Утверждена Академическим советом ОП Стратегическое управление финансами фирмы факультета экономических наук (протокол от 27.10.2015, №7)

Федеральное государственное автономное образовательное учреждение высшего профессионального образования
НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ «ВЫСШАЯ ШКОЛА ЭКОНОМИКИ»

Факультет экономических наук

ПРОГРАММА
подготовки к экзамену для поступающих на образовательную программу магистратуры «Стратегическое управление финансами фирмы», направление 38.04.08 Финансы и кредит

по дисциплине «Экономика»

Москва – 2016 г.
Entrance exam for Master’s program “Strategic Corporate Finance” consists of two blocks of disciplines.

The entrance exam for program “Strategic Corporate Finance” performed in writing, in the form of tasks on topics disciplines. Duration of exam 180 minutes. The exam is evaluated by 100 points system. Score regarding from 1 to 20 is considered to be a failure.

1.1 Microeconomics

Topic 1. Preferences.

Budget Constraint. Properties of the Budget Set; Taxes, Subsidies and Rationing.
Consumer Choice. Constraint optimization and graphical interpretation of results in the case of two goods.
The alternative approach in consumer preferences modeling: The Idea of Revealed Preferences. Principles of Revealed Preferences; The Weak Axiom of Revealed Preferences; Price Indices; The strong Axiom of Revealed Preferences.
Slutsky Equation. Slutsky Decomposition (Slutsky Substitution Effect, Hicks Substitution Effect, Income Effect). Hicks Compensated Demand.
Consumers surplus. Compensating and Equivalent Variation.
Consumers Behavior in the presence of Natural Income. Net Seller and Net Buyer. Modification of Slutsky Equation in the presence of Natural Income; Individuals Labor Supply; Example: multiperiod choice.

Topic 2. General equilibrium.

Allocation concept, feasible allocation, Pareto optimal (or Pareto efficient) allocations: definition and identification. Edgeworth box and graphical presentation of Pareto optimal allocations in the model with two consumers and two goods.
Walrasian equilibrium concept; graphical presentation of equilibrium in Edgeworth box in the model with two consumers and two goods. Walras’ law.

Topic 3. Individual behavior: producer theory.

Ways to describe technology and examples of technology. Properties of technologies. Marginal rate of technological substitution.
Profit maximization and supply of competitive firm. Graphical representation of profit maximization problem with one variable factor. Comparative statics analysis in profit maximization problem. Demand and supply laws.

Profit of a producer and producer surplus; graphical representation of firm’s profit and producer’s surplus.

**Topic 4. General equilibrium in an economy with production**

Modification of equilibrium definition (inclusion of production); The Robinson Crusoe economy: graphical representation. Walras’ Law in the model of general equilibrium with production; the existence of equilibrium in an economy with production.

Efficiency of general equilibrium in an economy with production. The model: two goods, two producers, two consumers. Pareto efficient allocations in the economy with production.

**Topic 5. Partial equilibrium (Perfect competition)**


Markets of factors of production. Labor market. Investment, savings and capital market. Multi-period production decisions; demand for borrowings and supply of loans, equilibrium interest rate.

Investment in two-period model. NPV criterion and its application. Multi-period model with production and separation theorem of consumption and production decisions.

**Topic 6. Market failures: externalities and public goods.**

Possible reasons for competitive markets failures.


**Topic 7. Market structures: monopoly and monopolistic behavior**


Monopsonist profit maximization. Inefficiency of resources allocation. Example: monopsony and monopoly on production factors markets.

Price discrimination.

**Topic 8. Market structures: strategic interaction.**

Strategic interactions of firms. Cournot’s, Stackelberg’s, Bertrand’s and price leadership models.

Collusion: cartel formation. Profits comparison in cases of collusion and oligopolistic competition.
Repeating interactions in context of oligopolistic competition.

Product differentiation: monopolistic competition.

**Topic 9. Theory of choice under uncertainty.**


Problem of optimal investment portfolio choice (for the case of one risky and one risk-free assets). Problem of optimal insurance choice.


Equilibrium in contingent goods’ exchange model under asymmetric information. Cases of hidden information and hidden actions.

**Main readings:**


**Additional literature.**


**1.2 Macroeconomics**

Introduction to macroeconomics

**Topic 1. Introduction to macroeconomics. Main macroeconomic indicators**


Gross domestic product, gross national income, net national income, personal income, and disposable income. Real and nominal GDP. Potential and actual GDP.


**Topic 2. Equilibrium in the goods market**

Market of goods and services. Components of aggregate spending. Consumption spending and its structure. Consumption in the short run. Marginal and average propensity to


**Topic 3. Money Market Equilibrium**


Monetary policy: its guideline and intermediate objectives. The instruments of monetary policy. Loose and tight monetary policy. The mechanism of monetary transmission. Money market equilibrium. Equilibrium interest rate and equilibrium money supply.

Monetary policy and inflation. Inflation and inflation expectations. Real effects of inflation. Inflation tax.

**Topic 4. Goods and money market equilibrium in a closed economy: IS-LM model**


**Topic 5. Short-run model of open economy: IS-LM-BP model**


The concept and types of arbitrage. Purchasing power parity theory. Covered and uncovered interest parity theory.


IS-LM-BP model. Equilibrium in a small open economy with fixed and flexible exchange rate.

**Topic 6. AD-AS model**


**Topic 7. Labor market, natural rate of unemployment and Phillips curve**


**Topic 8. Financial market. Theory of consumption and investments**


Life-cycle hypothesis. Permanent income hypothesis.


**Topic 9. Economic growth and economic fluctuations**


Main Reading:


2. Corporate finance


Topic 2. Fundamentals of Corporate Capital Valuation: Corporate Debt and Equity Capital


**Topic 3 Risk and return relationship**

Cost of equity. Shareholders, rational expectations and expected return estimation. Capital asset pricing model as a basis for expected return estimation. Fama-French model as an example of a multifactor model.


**Topic 4. Investment decisions**


**Topic 5 Capital structure choice and corporate value**

Modigliani and Miller theorem (MM) on capital structure, perfect capital market assumptions and basic MM irrelevance propositions. Shareholder reaction to changes in capital structure. MM propositions with corporate income taxes. Income tax shield as motivation to take debt. The effect of personal taxes on capital structure. Miller equilibrium model. Tradeoff theory as a model of optimal capital structure: tax shield vs financial distress costs. The pecking order of financing theory. The information conveyed by capital structure decisions. A debtholder - equityholder conflict: debt overhang problem, asset substitution problem, debt covenants and monitoring opportunities as means to agency costs. An equityholder-manager conflict: overinvestment problem, deficient management efforts, aligning the conflicting interests with capital structure. Minimizing the total cost of two agency conflicts with capital structure choice.

**Topic 6. Interrelation of financing and investment decisions**

Adjustments to capital budgeting techniques when evaluating a project under certain financing plan. Adjusted present value (APV), weighted average cost of capital (WACC) approach and free cash flow to equity (FCFE): three classic approaches.

**Topic 7. Payout policy and corporate value**

Main readings: