#### **38.04.01 – Economics**

(International Master's Degree Programme «Economics and Management»)

# The entry exam Programme in the field of Economics and Production and Business processes Management

#### **General Theory of Economics**

#### Needs and resources as the basis of Economics

Definition of resources. Kinds of resources: natural, labor, financial, entrepreneurial, informational. Factors of production. The main characteristics of resources: limitation, the exhaustion, non-renewable resources, rarity. The problem of resource efficiency use. Definition of needs. Classification of needs. The definition of welfare. The welfare classification. The problem of economic choice and optimal decision

#### Economic policy and economic goals

The definition of economic policy. Micro- and macro-levels of economic policy implementation in Russia. Objects and subjects of economic policy. The directions of economic policy. The definition of economic goals. The main economic goals of the state: economic growth; full employment; economic efficiency; price stability; economic freedom; equitable distribution of income; socio-economic security; rational balance of payments. The connection of economic policy with economic interests.

## Entrepreneurship in Economics

Entrepreneurship as a special kind of economic activity. Strategy of entrepreneurship activities. Organizational-economic forms of entrepreneurship: advantages and disadvantages. Specialization, cooperation and concentration. The conditions and development prospects of small, medium and large businesses.

## Market failures and government regulation of market economy

Market Failure: the essence, the main types. The objective necessity of market economy state regulation. The reasons of market failure. Monopoly: situational, natural, legal. Imperfect (asymmetric) information. Externalities: definition and kinds. The definition of public goods and their properties.

#### Free (classical) market economy: the principle characteristics

Pure capitalism. Private property is the dominant form of ownership. Freedom of entrepreneurship and freedom of choice. Personal interest as the main motivation of behaviour. Competition as a basic element of market mechanism. The system of markets. The limited role of government.

### Economy of the public sector

Forms and methods of the market and the government interaction. Public goods at a market economy. The balance in the production of public goods. Public welfare. Public choice. Financing and producing goods and services in the public sector of the economy. Social support. Public insurance.

#### **Microeconomics**

#### Supply and demand: their interaction

The definitions of supply and demand. The law of demand and law of supply: factors of impact. Kinds of demand: functional, non-functional, negative, hidden, falling, full. Kinds of supply: instant, short-term, medium, long-term. Individual and market-based approaches to the analysis of supply and demand. Market balance: balanced price and balanced volume. The conditions of existence, properties and functions of market balance. The uniqueness and multiplicity of balance.

# The state regulation of the market: price control, fixing the maximum (minimum) prices, taxation (subsidies)

"The price of floor" and "the price of ceiling". Market balance and the taxes on goods (subsidies). The change in the market balance under the impact of taxes on goods (subsidies). The surplus of consumer and producer. Public benefits from the competitive balance. The distribution of the tax burden with elastic and inelastic demand (supply).

## Costs of a company: types and approaches to the analysis

The concept of costs of the firm in economic theory. The concept of firm costs.

A variety of company costs: general, fixed, variable, average, marginal. The interconnection of company costs. The costs of company in the short-term and long-term.

#### Production function and its application to plan the company activities

The definition of production and the production function. Technology and production function. The properties of the production function. Technical and economic efficiency. Factors of production: capital, labor, land, entrepreneur ability. Marginal rate of technical substitution. Average and marginal product of the company. Short-term production: the law of diminishing marginal productivity. Long-term production: the returns to scale.

#### The concept and characteristics of market structures

Basic and non-basic types of market structures. Elements of the market structure: the number of companies (their size), the type of product (uniformity - differentiation), price control, conditions of entering the industry (the presence of barriers), non-price competition. Major and minor market structures. The behavior of the company in the conditions of perfect and imperfect competition.

## Power of the company monopoly: concept, methods of determining the permissible level. Antitrust.

The concept of monopoly power. Indexes of monopoly power. The maximum permissible level of monopoly power. The influence of monopoly power to the development of a market economy. Antitrust law. Types of price discrimination: done in terms of purchase; done by market segment. The economic consequences of price discrimination.

## Perfect competition: efficiency and conditions of balance in the short and long-term

Principles of existence of perfect competition. The profit of the company at the market of perfect competition in the short-term and long term, the conditions for its maximization. Pricing in the short and long-term periods and determining the optimal output. The company balance at the market of perfect competition. Efficiency of firm production at the market of perfect competition.

# Monopolistic Competition: efficiency and conditions of balance in the short-term and long-term

Short-term and long-term balance of the company at the market of monopolistic competition. Market efficiency of monopolistic competition. Non-price competition. Scientific and technical, and commercial competition.

#### Oligopoly: efficiency and conditions of balance in the short-term and long-term

Behaviour of companies at oligopoly market. The kinds of oligopolistic markets: single industrial companies, large vendors that are not obligated by agreements; the group of corporations such as "industrial pyramid." Economies of scale and oligopoly.

The incentives for price competition. The interdependence of companies at oligopoly market. Broken curve of demand of oligopolists. Cartel at oligopoly market.

#### Monopoly: efficiency and conditions of balance in the short-term and long-term

Causes of monopoly. The natural monopolies. Compromised companies and monopolies. The impact of price discrimination on the profit of the monopolist and the welfare of society. Methods of regulation of activities of natural monopolies (price, setting the maximum level of profitability, control of mergers and acquisitions, determination of groups of consumers with a minimum level of security).

## The market of production factors

Economic balance in the market of production factors. Conditions of maximizing profits and minimizing costs. The labour market and its characteristics. The ratio between free and working time. The efficiency of labour. Pricing at the labour market.

The influence of trade unions on the labour market. Capital market and its characteristics. Uncertainty and risk evaluation. The market for natural resources (lands) and its characteristics.

#### **Macroeconomics**

## Features of the of national accounts' system

The concept of gross domestic product. The ratio of the gross domestic product (GDP) and gross national product (GNP). Methods of calculating GDP and GNP (expenditure, income, value added). National income in a market economy. Structure of the national economy. Evolution of the sectoral structure of production in modern Russia.

### The general macroeconomic equilibrium

The definition of macroeconomic equilibrium. Aggregate demand and the factors of determining it. Aggregate supply in the short and long term. Macroeconomic equilibrium in the model of aggregate demand and aggregate supply. The transition from short-term to long-term equilibrium. Supply and demand shocks. The stabilization policy.

#### The labour market and unemployment

The actual unemployment level and its components. The natural level of unemployment. Classification of unemployment in the modern market economy. The theory of the natural level of unemployment. State employment policy. Main directions of employment policies in modern conditions.

#### The nature and kinds of inflation

The causes of inflation and it's kinds, methods of measurement. Economic costs of inflation. The effect of inflation on the standard of the population living, redistribution of the national income, the volume of national product. Economic consequences of inflation. Anti-inflation policy.

### Economic growth and economic cycle

Essence, types and factors of economic growth. Models of economic growth. The advantages and costs of economic growth. The economic cycle and its phases. Indicators of the economic cycle. Causes of cyclical development of the economy. Kinds of economic growth cycles. Ways to achieve economic growth.

#### The state budget

The state budget, it's purpose and structure. The balance of the state budget revenues. The main kinds of expenses and revenues of the state budget. Concept of the state budget. Budget deficit: structural, factual, cyclic, primary. Means of financing the state budget deficit. Public debt, it's forms and consequences.

### Currency regulation and its impact on macroeconomic processes

Currency regulation: definition and content. Levels of currency regulation. The balance of payments in currency regulation system. The exchange rate and the currency market. Real exchange rate and purchasing power parity. Floating and fixed currency rates. The currency rate and foreign trade.

## The banking system and monetary (money-credit) policy

The banking system and it's structure. The functions of the Central Bank. Commercial banks and their operations. Bank reserves. Money creation by commercial banks. Money multiplier. The objectives and instruments of monetary policy. Kinds of monetary policy. The impact of monetary policy on the economy.

#### **Applied questions**

#### Management

#### Methodological fundamentals of management

The concept of management: content, objectives and tasks; principles (the principle of legal security management solutions; optimization of management, the subsidiarity principle; the correspondence principle; the principle of automatic substitution of the absent; the principle of unity of command; a disposable input of the information; the principle of responsibility, the principle of competence, the principle of hierarchy); methods of management (economic, organizational and executive, legal and socio-psychological); methodological approaches to management (systemic, situational, complex, quantitative, marketing).

The basic functions of management (planning, organizing, motivation, stimulation, analysis, accounting, control). Special and private functions of management (marketing and innovation, commercial and operational functions, regulatory functions, support functions).

## The evolution of management idea and the modern concept of management

The concept of scientific management, administrative management, management from the perspective of psychology and human relations, concept of management from the perspective of science about the behaviour, the global strategy management, the management of objective orientation, market-based management.

#### Strategic management in the control system

The nature, functions, objectives. Environmental analysis in strategic management: factors internal and external environment, methods of analysis. Strategic planning of company activities: concept, stages, system of goals, types of plans (long and short-term plans; plans for development and stabilization of activities; plan of production and plan of implementation; plan of marketing, financial plan, organizational plan.

## Management of company staff

The nature, concepts, principles, and methods of management. Motivation of staff activity: the nature, theories of motivation (content and procedural) and their applied usage. Methods of motivation. The development of system of work stimulation in management. The development of workforce. Professional orientation and social adaptation in a company team. Staff training. Tools of staff management.

The management of production. Management of production activities of the enterprise. Production process and it's organizing.

Organizing of production, operational management of the development of the production, planning of production process, system of control and manufacturing process. The concept of production and production structure. Types of company production structure and types of production. Production process and it's organizing. Factors, influencing the industrial structure and basic ways of it's improvement. Production program: the main sections, principles and stages of development, options and indicators. Industrial capacity of company: concept, types, factors, determining it. The methods of calculation and the indicators of efficiency of industrial capacity.

### Process approach and modern systems of management of the organization

The advantages and disadvantages of functional and process approaches to management. Modern control systems: TQM (Total Quality Management) – a system of total quality management; PIQS (Process Integrated Quality System) – a quality management system, integrated with business processes; BPMS (Business Process Management System) – management of business processes; ERP (Enterprise Resource Planning) – complex system of planning and management of enterprise resources. ISO standards of 9000 series. Methods of process management in the tasks of enterprises restructuring.

## Business processes: essence, classification

The definition of the business process. The kinds of business processes with regard to process clients (external, internal). The kinds of business processes with regard to obtain added value (main, subordinate). The types of business processes with regard to the level of detailed consideration (top-level, detailed, elementary). Classification of processes with regard to types of activities (planning, working, recording of actual information, controlling and analysing).

## Basic concepts and methodological approaches to the improvement of business processes

The principles of quality by E. Deming. The cycle by E. Deming. The development of views on the improvement of business processes. The Japanese paradigm for improving business processes. The technique of rapid analysis of solutions (FAST). The benchmarking process. The process redesigning (concentrated improvement). The process reengineering.

#### **Finance**

#### The nature and functions of Finance in a market economy

Finance as an economic category. The necessity, the reasons for the emergence and functioning of finance. The role of finance in the system of monetization of the market economy. Financial resources, their content and composition, mechanism of formation and directions of usage. Functions of finance. The basics of finance using in public reproduction. Finance and the distribution of the gross domestic product and national income. The place of finance in stabilizing the socio-economic development of the Russian Federation. Finance and other economic categories correlation: price, monetary circulation and credit.

#### The financial system, its space and components

The national financial system, its concept, structure and elements. National and municipal finance, finance of enterprises, finance of households. The international financial system. Modern tendencies of market processes in the financial and monetary-credit sectors in Russia and abroad. Functions of national finance in a market economy, as well as individual parts of the financial system. Special features of formation and usage of financial resources of enterprises and commercial banks.

### The budget system of the state

The structure and principles of construction of budgetary system in the Russian Federation. The state budget as an economic category, regularities of its formation and development. The concept of the budgetary structure and system. Models of construction of budgetary system of unitary and federal states. Budgetary structure and budgetary system of the Russian Federation. The principles of the budget system of the Russian Federation: federal budget, regional budgets, local budgets and budgets of state extra-budgetary funds. The consolidated budgets and their characteristics. Prospects of budgetary system development in the Russian Federation.

Extra budgetary funds: the nature, significance, problems of formation and use in Russia

Socio-economic nature of extra budgetary funds, their classification and composition. State extra budgetary funds of the Russian Federation: their classification, peculiarities of formation and functioning principles. Pension fund of the Russian Federation, its role in social policy of the state. The peculiarities of modern pension reform in Russia. State social insurance fund, its income and expenses. The role of the fund in the implementation of government social functions. Funds (federal and territorial) compulsory medical insurance: sources of funds, methods of determination and funding. Territorial, sectoral and cross-sectoral extra-budgetary funds.

# The nature and classification of taxes. State tax policy and its principle trends in Russia at the present stage

Taxes as an economic and legal category. Functions of taxes. Classification of taxes. The principles of the tax system of the Russian Federation. State tax policy: goals and objectives. Problems and prospects of development of the Russian tax system. The concept of taxes. The kinds of taxes. Tax rate. The tax base. The object of taxation. The tax period. The tax exemption. The tax credit. The tax burden.

#### The economic essence of insurance, its function

The necessity and economic content of insurance. Insurance as a financial category. The role of insurance to provide the continuity of public reproduction. The functions of insurance. Classification of insurance: mandatory and voluntary; personal, property, economic risks and liability; reinsurance and co-insurance. Insurance market, its structure and principles of organizing. Participants of the insurance market and their functions. Tariff policy in insurance.

## The content of company finance and principles of their organization

The nature and forms of corporate finance. Finance and financial resources of the company. Functions of company finance. The place and role of company finance in the financial system of the state. The specificity of finance in material production and non-production spheres. Basis of finance functioning of commercial organizations. The principles of profitability, promotion, redundancy. Special features of company finance in material production and non-production spheres.

## The formation, distribution and use of financial results of the company activity

Profit as net income of company. Profit functions. The main indicators of profit: gross profit, profit from sales, profit before tax, net (retained) profit. The main factors influencing profit. Reserves of profit increase. Distribution and use of profits. The concept of dividend policy and value of its choice.

#### Marketing

#### The nature and content of marketing: industrial and marketable, and marketing concepts

The role of marketing in modern economy. Marketing as a concept of entrepreneurship at the market. Background and history of marketing. The evolution of the concept of market activities of company. Industrial and marketable concepts and their features: the concept of improving production, improving quality, improving marketing efforts. The emergence and establishment of the marketing concept, its essence and fundamental characteristics. The development of marketing in modern conditions, the concept of social-ethical marketing.

# Marketing as a management process system of actions of companies at the market. System of decision-making in marketing

Market activity and its place in general system of company functioning. Marketing activity: goals and tasks. Common functions in marketing: analysis, planning, organization, control. The logic of marketing activity. Special functions in marketing: study of micro - and macro-environment, consumer behavior study, strategic marketing planning, etc. Marketing as a process of system management of company in the external environment. A model for making marketing decisions.

# Organization of the logistics system at an enterprise: the structure and content of basic elements. Functional subsystems and threads

The definition, nature, objectives, tasks and basic functions of logistics. The place of logistics in the overall functioning of the company. The evolution of logistics concepts. Organization of the logistics system at an enterprise: the structure and content of basic elements. Functional subsystems and threads. Inventory management in logistics. Systems and methods of inventory management. Storage management at an enterprise. Marketing logistics: nature and objectives. The formation of channels and distribution

networks (distribution). The participants of channels of distribution. The problems of goods transportation in logistics.

#### **Economics of Enterprises (organizations)**

## Economic bases of an enterprise activity. Enterprise and entrepreneurship in the market environment

The company – a principal component of the economy. Internal and external environment of the enterprise. Objectives of the enterprise. Functions of a manufacturing enterprise. The main forms of the enterprise activity. Classification of the activity fields. The concept of entrepreneurship. The legal aspect of entrepreneurship. Basic characteristics and principles of entrepreneurship. Forms of entrepreneurship. Classification of legal entities to implement activities. Organizational and legal forms of enterprises.

### The authorized capital and assets of enterprises

The enterprise as a property complex. The kinds and composition of property, ways of its formation. Fixed assets of the enterprise: definition, classification, methods of assessment and accounting. Kinds of depreciation. Depreciation of fixed assets. Depreciation policy of the enterprise in the market economy. Working capital: composition, classification, turnover and regulation. Intangible assets as a special category of property.

#### Organization, regulation and remuneration of labor

Organizing of labor at an enterprise. Labor regulation as the basis of its organizing. Productivity and efficiency of labor. The nature of the indicators and factors of labor productivity increase. The nature of wage. Organizing of remuneration of labor at the enterprise. The wage fund. The order of formation and the size of the means directed to consumption. Material and moral stimulation for employees.

## Cost price, estimate and calculation, price and pricing

The definition of production cost and the cost of products, it's kinds and figures. Grouping of cost items and accounting articles. Methods of product cost planning. Directions of reducing production costs. The essence, components and structure of pricing at the enterprise. Policy of pricing at the enterprise.

#### The quality and competitiveness of products. Standards and quality system

The problem of product quality. Indicators of product quality. Management of quality. Quality as a management object. A complex system of quality management. The quality and competitiveness. The role of standardization, metrology and certification to ensure the quality of products. The trademarks, service marks and appellations of production location and their role in ensuring the quality. Methods of quality control in the production process.

#### Innovative and investment activity of the enterprise

The definition of investments and investing. Main directions and types of investments. Proprietary and borrowed funds of the company. The main approaches to the valuation of financial efficiency of investment. The nature and content of innovative activity of the enterprise. The life cycle of the innovation and characteristics of the stages of the innovation process. Venture financing of innovative activity. The process of developing an innovative product. Scientific and technical policy of the company. Evaluation of innovation efficiency and innovative projects of the company. Ways to reduce risk in innovation, their characteristics.

### General Theoretical Issues Basic Literature

- 1. John Sloman, Dean Garratt, Alison Wride. Economics. 9<sup>th</sup> Edition: London, 2014.
- 2. John Sloman, Elizabeth Jones. Essential Economics for Business (Formerly Economics and the Business Environment).  $-4^{th}$  Edition: London, 2014.
- 3. Michael Parkin, Melanie Powell, Kent Matthews. Economics. European Edition.9th Edition: London, 2014.
  - 4. Yevdokimov Y. Practical Guide to Contemporary Economics. Canada, 2013.

#### **Additional Literature**

 David Begg, S. Fisher, R. Dornbusch. Economics. – University of London: McGraw-Hill Book Company, 1991.

- 2. Mankiw N.G. Principles of Economics. 6<sup>th</sup> Edition: Cengage Learning, 2011.
- 3. Paul A. Samuelson, William D. Nordhaus. Economics. 18<sup>th</sup> Edition: Boston, 2005.
- 4. Philip Kotler, Kevin Lane Keller. Marketing Management. 12<sup>th</sup> Edition: Prentice Hall, 2005.

## **Applied Issues Basic Literature**

- 1. Chandan J. S. Management Theory and Practice. Vikas Publishing House, 1999.
- 2. Gerald A. Cole. Management Theory and Practice. Cengage Learning: EMEA, 2004.
- 3. Matteson M. T. Management and Organizational Behavior Classics. 4<sup>th</sup> Edition: Irwin, 1989.
- 4. Michael Albert, Franklin Khedouri Michael H. Mescon. Management. 3d Edition: London, 1988.

#### **Additional Literature**

- 1. Peter F. Drucker. The Practice of Management. Harper Business, 2006.
- 2. Philip Kotler, Gary Armstrong. Principles of Marketing. 11<sup>th</sup> Edition: Prentice Hall, 2005.
- 3. Thomas J. G. Management: Study Guide / edited by Griffin R.W. 3d Edition: Boston-Dallas, 1990.