# **EKS 2A** State exam- questions

# 1. The effect of consumer preferences on the choice of the consumer basket, the impact of risk on consumer decisions

Theory: Total and marginal utility, the law of diminishing marginal utility. Axioms of
rational consumer behaviour. Indifference map for typical and special preferences, the
marginal rate of substitution in consumption. Set of market opportunities, marginal
rate of substitution in exchange. The consumer's optimum for different types of goods.

Decision-making in risk conditions depending on the attitudes to risk. Insurance
decisions.

#### • Managerial economics - applications:

Job offer or

<u>Choice of a combination of two specific consumer goods</u>, defining a budget constraint and determining the optimal combination

• Applied macroeconomics: factors influencing the rate of inflation

#### 2. Impact of price changes on demand, price elasticities of demand

• Theory: The effect of a price change on the consumer optimum, demand curve, substitution, and income effect of price change. Normal and inferior goods. Price elasticity of demand and its effect on consumer spending. The effect of changes in the prices of other goods on demand, substitutes, and complements. Cross elasticity of demand.

#### • Managerial economics - applications:

<u>Choosing a combination of two specific consumer goods</u>, and deriving an individual demand for the selected goods.

• **Applied macroeconomics:** the effect of exchange rate changes on net exports (Marshall - Lerner condition)

# 3. Impact of change in income and change in preferences on demand; income elasticity of demand

• **Theory:** The effect of the change in income on the consumer optimum, <u>normal and inferior goods</u>, necessary and luxury goods. Engel's curve. Impact of income elasticity of demand on consumption of various types of goods.

#### • Managerial economics - applications:

Impact of excise duty and income tax on consumers or Choosing a combination of two specific consumer goods, and deriving an Engel curve for the selected goods.

• Applied macroeconomics: macroeconomic factors influencing the level of consumption.

#### 4. Profit of the company in various cost conditions

• **Theory:** Short-run costs: bahaviour of costs functions in conditions of rising, falling, and constant returns to the variable input. The inverse relationship between cost and production function, and the behaviour of average and marginal productivity of labour and capital. The bahaviour of long-run costs in terms of various returns to scale. The impact of changes in input prices on the company's costs. Optimal combination of inputs and capital intensity of production.

## • Managerial economics - applications:

<u>Examples of long-run production functions</u>: linear, Leontief, and Cobb-Douglas production functions.

• *Applied macroeconomics:* supply shocks and their impact on the equilibrium of the economy

# 5. The impact of the competitive environment on the price of production. Monopoly, perfect and monopolistic competition

• *Theory:* Firm's supply in the perfect competition, profit maximization in the short run, the shutdown point. The elasticity of market supply. The equilibrium of a perfectly competitive industry. Price and non-price competition in monopolistic competition, the company's profit in the short and long run. Profit of the monopoly in the short and long run.

#### • Managerial economics - applications:

Selected real-world example of <u>monopoly</u>: barriers to entry, production, price, and profit or

<u>Types of barriers to entry into the industry</u> and reasons for the existence of a monopoly

• Applied macroeconomics: the relationship between unemployment and the output gap (Okun's law)

#### 6. Evaluation of production and allocation inefficiencies of various market structures

• **Theory:** Social well-being. Consumer surplus, producer surplus. Allocation efficiency. Allocation efficiency of perfect competition, allocation inefficiency of imperfect competition, deadweight loss. Production efficiency of perfect competition, production inefficiency in conditions of monopoly, and monopolistic competition.

#### • Managerial economics – applications:

Measurement of monopoly power and market concentration.

• Applied macroeconomics: factors of economic growth

7.	<b>Collusive and</b>	competitive	behaviour	of com	panies in	oligo	polistic	markets

• Theory: Oligopoly models. <u>Cournot's model</u>, <u>Bertrand's model</u>, <u>Stackelberg's model</u>. Collusion and cartel. Price leadership and <u>oligopoly with the dominant company</u>. Sweezey model with a kinked demand curve. Sunk costs.

#### • Managerial economics - applications:

Selected real-world example of a cartel, tacit agreement. Cartel stability.

• Applied macroeconomics: investment and the stock market (Tobin's q)

#### 8. Simultaneous, sequential and repeated games in managerial decision making

• **Theory:** Simultaneous - move games in managerial decision-making, the prisoner's dilemma in price and non-price competition, dominant strategies. Different strategies of competitors, the cooperation of competitors. Nash equilibrium. Sequential-move games. Repeated games.

#### • Managerial economics - applications:

Application of game theory to price and non-price competition

• Applied macroeconomics: a model of misperception of the price level by employees

# 9. The impact of pricing strategies on the company's profit and efficiency

Theory: Optimal markup. Price discrimination: first, the second and the third degree of price discrimination, specific forms of price discrimination. Price discrimination and allocation efficiency. Pricing of multiple goods by one company: mutual influence of pricing of various goods in terms of demand, the influence of technology on pricing, transfer prices.

## • Managerial economics - applications:

A real-worl example of two part pricing, variable and fixed price component or A real-world example o block price, price matching, and price tied to brand loyalty

• Applied macroeconomics: original wage and price (modified) Phillips curve

#### 10. The influence of state regulation on managerial decision-making

- **Theory:** Market failure. Market power of companies, support of competition, price regulation. Solving the problem of negative externality, Coase theorem, quotas, taxes, missing market. Solving the problem of positive externality. <u>Public goods</u> and their allocation, the problem of the black passenger. Asymmetric information. State failure.
- Managerial economics applications:

The role of <u>free-riders</u> in practice or

The market power of companies and antitrust legislation.

• Applied macroeconomics: fiscal policy in a flexible or fixed exchange rate regime

# 11. Aggregate demand: consumption and investment

- *Theory.* Macroeconomic theories of consumption: a model of intertemporal choice, life cycle hypothesis, the theory of permanent income, Keynes's theory of consumption. Macroeconomic theories of investment: the principle of the flexible accelerator, the concept of Tobin's q.
- **Applied macroeconomics:** Definition and structure of aggregate demand. Investment structure: investments in fixed capital and inventories. Development of aggregate demand in the Czech Republic.
- Managerial economics: Substitution and income effect.

#### 12. Evaluation of economic policy measures through the product-expenditure model

- *Theory.* Product-expenditure model: model assumptions; an equilibrium product in the model; the principle of expenditure multiplier.
- Applied macroeconomics. Evaluation of fiscal policy measures through the product expenditure model. Effects of changes on the revenue side of public budgets in terms of the product expenditure model. Effects of changes on the expenditure side of public budgets in terms of the product expenditure model. Public budget deficit and debt. Structural and cyclical public budget deficit. Effects of public debt. Evaluation of changes in net exports and the exchange rate using the product expenditure model. Effects of nominal exchange rate changes on exports and imports (Marshall Lerner condition) and the equilibrium product. Effects of changes in price levels in the Czech Republic and abroad on exports and imports and the equilibrium product. Effects of changes in income at home and abroad on exports and imports and the equilibrium product.
- *Managerial economics*. The elasticity of demand.

#### 13. Money market and basic principles of monetary policy

- **Theory**. The empirical and theoretical definition of money, the function of money. Defining the demand for money. Factors influencing the demand for money according to the quantitative theory of money, Keynes's theory, Friedman's theory. Defining the money supply. Forming a money supply. Money market equilibrium.
- **Applied macroeconomics.** Definition of monetary policy and its objectives. Monetary policy instruments. Evaluation of changes in the parameters of monetary policy instruments for the balance of the money market.
- Managerial economics. Consumer preferences.

#### 14. Determination of exchange rates

- **Theory.** Exchange rate definition. Types of exchange rates. Exchange rate regimes (flexible, fixed exchange rate). Exchange rate behaviour in the short term: the theory of interest rate parity. Exchange rate behaviour in the long run: the theory of purchasing power parity. Nominal and real exchange rate. Linking interest rate parity and purchasing power parity: the international Fisher effect.
- **Applied macroeconomics.** Development of the nominal and real exchange rate of the Czech currency. Impact of exchange rate changes on net exports. The impact of exchange rate changes on the international flow of capital. (Interest rate parity as a basis for investment decisions).
- Managerial economics. Risk insurance.

#### 15. Evaluation of monetary and fiscal policy in a closed economy using the IS-LM model

- *Theory.* IS-LM model: model assumptions; equilibrium in the model.
- *Applied macroeconomics.* Effects of changes on the revenue side of public budgets in terms of the IS-LM model. Effects of changes on the expenditure side of public budgets in terms of the IS-LM model. Crowding out effect. Effects of changes in monetary policy instruments in terms of the IS-LM model.
- Managerial economics. Impact of taxes on consumer behaviour.

# 16. Evaluation of fiscal and monetary policy in an open economy through Mundell and Fleming's model

• *Theory.* Mundell and Fleming model: model assumptions; formation of equilibrium product and equilibrium interest rate.

#### Applied macroeconomics.

Evaluation of fiscal policy measures through the product - expenditure model. Definition of fiscal policy, tools of fiscal policy. Effects of fiscal policy measures in the fixed exchange rate regime from the point of view of Mundell and Fleming's model. Effects of fiscal policy measures in the flexible exchange rate regime from the point of view of Mundell and Fleming's model. Evaluation of monetary policy measures through the product - expenditure model. Definition of monetary policy, instruments of monetary policy. Effects of monetary policy measures in the fixed exchange rate regime from the point of view of Mundell and Fleming's model. Effects of monetary measures in the flexible exchange rate regime from the point of view of Mundell and Fleming's model.

• Managerial economics. Income changes and their impact on consumer behaviour.

#### 17. Labour market: the formation of equilibrium wages and employment

- *Theory.* Formation of equilibrium wages and employment in the classical and Keynesian model of the labour market. The formation of equilibrium wages and employment in terms of monetarism (a model of misperception of the price level by employees) and the new classical economy (a model of real economic cycles). Definition of the natural rate of unemployment and determination of its amount. Hysteresis in the labour market.
- **Applied macroeconomics.** Population structure in terms of labour market: labour force, economically inactive population. Forms of unemployment. Unemployment rate, economic activity rate. Development of nominal and real wages in the Czech Republic, wage differentiation.
- *Managerial economics*. Deciding between work and leisure, job offer.

#### 18. Inflation, unemployment and product

- *Theory.* Price level: definition, Inflation rate: calculation. Types of price indices. Inflation expectations (adaptive, rational). Relationship between inflation and unemployment: Phillips curve (original, price, price extended by inflation expectations). The cost of inflation. Relationship between unemployment rate and output gap (Okun's law). Relationship between inflation rate and output gap (long-term and short-term aggregate supply). Short-term and long-term equilibrium in the model of aggregate demand and aggregate supply.
- **Applied macroeconomics.** Evaluation of the effect of positive and negative demand shocks on the inflation rate and the size of the product gap. Evaluation of the effect of positive and negative supply shocks on the inflation rate and the size of the product gap. Assessment of changes in inflation expectations on the inflation rate and the size of the product gap.
- Managerial economics. Changes in market demand and supply.

19. Monetary policy and aggregate demand							
• Theory. Monetary policy regime: inflation targeting. Taylor's rule. Relationship between							
inflation rate and real interest rates, relationship between inflation rate and output gap							
(monetary policy rule). Definition of aggregate demand. Aggregate demand and the							
monetary policy rule. Short-term and long-term equilibrium in the model of aggregate							
demand and aggregate supply.							
• Applied macroeconomics. The impact of changes in aggregate demand on the equilibrium							
product and the inflation rate. The effect of changes in aggregate supply on the equilibrium							
product and the inflation rate. Possible reactions (policies) of the central bank to demand							
inflation. Possible reactions (policies) of the central bank to supply inflation.							
• Managerial economics. Simultaneous games: single and repeated.							
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