

**\*\*\*\*\* STUDY QUESTIONS AND CONCEPTS FOR Intro Micro Econ FINAL \*\*\*\*\***

Comment (and disclaimer): The list below is meant to give you an idea of what I think are important concepts and relationships.

**I. INTRODUCTION:**

**Concepts:** PPF, opportunity costs, economic resources, positive statements, normative statements, comparative & absolute advantage, gains from trade

- Questions:**
- \* What does the shape of the PPF tell us?
  - \* What does the law of diminishing returns tell us?
  - \* Why is the PPF shaped the way it is?

**II. DEMAND, SUPPLY, MARKETS, AND THE GOVERNMENT:**

**Concepts:** demand function, demand, quantity demanded, supply function, supply, quantity supplied, own price elasticity of demand, income elasticity of demand, cross price elasticity of demand, own price elasticity of supply, surplus measures

**Questions:**

- \* What variables are in the demand(supply) function?
- \* What is the difference between a shift in demand(supply) and a movement along the demand(supply) curve?
- \* How are own price elasticity of demand and total revenue related?
- \* How are demand, marginal revenue and total revenue related to own price elasticity of demand?
- \* Know the comparative statics results well.
- \* What will cause a shift (and in what direction) in demand(supply)?
- \* How will a change in the price of a substitute (complement) good affect the demand for commodity x?
- \* What is the difference between a normal good and an inferior good? a necessity and a luxury?
- \* What is an equilibrium price?
- \* What happens to price when there is excess demand?
- \* What happens to price when there is excess supply?
- \* What are the effects of price floors, ceilings, and quantity restrictions on short-run demand and supply?
- \* What is the difference between the statutory and economic incidence of a tax?
- \* How does the economic incidence of a tax change as elasticities change?
- \* Will the economic incidence of a tax depend on the statutory incidence?

**III. CONSUMER THEORY**

**Concepts:** preferences, indifference curve maps, utility functions, budget sets, budget lines, marginal rate of substitution, economic rate of substitution, total effect, Hicks substitution effect, Slutsky substitution effect, income effect, Giffen goods

**Questions:**

- \* What are the axioms for having nicely behaved preferences?
- \* What are the properties of nicely behaved indifference curve maps?
- \* What is the MRS and what does it tell us?
- \* What determines the slope of the budget line? How does it change?
- \* What is the ERS and what does it tell us?
- \* What characterizes the consumer's optimal bundle?
- \* How do you break down the total effect of a price change into its income and substitution effects?
- \* When and why can a good be Giffen?
- \* How does the "odd" case of Leisure/Labor and \$all-other-goods work with respect to total, substitution, and income effects?
- \* How do you get the consumer's demand for X from the consumer theory problem?
- \* How do you get market demand for X once you know all the individual consumer demands?
- \* What happens to generate a backward bending supply curve for labor?

#### IV. PRODUCER THEORY:

**Concepts:** economic profit, accounting profit, total revenue, total cost, production function, short-run, long-run, very long-run, total product, average product, marginal product, the "law of diminishing marginal product," all the long-run and short-run cost functions, internal economies and diseconomies of scale

#### Questions:

- \* What is the relationship between marginal products of inputs and the prices of inputs when the firm is choosing its input combination to cost minimize?
- \* How do average and marginal product curves for a particular input relate to each other?
- \* How do the short-run average and marginal cost curves relate to each other?
- \* What are the conditions that must be satisfied if the firm is choosing the level of output that maximizes profits in the short run? in the long run?
- \* Why are short-run marginal and average cost curve usually "U" shaped?
- \* Why are long-run average total cost and marginal cost curves "U" shaped?
- \* How can you determine total cost from the average cost curve? from the marginal cost curve?
- \* How do short-run average total costs relate to the long-run average total cost function?

#### V. FIRM BEHAVIOR AND MARKET STRUCTURE

##### A. Perfect Competition:

**Concepts:** perfect competition,  $SRS^f$ ,  $SRS^i$ ,  $LRS^f$ ,  $LSL^i$ , allocative efficiency, productive efficiency, constant cost industries, producer surplus

#### Questions:

- \* What is the firm's perceived demand curve when the firm operates in a perfectly competitive industry? What does the firm's total revenue function look like? marginal revenue?
- \* What are the properties of the short-run and long-run equilibrium situations in a perfectly competitive market?
- \* Are firms in a competitive industry always producing a level of output consistent with both allocative and productive efficiency?
- \* What are the short-run and long-run effects of price floors and ceilings in perfectly competitive industries?
- \* What are the short-run and long-run effects of commodity taxes in perfectly competitive industries?

##### B. Monopoly:

**Concepts:** simple monopoly, natural monopoly, dead-weight loss, price discrimination

#### Questions:

- \* What is the firm's perceived demand curve when the firm is a monopolist? What does the firm's total revenue function look like? marginal revenue?
- \* What are the properties of the short-run and long-run equilibrium situations for the monopolist?
- \* Is the monopolist always producing a level of output consistent with both allocative and productive efficiency?
- \* What are the short-run and long-run effects of price floors, ceilings and taxes on the monopolist?
- \* Will the monopolist have a supply curve?
- \* Will the monopolist ever produce the level of output that maximizes total revenue?
- \* Will the monopolist ever produce a level of output that is in the inelastic portion of his demand curve?
- \* What is the dead-weight loss caused by the profit maximizing monopolist?
- \* How will the monopolist's problem and behavior change if he can practice **perfect** price discrimination?

- \* How can the government regulate the activity of a natural monopolist?
- \* Why are monopolies bad, or are they?

**C. Monopolistic Competition, Oligopoly, and Industrial Organization:**

**Concepts:** product group, oligopoly, monopolistic competition, game theory, Cournot/Nash and Bertrand/Nash equilibrium, dominant strategy equilibrium, maximin equilibrium, cartels, collusion

**Questions:**

- \* What is the shape of the firm's demand curve when the firm is in a monopolistically competitive industry? What does the firm's total revenue function look like? marginal revenue?
- \* What are the properties of the short-run and long-run equilibrium situations for the monopolistically competitive firm?
- \* Is the monopolistically competitive firm always producing a level of output consistent with both allocative and productive efficiency?
- \* What is meant by excess capacity? Why will there always be excess capacity in the long-run in monopolistically competitive firms? Is this good or bad?
- \* What are the characteristics of oligopolies?
- \* What is a dominant strategy? Nash strategy? and maximin strategy?
- \* How can firms in an oligopolistic industry increase joint profit?
- \* How does the Cournot equilibrium for oligopoly compare to the Bertrand?
- \* What kind of market situations tend to make cartels more stable?