

AL-FARABI KAZAKH NATIONAL UNIVERSITY

Approved on the meeting of
Academic Affairs of Al-Farabi Kaz NU
by Vice Rector

_____ Khikmetov A.K.

Protocol No. _6_____

«_22_» _____06_____2020 y.

PROGRAM
ENTRANCE EXAMINATION IN THE SPECIALTY
FOR ENTERING THE MA COURSE IN THE SPECIALTY
«8D04105 – INNOVATIVE MANAGEMENT»

ALMATY 2020

The program is made according to the State general education standard in the specialty "6D051700" – Innovative Management. The program is made by e.d.s., acting professor Kunanbayeva D.A.

The program is considered at a faculty meeting "Management and marketing"
The protocol № __38__ from __26__05__ 2020.

Department chair, Dr.Econ.Sci., professor _____ Turginbayeva A.N.

Approved at a meeting of methodical bureau of Higher School of Economics and business

The protocol No. __9__ from __27__05__ 2020.

Chairman of methodical bureau
c.e.s., associate professor _____ Sultanova B. B.

Approved at a meeting of Higher School of Economics and business
The protocol No. __11__ from __29__05__ 2020.

Chairman of the Academic council,
dean of Higher School of Economics and business
Dr.Econ.Sci., professor _____ Sagiyeva R. K.

Scientific secretary,
c.e.s., associate professor _____ Smagulova G. S.

CONTENT

1. Goals and objectives of the entrance examination in the specialty

Entrance exam objectives - definition of theoretical and practical training for entering the doctoral applicant, as the level of the relevant knowledge and skills training requirements for PhD in the direction of training.

The main objectives of the entrance examination:

- To check the level of knowledge of the theoretical foundations of the academic disciplines of the entrant in the field of training "innovative management";
- Identify skills and abilities for research activities;
- To check the ability to operate by reference to the relevant provisions in the educational and scientific literature;
- Determine the ownership of the culture of thinking, the ability to correctly formulate its results;
- The ability to set a goal and formulate tasks related to the implementation of professional functions.
- Check the level of proficiency with special professional vocabulary and vocabulary;

2. Requirements to the level of training of persons entering the doctoral program

Prior to the minimum level of education for those wishing to learn the education programs of doctoral-program - Master. Specialties of higher and postgraduate education, related to the above, including the specialties of foreign universities.

Applicants should be prepared for doctoral studies as well as research activities in the field of innovation management. The applicant must possess a diverse arsenal of modern research methods, including the use of specialized computer programs for various calculations. In addition, the applicant must possess the following scientific and methodological skills and abilities:

- Formulate the problem, purpose and objectives of the study;
- Select appropriate research methods;
- To conduct information-analytical and information-bibliographic work with the involvement of modern technologies;
- Analyze collected information and explain the results;
- To present the results of the work done in the form of reports, abstracts, articles, designed in accordance with modern requirements.

3. Prerequisites for the educational program

Innovation Management - 5 credits

Marketing Innovation - 5 credits

Venture Business Management - 5 credits

4. The list of examination topics

Discipline "Innovative management"

1. Innovation management as a science. Fundamentals of the theory of innovation. Formation of the theory of innovation and its modern concepts. "Wave Theory" and Innovations essence, the concept and classification of innovation. Generating ideas. A system analysis algorithm is conjecture.
2. Organization of innovation activities at the macro level. Features of innovation. Innovative cluster. Innovative infrastructure. Business incubators, technoparks and technopolises. National innovation systems. Forms of state regulation and support of innovation. Financing innovation: sources and forms. Venture financing.
3. Organization of innovation management. The concept and content of the innovation process. Innovative process: stages, subjects and conditions. Organizational forms of innovation: innovators eksplerenty, Violentyev, patient's samples, commutator, venture (risky) firms. Organizational structure of innovation process management. The concept of the company's innovative potential. Analysis of the company's innovative potential. Determining the level of the innovative potential of the organization.
4. Innovative strategy. The place and role of the company's innovation strategy in its development strategy. The essence of innovation strategy and its features. Types of innovative strategies and ways to choose it. Technology development of innovation strategy.
5. Management of innovative projects. Basic concepts of project management. The concept of "innovation project" and their classification. Features management of innovative projects. Sources of financing for innovative projects. The life cycle of innovative projects. Development and implementation of innovative projects. Business plan for an innovative project. Methods for monitoring the implementation of the project.
6. Personnel management in an innovative organization. Features of personnel management of innovative organizations and companies. The essence of personnel management. Strategic management of the personnel of innovative companies. Methods of personnel management. Motivation of staff. Corporate culture. Management styles.
7. Management of intellectual property. Formation of objects of intellectual property. Features of the use of objects of intellectual property. Legal protection of intellectual property. Balanced distribution of rights to objects of intellectual property between the participants in their creation. Accounting and evaluation of intellectual property.
8. Commercialization of intellectual property. Patent protection: Rights of the patent holder: Licensed trade. Types of licenses. The global market for licenses: Mr. longwall exporters and importers of licenses in the

international market. UNIDO - an international organization that regulates licensed trade.

9. The risks of innovation.

The concept of risk. Causes of innovative risks. Types of innovative risks. Risk n epolucheniya expected income from the sale of licenses with royalty payments; The risk of a discrepancy between the actual parameters of innovation and design.

10. Process of management of innovative risks.

Methods of identification of innovative risks. Risk assessment, to oeffitsient risk.

Methods of reducing innovation risks. Methods of neutralizing innovative risks.

11. Organization vechurnogo business.

The concept and essence of venture business. The steps of forming a business venture: "innovator", "eksplerent", "Violentyev". Venture capital. Venture investors. The mechanism of venture financing. Domestic and international experience of development of venture business.

12. The effectiveness of innovation.

The effect of innovation. Transfer of innovation. Types of effects: Science and Technology, to ommerchesky, economic, social, e NVIRONMENTAL. METHODS calculation parameters: with tatichesky , Etc. Response Dynamic . Indicators E Economic efficiency of innovation: profit from innovation, the level of profitability of innovation, internal rate of return of innovation, investment payback period .

13. Formation and development of the national innovation system

Republic of Kazakhstan

State regulation of innovative activities State support for innovation in developed countries: Japan, USA, Great Britain, France. The current state of the scientific, technical and innovation spheres of the Republic of Kazakhstan. State regulation of innovative activity in the Republic of Kazakhstan.

14. Organization of innovation infrastructure in the Republic of Kazakhstan

Objects and subjects of innovative infrastructure Functions of the National Innovation Fund of the Republic of Kazakhstan. Measures to establish venture capital funds in the Republic of Kazakhstan. Measures to improve the intellectual property assessment system in the Republic of Kazakhstan. Formation of professional innovation management in Kazakhstan

15. The innovative nature of modern business.

Formation of the national innovation system as a factor in the organization of business in modern conditions. The nature and purpose of creation of industrial parks. The main types of industrial parks: scientific , technological, business incubators, techno .Organizatsiya business venture. Specific sources of financing in the form of venture capital, "business angels" grants. Sources of formation of venture capital and investment funds - investment institutions, pension funds, insurance companies, various government agencies and international organizations. Projects of public-private partnership.

1. Innovative marketing as the main factor in the success of modern business

The concept, purpose and functions of innovative marketing. Features of innovative marketing. Functions of innovative marketing: marketing research, policy planning in the field of innovation, trade and assortment policy, sales and distribution, promotion, pricing, marketing management.

Types of innovative marketing. The relationship of operational innovation marketing with the stages of the life cycle of innovation in the market. Content and classification characteristics of innovations. Stages of marketing development in the innovation sphere. Marketing aspect of the theory of innovation.

2. Features of the innovation market.

The structure of the innovation market. Factors of the innovation market: global threshold of knowledge, innovative resources, innovative entrepreneurs (innovative potential), field of innovative activity, innovative climate. Subjects of innovation. State regulation of the innovation market. Competition in innovative markets. Stages of analysis and assessment of the competitive environment in the product market.

3. An innovative product as a basis for business development

The characteristic of an innovative product and the need for its production. Product novelty levels. Key features when creating a new product.

Stages of the process of creating an innovative product. The main components of the innovation process. A marketing process aimed at profitable commercialization of innovation.

Sources of financing the production of an innovative product. External and internal financing of innovation. Forms of financing innovation.

4. Marketing support for innovative products.

Marketing plan for an innovative product. Marketing goals of innovation. Tasks of innovative marketing depending on the stage of the innovation process. Strategy and tactics of innovative marketing. The distribution scheme of innovative goods (services).

Marketing research when introducing a new product to the market. Risks when creating a new product. Diagram of the process of creating a new product in the company. Innovative methods of collecting marketing information. The main disadvantages of the classical methods of marketing research. Innovative research methods with the use of Information, communication and Internet technologies.

5. Consumers of an innovative product.

The nature and types of consumer behavior for new products and services. Types of consumers by the criterion of attitude to goods and services. The model of the buying process.

The characteristic and features of perception of an innovative product. Scheme of the process of perception of an innovative product by a consumer. Product Recognition. Formation of the image of innovation in the minds of consumers. Characteristics of an innovative product that affect the process of its perception.

Internal conflicts induced by innovation. Ways to increase the effectiveness of interaction with the consumer, depending on the type of internal conflict.

6. Promotion of a new product on the market and the development of its strategy.

The concept and methods of product promotion. Functions and types of product promotion. The main strategies for promoting the product on the market

Reputation management in promoting an innovative product. Stages of work in the reputation management system. PR and its impact on reputation. Online reputation management.

7. Pricing policy for new products

Pricing for a new product. Features of the price of innovation and pricing factors. Stages of pricing policy formation. Pricing Methods for Innovation. Approaches to the problem of pricing.

Pricing strategies for new products. Types of pricing strategies and conditions for their use.

8. Branding when entering the market with a new product.

Concept and types of branding. The benefits and dangers of branding. Branding measurement indicators and evaluation of its effectiveness. Stages of creating and developing a brand. Parameters for evaluating the effectiveness of the actions of a brand-oriented company. Branding performance indicators according to D. Aaker's model. Strategic and tactical metrics for diagnosing brand impact on business performance.

9. The concept and characteristics of Internet marketing.

Features of internet marketing and e-commerce. Advantages and disadvantages of Internet marketing. The main elements of the Internet marketing complex, the advantages and disadvantages of each tool.

10. Neuromarketing is an innovation in stimulating purchases.

The essence, goals, methods and techniques of neuromarketing. Popular neuromarketing methods. Neuromarketing with examples: methods of use in advertising and in life. Neuromarketing as a mechanism for attracting consumers. Neuromarketing and its prospects in branding. Types of sensory marketing.

11. Green marketing

The history, the main features and features of Green Marketing. Sources of "green" pressure to increase the environmental attractiveness of the company's products. Typology of clients in terms of their attitude to environmental issues

Features of marketing tools for "green" products and technologies. Marketing approaches to environmental management.

12. Lateral and cognitive marketing

Lateral marketing as an innovative type of marketing. . The concept of lateral thinking and lateral marketing. Characteristic of convergent / vertical and divergent / lateral thinking. The goals of lateral marketing. The main stages of lateral marketing. Types and methods of lateral marketing. The use of lateral marketing at the levels of the market, product or service, marketing mix. Lateral shift focus selection. Generating a marketing gap. Creating shifts to interrupt logical thinking.

The concept of cognitive marketing, its essence, content and basic functions. Cognitive Marketing Innovation. The place of cognitive marketing in the market activity of a company. Gestalt and multi stable perceptions in cognitive marketing

Discipline "Venture Business Management"

1. The essence of venture capital business

The concept and features of the venture business. The importance of venture business in the processes of creating an effective and competitive modern economy. The history of the creation and development of a venture business. Conditions for the successful development of the venture business. Features of the development of a venture company. Stages of venture business development. The relationship and differences in the concepts of venture capital business, venture capital and venture capital fund. Forms of organizing a venture business.

2. The financial model of venture capital funds

Venture fund as a financial institution. The effectiveness of the venture capital fund. Stakeholders venture capital fund. Institutional investors, their expectations. Agent conflicts in the venture business. The state as a venture investor.

Option management management remuneration schemes as an instrument of corporate control and an element of financial architecture: ordinary option contracts and options with financial leverage (leveraged stock options). Studies of the role of optional reward schemes.

3. Venture companies: risky investments

Venture investments, features of their formation. The purpose of venture capital. The mechanism of venture investment. Characteristics of venture capital investments: Risks of venture capital investments

4. Evaluation of innovative companies and the share of the venture investor in it.

Valuation methods for companies in venture investment: the contractual method, the multiplier method, the method based on discounted flows, the venture method, the "first Chicago" method, the real options method. Possibilities of applying methods at different stages of a company's life cycle.

Company valuation and project valuation. Intellectual property management and valuation of intellectual capital of companies.

5. The process of selecting innovative projects by venture investors: criteria, evaluation process.

The competencies of the management staff created for a specific project of the company. The uniqueness of the proposed project, its competitive advantages, the presence of innovation market niche with high growth potential. High return on invested capital. Competencies of entrepreneurs in special matters (technical side of the project).

The stages of the venture capital assessment process include 4 main stages: preliminary assessment, achievement of preliminary agreement on financing conditions, thorough assessment and signing of the transaction.

6. Portfolio management venture investor.

The basic principles of forming an investment portfolio of a venture fund are. Methodology for selecting the most promising projects from the stream of initial applications. The most appropriate valuation methods for venture financing,

7. Formation and development of venture business in developed countries

The economic nature of venture capital and its evolution in the United States. Venture capital in the structure of production factors. US Venture Capital Evolution

Comparative characteristics of the structure of the venture capital industry in the USA and Western Europe. Sectoral and regional structure of venture investments. Corporate structure of venture capital industry entities. Features of phased specialization of venture investors. Modern methods of investment.

8. Models of partnership between the state and the private sector in the venture industry.

The concept of public-private partnership and its features in the venture capital industry. Instruments of state support for innovation based on partnership between the state and venture

funds. Key areas of cooperation between the state and private investors in the creation of venture capital funds aimed at increasing the innovative activity and competitiveness of national economies.

9. World experience in supporting venture business. Development of venture business in the Republic of Kazakhstan. Prospects for the development of venture business in the Republic of Kazakhstan

List of recommended literature

Main:

1. Kupeshova S.T. Innovation management. A: "Kazakh University", 2010. Innovation Management. Fathutdinov R.A. 6th ed., Rev. and add. - St. Petersburg: Peter, 2008. -- 448 p.
2. Ilyenkova S.D. Innovation Management. - M.: Banks and exchanges, UNITI - 2007. - 327 p.
3. Innovation management: Textbook for universities. Bobkov L.V., A.I. Bazilevich, Avrashkov L.Ya. 2008. - 464 p.
4. Mustafin M.A. Raimov S.R. Innovation Management and Marketing prakt. Allowance. -Almaty, PRINT EXPRESS, 2009 -136 p.
5. Mustafin M.A. Innovation project: concepts, algorithms, marketing, management: Monograph. - Almaty, PRINT EXPRESS, 2008 -225 s.
6. Management of innovation in the organization: textbook. allowance for the specialty "Organization Management" / A.A. Bovin, L.E. Cherednikova, V.A. Yakimovich. - th ed., ster.- Moscow: Omega-L Publishing House 2008.- 415s
7. Yu.I. Osik, Z.N. Borbasova, O.V. Prokopenko, V.Z. Valeeva. Marketing of innovations and innovative marketing: textbook. allowance for students. econ. specialist. universities / Yu.I. Osik, Z.N. Borbasova, O.V. Prokopenko, V.Z. Valeeva. - Karaganda: Publishing house of KarSU, 2016. - - 155 p.
8. Petrushova E.V. Cognitive-pragmatic characteristics of the discourse of the subject field "Marketing": the dissertation of the candidate of philological sciences: 10.02.19. - Krasnodar, 2011.
9. Prokopenko O.V., Osik Yu.I. Ecological marketing. Karaganda, KarSU Publishing House, 2015. -- 212 p.
10. Prokopenko OV, Osik Yu.I. Environmental Marketing: Workshop. Karaganda, KarSU Publishing House, 2016. -- 123 p.
- Khalilov D. - Social Media Marketing - Moscow: Mann, Ivanov and Ferber, 2014. - 240 p.
11. Gelmanova Z.S., Ossik Yu.I., Gazaliev A.A. Management of Innovative Activity in the Conditions of Globalization. Karaganda: KSU Publishing House, 2015. -- 152 p.

Additional:

1. Mukhamedyarov A.M. Innovation Management. - M.: INFRA-M, 2008.-176 p.
2. The Law of the Republic of Kazakhstan "On Innovative Activities" // Kazakhstan truth 2002. July 2
3. Innovations қ Kyzmetti memeklettik Goldau Turals Kazakhstan Republic of 2006 2006 Zhury 23 Nauryzdy N 135 Zagy Egemen Kazakhstan 2006 2006 31 Nauryz N 71-72
4. The Law of the Republic of Kazakhstan "On the Protection of Copyright and Related Rights" // Kazakhstanskaya Pravda 1999, June 12
5. Law of the Republic of Kazakhstan "On Patents" // Kazakhstanskaya Pravda, 1999, June 17
6. Jansen F. The Age of Innovation: Translation from English. - M.: INFRA-M, 2006 -308 s
7. Mazur I.I., Shapiro V.D., Olderooge N.G. Project Management - M.: Omega-L, 2004. - p. 664

6. Scale of evaluation results of entrance exam

| | | | |
|------------------------|-------------------------------|-----------|---------------------------------|
| Based on letter system | The digital equivalent points | % Content | Based on the traditional system |
|------------------------|-------------------------------|-----------|---------------------------------|

| | | | |
|--------------------------------|------|----------------|--|
| A | 4.0 | 95-100 | Excellent |
| A- | 3.67 | 90-94 | |
| B + | 3.33 | 85-89 | Good |
| AT | 3.0 | 80-84 | |
| AT- | 2.67 | 75-79 | |
| C + | 2.33 | 70-74 | |
| FROM | 2.0 | 65-69 | |
| FROM- | 1.67 | 60-64 | Satisfactorily |
| D + | 1.33 | 55-59 | |
| D | 1.0 | 50-54 | |
| F | 0 | 0-49 | |
| I (Incomplete) | - | - | "Discipline is not complete" (Not taken into account when calculating the GPA stands) |
| P (Pass) | - | 0-60 65-100 | "Offset" (Not taken into account when calculating the GPA stands) |
| NP (No P ass) | - | 0-29 0-64 | "Fail" (Not taken into account when calculating the GPA stands) |
| W (Withdrawal) | - | - | "Failure to discipline" (Not taken into account when calculating the GPA stands) |
| AW (Academic Withdrawal) | | | Removal from the discipline for academic reasons (Not taken into account when calculating the GPA stands) |
| AU (Audit) | - | - | "Discipline listened" (Not taken into account when calculating the GPA stands) |

Assessment of examination papers is done on a 100-point scale, taking into account the degree of completeness of the student response:

| Assessment of | criteria | Scale Score |
|-----------------|---|-------------|
| A Excellent | 1. This correct and complete answers to all the theoretical questions and answers, and have the fundamental scientific basis for the direction of training. 2. demonstrated a systematic understanding of management activities and manifest skills to critically analyze, evaluate and synthesize new and complex ideas in the management process; 3. Polnostyu decided case study and manifest the ability to effectively solve the management problems in organizations; 4. The student is able to formulate and solve modern scientific and practical problems in the field of control | 95-100 |
| A- Excellent | 1. This correct and complete answers to all the theoretical questions; 2. Polnostyu decided case study and demonstrate competence in the field of management; 3. Material is presented correctly with respect logical sequence; | 90-94 |

| | | |
|-----------------------|--|-------|
| | 4. The answers demonstrate this ability of the student to successfully carry out research and administrative activity | |
| B + Good | 1. Given the right, but incomplete answers to theoretical questions, allowed non-essential errors or inaccuracies in the definitions and in matters of management of organizations; 2. Answers practical order correct and have shown the ability to decide on its level of management problems, but solving them admitted minor error; 3. Demonstrate skills to integrate existing and new social knowledge for the production of scientific problems and solve management problems in organizations; | 85-89 |
| AT Good | 1. This correct but incomplete answers to theoretical questions, admitted errors or inaccuracies in the definitions and in matters of management of organizations; 2. Answers practical order correct and have shown the ability to decide on its level of management problems, but solving them made mistakes; 3. The material is presented correctly with respect logical sequence, but with minor errors. | 80-84 |
| B- Good | 1. This correct but incomplete answers to theoretical questions in the direction of management, admitted errors or inaccuracies in the definitions and in matters of management of organizations; 2. Answers practical order correct and have shown the ability to decide on its level of management problems, but solving them made mistakes; 3. The material is presented correctly with respect logical sequence, but with errors. | 75-89 |
| B- Good | 1. Answers to theoretical questions, in principle correct, but incomplete, inaccuracies in the wording and logic errors; 2. Practice not completely satisfied, but for the most part done; 3. The material is presented correctly, but the logical sequence broken. | 70-74 |
| C + Satisfactorily | 1. Responses to the theoretical questions correct, but incomplete, inaccuracies in the statements and there are logical errors; 2. Practice not fully satisfied; 3. The material is presented, but the logical sequence broken. | 65-69 |
| C- Satisfactorily | 1. Responses to the theoretical questions are incomplete, do not reveal the essence of management activities in organizations committed significant errors in wording and there are logical errors; 2. Practice not satisfied; 3. The material contained inconsistently. | 60-64 |
| D + Satisfactorily | 1. Responses to the theoretical questions contain gross errors and incomplete answers to the student; 2. Practice not satisfied; 3. The presentation of the response allowed substantial grammar, terminology error logic sequence broken. | 55-59 |
| D Satisfactorily | 1. Responses to the theoretical questions contain gross errors and incomplete answers to the student; | 50-54 |

| | | |
|-----------------------|--|------|
| | 2. Practice not satisfied; 3. The presentation of the response allowed significant grammar, terminology error logic sequence broken. | |
| F unsatisfactorily | 1. Responses to the theoretical issues include gross errors; 2. Practice not fulfilled, to identify the student's inability to process information. | 0-49 |