

Study guide for the final exam

The final exam is scheduled for May 10, 8 am -10 am, in our class room. Closed book, closed notes. Calculators recommended, but not required.

The exam will be similar to the HWs, but not identical to the HWs. Although the topics of the exam start with the second half of the course, some knowledge about the derivation of the demand and supply functions is needed to do well in the exam. This is a 2 hour exam. It will consist of ca 75 % computation and 25% explanations and definitions.

Topics

Consumer Theory:

Utility max for two goods,

MRS: def, computation

Producer Theory

Cost min, profit max in LR and SR

Def and meaning of returns to scale

Partial Equilibrium:

Firms Supply Behavior

-Calculation of supply curves from cost min

Supply and Demand, Comparative Statics

- Def of partial equ.

- Know how to analyze quantitatively and geometrically parameter changes (# of firms, supply or demand shifts due to various reasons, etc.)

General Equilibrium:

-Def of a general equilibrium

-Difference to partial equilibrium.

- Walras Law: Def, meaning and assumptions

Edgeworthbox

-Given preferences and endowments, know how to construct an E-box

Computation of Equilibrium

-Know how to compute demand functions, given Utility and endowment

Edgeworthbox & Pareto Efficiency

-know the (formal *and* intuitive) def of Pareto efficiency

-Know how to construct the Pareto set geometrically, MRS and PE

- Relationships between Pareto Efficiency and General Equilibrium

Market Imperfections:

Monopoly, reasons for Mon, types (def of natural monopoly)

-know how to set up the problem and explain intuitively

-What is a marginal revenue curve?

-know how to graph monopolist's p, q, Profit, DWL

-mark up pricing and def of elasticity

-Know how to compute the above (DWL only for linear demand curve)

Monopoly and Efficiency

-Definition of Consumer Surplus by the concept of willingness to pay,

-Compute DWL and CS for linear demands

Monopoly and Price Discrimination

-Explanation of 3 kinds of price discr, and examples

-Know how to compute third degree price discrimination monopoly (for linear demands only).

Models of Oligopoly

-Know how to set up Cournot and Quantity leadership duopoly and know how to compute it

-Know how to compare Cournot and Quantity Leadership to perfect competition and pure monopoly

Oligopoly Models and Game Theory

-Def of NE, know how to find a NE in a game matrix

-Bertrand and Cournot, and Bertrand-Cournot games and their NE solutions

-why is the Cartel solution (what is it?) not a NE, but a “dilemma”?

- Follower Leader model as a game

How to prepare?

* Redo the HWs and do the 2 practice exams.

* Study the notes, especially parts 3 & 4; refer to your book if you need further explanations.

* In addition, you may consider doing exercises in the book relevant to the course

* Go to Josh’s review sessions.