

Themes for the final state examination in economics

1. Budget constraint, preference and utility (budget constraint - budget set and budget line; preferences - assumptions about preferences, examples of preferences, marginal rate of substitution; utility - the relationship between preferences and utility function, examples of utility functions, marginal utility)
2. Choice and revealed preference (choice - the optimal choice for different preferences, applications of consumer choice; revealed preference - the idea of revealed preference, the relationship between revealed preference and preference, weak and strong axiom of revealed preference)
3. Demand and Slutsky equation (demand - income and price offer curves, Engel curves, demand curve; Slutsky equation - substitution and income effect, Slutsky identity, the law of demand)
4. Consumer's surplus, market demand and equilibrium (consumer's surplus - compensation and equivalent variation, consumer's surplus; market demand - derivation of market demand, price elasticity of demand; equilibrium - market equilibrium, Pareto efficiency)
5. Uncertainty (choice under risk, the expected utility function, the independence assumption, risk aversion and risk loving, insurance, diversification, risk spreading)
6. Technology and profit maximization (technology - production and technological constraints, examples of technology, technical rate of substitution, production function in the short and in the long run; profit maximization - short-run and long-run profit maximization, demand for factors of production, revealed profitability)
7. Cost minimization and cost curves (cost minimization - cost function, conditional factor demand, revealed cost minimization; cost curves - short-run and long-run cost curves)
8. Firm supply and industry supply (firm supply - perfect competition, short-run and long-run supply of a competitive firm, economic profit and producer's surplus; industry supply - short-run and long-run industry supply and equilibrium, economic rent)
9. Monopoly and monopoly behavior (monopoly - definition, causes of origin and examples of monopoly, markup pricing, inefficiency of monopoly, natural monopoly; monopolistic behavior - price discrimination, bundling, two-part tariff, monopolistic competition, product differentiation)
10. Oligopoly (the Stackelberg model, the model of price leadership, the Cournot model, the Bertrand model, collusion, cartel stability)
11. Game theory and asymmetric information (game theory - Nash equilibrium in pure strategies, the prisoner's dilemma, repeated games, sequential games; asymmetric information - adverse selection, moral hazard, signalization, motivation)
12. Exchange and production (exchange - the model of pure exchange, trade and equilibrium in pure exchange, Walras' law, equilibrium and efficiency, the first and second welfare theorem; production - the first and second welfare theorem in production, equilibrium in exchange and production)

13. Macroeconomic data (gross domestic product, rules for computing GDP, real GDP vs. nominal GDP; the GDP deflator, the consumer price index, the CPI vs. the GDP deflator; the unemployment rate and labor-force participation)

14. Consumption (keynesian consumption function; the model of intertemporal choice - changes in the real interest rate, constraints on borrowing; the life-cycle hypothesis; the permanent income hypothesis; the random-walk hypothesis)

15. Long-run equilibrium in a closed economy (the neoclassical production function and theory of distribution; the macroeconomic identity of national accounts; consumption function, investment function; private, government and national saving; equilibrium of national saving and investment, change in taxes and government spending)

16. Money and inflation (the definition of money, the types and functions of money; supply of money, banking system, money multiplier, the instruments of monetary policy; money demand, the Baumol-Tobin model; the quantity theory of money; the Fisher effect; the social costs of inflation; hyperinflation)

17. Long-run equilibrium in an open economy (the macroeconomic identity of national accounts in an open economy; the equilibrium of saving and investment in a small open economy; the real exchange rates; the determinants of the real exchange rates; the impact of policies on the real exchange rate; purchasing power parity, nominal exchange rate)

18. Unemployment (the natural rate of unemployment; cyclical unemployment; the model of natural rate of unemployment; job search and frictional unemployment; real-wage rigidity and structural unemployment, minimum wage, unions, efficiency wages; labor market in the US and in Europe)

19. The Solow model (the importance of economic growth; the assumptions of the Solow model; capital accumulation and steady state in the Solow model; the golden rule level of capital; population growth; technological progress)

20. The IS-LM model (the facts about the business cycle; derivation of the IS curve; the government spending multiplier, tax multiplier; derivation of the LM curve; equilibrium in the IS-LM model; derivation of the AD curve; the effect of fiscal and monetary policy on the equilibrium in the IS-LM model and on the AD curve)

21. The Mundell-Fleming model (derivation of the IS* and the LM* curve; equilibrium in the Mundell-Fleming model; the effects of public policy under fixed and floating exchange rates; interest rate differentials, risk premium; comparison of floating and fixed exchange rates, derivation of the AD curve)

22. Aggregate supply and the Phillips curve (the basic theory of short-run aggregate supply; the AS-AD model and short-run fluctuations; the Phillips curve; adaptive and rational expectations; disinflation and the sacrifice ratio; the natural-rate hypothesis and hysteresis)

23. Fiscal and monetary policy (active vs. passive policy; inside and outside lag; the Lucas critique; rule-based vs. discretionary policy; the time inconsistency; budget deficit and government debt; the Ricardian equivalence)

Literature:

VARIAN, Hal R., Intermediate microeconomics: a modern approach. 8. ed. New York: Norton, 2010.

MANKIW, N. Gregory, Macroeconomics. 7th ed. New York: Worth Publishers, 2010.