund focused on working with innovative enterprises and projects.
- 2. An association of several independent organisations for the implementation of a project based on the intellectual and other resources of the association members, which allows to reduce risks, combine efforts and, on this basis, reduce costs without mergers or acquisitions.
- 3. An organisation that creates conditions for training and development of all employees and, being in the process of constant self-improvement, thus changes the world around it.
- 4. An organisation that outsources part of its business functions (primarily direct production) to third-party contractors, while focusing on the strategic and transactional components of the business, i.e. determining what and how much to produce, how and to whom to sell.
- 5. Market-oriented relationships between different partners, including information exchange, cooperation, and asset sharing.
- 6. A complex multifunctional complex that provides favourable conditions for the effective operation of newly created small innovative firms that implement interesting scientific ideas (provision of innovative services: rental of premises; rental of scientific and technological equipment for a certain period; consultations on economic and legal issues; financial services;

expertise of innovative projects (scientific, technical, environmental, commercial); information and advertising support), etc.)

- 7. An institution engaged in research in the field of science and technology, development of research and development work, a type of institute.
- 8. A centre for the implementation of scientific and technological achievements, usually a new city where new developments are put into production and where the population lives.
- 9. A set of enterprises, organisations, institutions, their unions, associations of any form of ownership that provide services to support innovation activities (financial, consulting, marketing, information and communication, legal, educational, etc.)
- 10. A legal entity or a group of legal entities acting in accordance with a joint venture agreement without establishing a legal entity and without pooling contributions in order to create organisational frameworks for the implementation of technology park projects for the production implementation of knowledge-intensive developments, high technologies and ensuring industrial production of globally competitive products.

Option 6.

- 1. Peculiarities of the formation of intellectual business in Ukraine.
- 2. Licensing agreements in the intellectual business.
- 3. Stages of development of intellectual business projects.

Task. Distribute the job responsibilities of CIO (Chief Information Officer) and CKO (Chief Knowledge Officer). Determine which position is predominantly technical in nature and which is social and organisational.

Table 1. Comparative characteristics of the CIO and CKO job descriptions

1	Chief Information Officer	Chief Knowledge Officer
Strategic characteristics		J
Technical characteristics		
Organisational characteristics		
Competences		
Personal characteristics		

Competences: work with personnel (management of the IT department, interaction with heads of other departments), planning of maintenance actions (diagnostics of emerging inconsistencies, involvement of competent IT department employees in their correction), direct maintenance (testing, monitoring, correction of inconsistencies).

Competencies: identification of experts, identification of knowledge sources, knowledge of psychology, knowledge of knowledge sharing technology, managerial skills, knowledge of knowledge management methodology, knowledge of knowledge management technology.

Organisational characteristics: managing a group of employees in the knowledge management department, creating a knowledge map, motivating employees to share knowledge, motivating employees to use corporate knowledge.

Organisational characteristics: managing a group of employees in the department, organising a technical support bureau for users, ensuring an adequate production IT system, preparing an IT budget, managing a technical security system.

Personal characteristics: sociability, friendliness, determination, meticulousness.

Personal characteristics: sociability, sociality, leadership skills.

Strategic characteristics: diagnostics and analysis of the company's intellectual capital, selection and planning of actions for the effective use of knowledge, evaluation and control of knowledge use.

Strategic characteristics: development of the company's IT policy, development of the company's IT infrastructure.

Technical characteristics: management of large contracts for the purchase of computer hardware, software and IT services, control of small contracts.

Technical characteristics: creation of a corporate information environment for knowledge sharing, creation of knowledge access points, implementation of IT supporting knowledge management functions.

Option 7.

- 1. Types, purpose and goals of intellectual business.
- 2. The structure of the intellectual potential of the organisation.
- 3. Goals and principles of economic security of intellectual business.

Task. Fill in Table 1 using the definitions given below.

Table 1

Types of knowledge in terms of content and application

Term	No. Definition
know - what	
know - who	
know - how	
know - where	
know - why	
feel how and why	

- 1. Knowledge of where to find the information you need and what search tools you can use to find it. This type of knowledge is especially important when working with modern information search and processing tools.
- 2. Cognitive knowledge, knowledge of the facts that are necessary to perform a particular job. This type of knowledge is important, but not critical (you can know the rules of football, but not play it).
- 3. Cognitive knowledge, knowledge about relationships, contacts, who has the necessary skills and capabilities, as well as knowledge. This type of knowledge is especially important in the process of networking.
- 4. Skills, knowledge of processes, procedures, techniques, tools, technologies used in companies. This type of knowledge allows you to perform a task, but you can perform a task but not have an idea of the process as a whole.

- 5. Synthesis and trained intuition, knowledge that allows you to combine two or more aspects to obtain a new effect. This type of knowledge makes it possible to generate and implement innovations, and also allows you to coordinate work in the organisation, directing it towards high efficiency.
- 6. Systemic understanding, knowledge about the context of the activities of individual employees and the company as a whole, knowledge about prospects, about the factors of activity. This type of knowledge is especially important when implementing strategic development plans. This type of knowledge provides an understanding of the relationship between elements and their impact on processes, and also includes knowledge of when it is most appropriate to perform certain actions or stop an activity.

Option 8.

- 1. The essence and types of intellectual products.
- 2. Ways and mechanisms of commercialisation of intellectual business objects in Ukraine.
 - 3. Types of economic risks in the field of intellectual business.

Task. Read the test by E. Brookings, indicate the numbers of questions related to structural, human and market capital.

- E. Brookings. The test for the presence of intellectual capital Are the following statements true or false about your company?
- 1. Every employee in the company knows what his or her job is and how he or she contributes to the achievement of corporate goals.
- 2. The company treats each employee as a unique find, and management strives to find the best work assignments for each person.
- 3. Every employee in the company has the opportunity to plan their career development.
- 4. The company calculates the return on investment from research and development.
- 5. The company knows exactly what know-how we acquire as a result of research and development.
 - 6. The company knows exactly who its regular customers are.
- 7. The company calculates the return on investment in terms of distribution channels.
- 8. The company implements a strategy for the protection of intellectual property.
 - 9. The company monitors the financial statements for all licensing agreements.
- 10. The company's training programmes for employees support corporate goals.
- 11. The company's customers have the perception of the company that the company would like to create.
 - 12. The company knows the value of its brands.

- 13. Every scientist and engineer in the company knows the basics of patent protection.
- 14. The company creates new intellectual capital in the process of business cooperation.
 - 15. The company's existing management methods make it stronger.
- 16. The company has a well-developed infrastructure that facilitates the best performance.
- 17. The company has a mechanism for implementing employee suggestions for improving various aspects of the company's operations.
- 18. Employees are immediately rewarded for their contribution to the achievement of corporate goals.
- 19. The company understands the innovation process and encourages all employees to participate in it.
 - 20. The company's corporate culture is one of its greatest strengths.

Option 9.

- 1. Economic content, components and functions of intellectual capital.
- 2. The essence, types and importance of investment in intellectual business.
- 3. Organisational and legal forms of intellectual business.

Task. Intellectual resources are a set of accumulated knowledge, ideas, competences, information that has scientific and commercial value and can be used to create and manufacture products. Science-based approaches to the formation and management of intellectual resources are the basis for the innovative development of any enterprise in a competitive market.

According to the concept of A. Brookings, intellectual capital, hence intellectual resources, includes several elements: structural assets, human resources, and market assets. Consider the structure of intellectual resources (Table 1), fill in the missing components using the following data: applications and patents for inventions, utility models, industrial designs; image, business reputation; innovation strategy, organisational structure of innovation activities, innovation culture, staff motivation system in the context of innovative development, availability of modern information systems, competitive advantages, partnerships, patent portfolio, personal competences; inventive activity, qualification and educational level of employees, staff stability, staff training and development system, market position, trademarks, customer loyalty, customer base, socialisation of labour, social responsibility to society, consumers and own staff.

Table 1

Structure of the company's intellectual resources

1	The January Control of the Control o	_
Intellectual resources of the enterprise		
	Structural assets Human assets Market assets	

Intellectual	Intellectual	Intellectual property	Structural	Structural
property Social	property	Social resources	assets Human	assets Human
resources	Social	Organisational and	assets Market	assets Market
Organisational	resources	managerial resources	assets	assets
and managerial	Organisation			
resources	al and			
	managerial			
	resources			

Option 10.

- 1. The essence and structure of intellectual property.
- 2. Mechanism of ensuring economic security of intellectual business.
- 3. Advantages and disadvantages of virtualisation of intellectual business.

Task. Fill in Table 1 using the definitions given below.

Table 1

Distinctive features of explicit and tacit knowledge

	Explicit	Implicit
Individual		
Group		

- 1. Knowledge of groups of people that can be codified (norms of interaction, procedures).
- 2. The skills of individuals, their competence, their norms and beliefs that exist together with their carrier.
- 3. The knowledge of individuals that can be recorded and transferred in the form of documents.
- 4. The knowledge of groups of people that cannot be codified and transmitted in the form of a document (group culture, routines and collective norms).

Define the following types of knowledge: empirical, theoretical, organisational, personal.

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE NATIONAL AVIATION UNIVERSITY

Educational and Research Institute of Continuing Education Department of Air Transport Economics

CONTROL WORK

in the discipline: "Intellectual and Internet business"

Option 1

Performed by: student of the group MFEA-101M of speciality 073 " Management "
Educational And Professional Programme: "Management Of Foreign Economic Activity"

Ivan IVANOV number of the grade book______

Accepted: PhD in Economics, Associate Professor Tatiana SIMKOVA

TABLE OF CONTENTS

1. Name	3
2. Name.	7
3. Name.	11
4. Objective.	16
Conclusions.	
List of references	20

LIST OF REFERENCES

- 1. Bazylevych V.D. Intellectual property / V.D. Bazylevych. K.: Znannya, 2006. 431 p.
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