

Micro Exam Review for 2nd Exam (on October 27th): Key principles to understand

Chapter 6 – Production

1. Production function (a mathematical expression of a production technology)
2. The Long Run versus the Short Run
3. Total Product, Marginal Product, and the Law of Diminishing Returns (including their graphical representation)
4. Isoquants as long-run representation of production with two inputs (including the Marginal Rate of Technical Substitution); know the interpretation of different isoquant shapes
5. Constant, Increasing, and Decreasing Returns to Scale; Cobb-Douglas production function

Chapter 7 – Costs of Production

1. Economic vs Accounting costs; Opportunity costs and Sunk Costs
2. Short-run Costs (using a table, graph, and algebra)
3. The relationship between Marginal Product and Marginal Cost
4. Isocost lines
5. Long-run Costs and Optimal Input Choice (the optimality condition of $MRTS = w/r$)
6. Output maximization versus Cost minimization (using graphs and using calculus)
7. Long-Run Expansion Path
8. Long-Run Average Cost curve (LAC); Economies and Diseconomies of Scale; Economies of Scope
9. Minimum efficient scale
10. Relationship between the shape of the long-run average cost curve and the structure of an industry

Chapter 8 – Perfect Competition

1. Assumptions for perfect competition
2. Profit maximizing in the short run (price=MR; produce quantity where MR=MC); show solution both graphically and using calculus
3. The short-run shut-down condition and the individual firm's supply curve (which coincides with its MC curve above the minimum of its AVC)
4. Summing individual supply curves to get market supply
5. Equilibrium market price and quantity as determined by market demand and market supply
6. Elasticity of Market Supply
7. Producer Surplus versus Profit
8. Profit-maximizing in the long run
9. Response of firms and the industry to the presence of economic profits or economic losses
10. Long-run equilibrium and the long-run supply curve (for constant cost, increasing cost, and decreasing cost industries)

Chapter 9 – The Analysis of Competitive Markets

1. Consumer and Producer Surplus (review); Welfare Effects; Deadweight Loss
2. Efficiency of Perfectly Competitive Markets
3. Market Failure; Externalities; Information
4. Price Controls – Minimum prices; Price Supports and Production Quotas
5. Import Quotas and Tariffs
6. Taxes and Subsidies

Practice Problems from Chapter 8 and Chapter 9 – also homework 3 and 4 and inclass problems from Chapter 6, 7, and 8

1. Questions for Review page 295 number 4
2. Questions for Review page 295 number 5
3. Questions for Review page 295 number 8
4. Exercises page 296 number 4
5. Exercises page 296 number 5
6. Exercises page 296 number 10
7. Exercises page 297 number 11
8. Questions for Review page 333 number 2
9. Questions for Review page 333 number 9
10. Exercises page 333 number 2