

Study Guide Exam 1

Econ 250

This is a list of topics and types of problems that will be on the exam. It is not an extensive list, and everything we covered in class or problem sets is fair game on the exam. Use the book as an additional resource and be sure you are comfortable with how the problem sets work. Best of luck.

1 Review of Micro and Basic Questions - Chapters 1 and 2

Rent Seeking

Willingness to pay

Consumer Surplus

Demand Elasticity - what it is and how to calculate it.

Cost functions involving variable and fixed costs, and how to determine the cost function.

Total Cost, average, and marginal cost, and the relationship between the three.

Supply function, relationship to marginal cost and shut down price.

Opportunity costs - what it is and calculation if there is something like foregone interest.

Sunk Cost

Economic Cost

Economies of scale and scope-economies and diseconomies of scale, minimum efficient scale.

The basics of profit maximization, including taking a derivative to get MC or MR.

Efficiency - allocative, productive, and dynamic.

2 The Firm - Chapter 3

Agency Theory

Principal-Agent Problem - what are the incentives for an agent? How do firms encourage the agent acts in their best interest?

Firm size - the logic behind it in terms of horizontal and vertical integration (specific assets, hold-up problem).

Why are firms different not just across industries but also within industries? Impediment to imitation, superior strategy, learning curve.

3 Game Theory - Chapter 4

What's a game? What's it useful for?

Single game versus multiple period game, how does it change things?

Be able to write up a simultaneous one-period game like prisoner's dilemma.

Dominant strategies - what are they and be able to find them.

Dominated strategy - the same.

Know the assumptions of games.

Nash Equilibrium - know what it is and how to find it, not always a Nash equilibrium.

Sequential games - one player plays, then the other, be able to represent and solve these.

Solved by backward induction.
Implications of a credible threat for Nash equilibria?
Repeated games - allow for retaliation, and new results. Know why and how.

4 Monopoly and Regulation - Chapter 5

Monopolist chooses optimal quantity, sets price accordingly.
The elasticity rule, what it implies for the relationship between elasticity and price.
Dominant firms.
Monopoly power - implications for pricing.
Difference in monopoly and monopoly power, and legal implications.
Natural monopoly - why it exists.
Regulations for natural monopoly: 1.) marginal cost pricing, 2.) subsidizing fixed costs, 3.) average cost pricing, 4.) rate-of-return regs.
Problems with regs.
Low versus high power.
Price-cap regulation
Actual regulation with mergers and the FTC.

5 Price Takers - Chapter 6

Assumptions of p. comp., and results from p. comp.
Why these ideas don't hold in reality.
Competitive selection.

6 Price Discrimination - Chapter 10

Why the law of one price holds if resale is possible.
Different prices are not sufficient - ratio of price to MC evidence of PD.
All degrees of PD - what they are and what they imply for CS, PS, and TS.
3rd Degree - group PD, monopolists decision based on elasticity rule for multiple groups.
2nd degree - self-selection, two-part tariff is an example. Know how it works and what happens to CS, PS, TS from a two-part tariff.
Two-part tariff with multiple types of consumers - like phone company data plan.
Incentive compatibility and participation constraint when designing types.
Bundling - pure and mixed.
Know when a bundle makes sense in pricing, as in our example in class.
Durable goods depend on timing for PD.
Versioning.
Legality of PD in the US and the EU.