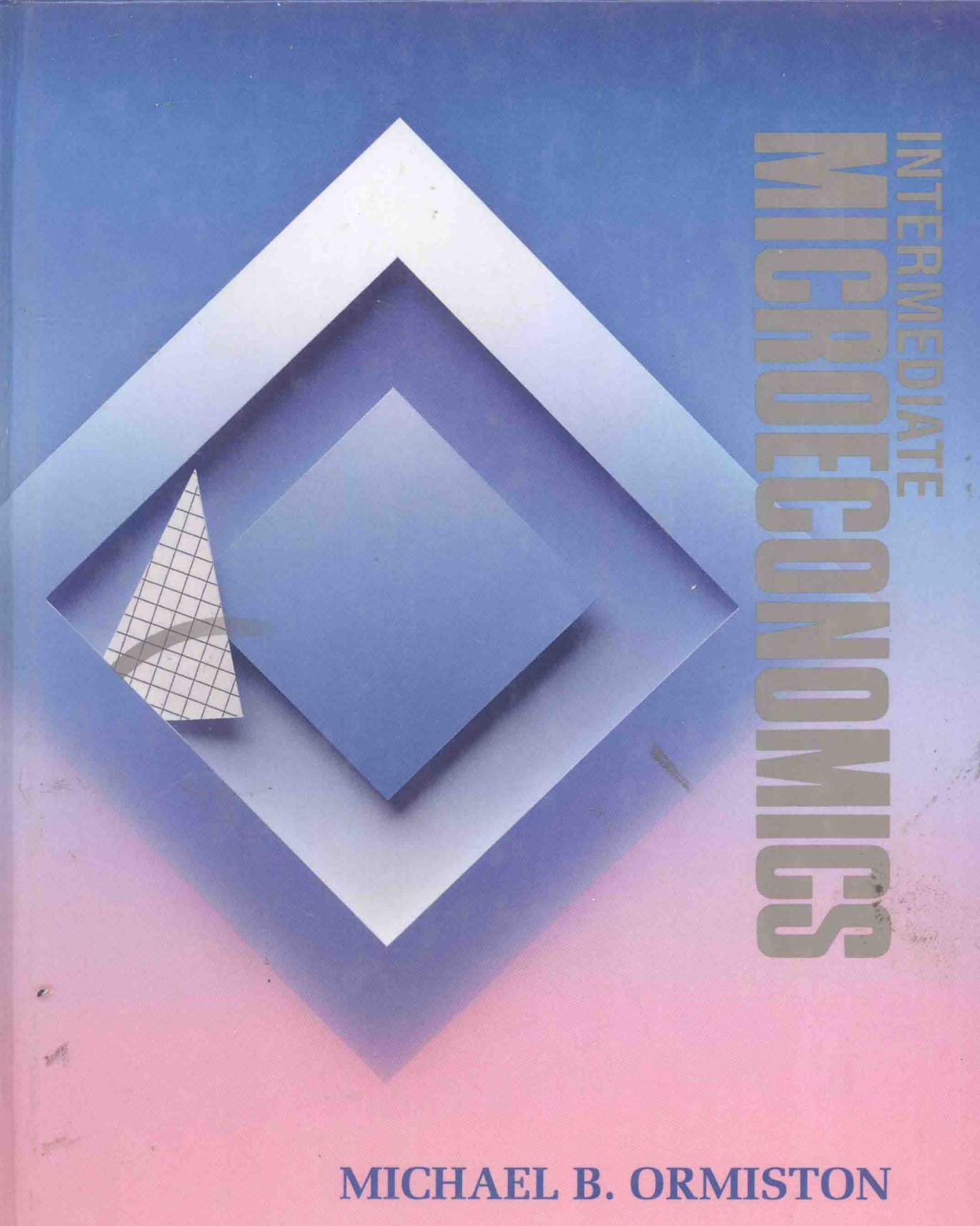

INTERMEDIATE MICROECONOMICS

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PREFACE

For students interested in the economic problems facing modern societies, microeconomics is one of the most important courses in the economics curriculum. Microeconomics provides a logical framework for explaining and predicting economic behavior. The principles learned in this course are essential for understanding and evaluating budgeting decisions, business decisions, public policy, and how economic systems function.

In writing Intermediate Microeconomics I had two primary

goals—to give a clear and understandable presentation of the fundamental principles of modern microeconomic theory and to get students involved in using microeconomics to analyze and evaluate economic problems. To accomplish the first goal, I have emphasized the basic concepts and techniques central to microeconomic theory. I believe that students with a thorough understanding of the basics will be able to use microeconomics on their own long after the course has ended. To accomplish the second goal, I have used solved problems within the chapters to develop the economic principles being discussed and to show students how they can apply microeconomics outside the classroom. These solved problems are not the typical "boxed" examples or "case studies" found in many texts. Rather, they are examples designed to get students involved in setting up and analyzing actual economic problems. They present a mix of real-world and hypothetical situations but they always deal with events or phenomena that are pertinent to the real world.

The examples within the chapters are designed to address one basic principle at a time and have two parts. The first part states the economic problem and the second solves it. The solutions are annotated so that students have not only answers but also explanations of how to set up and solve the problems. Over the years I have found that many of my students have not learned a systematic method of solving problems. These students find it difficult to appreciate microeconomic theory because they must learn not only new economic concepts but also a new way of thinking. I endeavor to overcome this obstacle with the solved problems. As the book progresses, the solved problems are used to demonstrate economic theory at work, and economic theory is used to improve the student's problem-solving capabilities.

There are several additional features that set this book apart from other intermediate microeconomics textbooks. First, Chapter 2 demonstrates how to use equations and graphs to set up and analyze equilibrium and optimization problems. This serves a dual purpose. It provides a review of the supply and demand model and exposes the student to marginal analysis. I believe that if students have a good grasp of these techniques at the beginning of the course, later on they will be able to concentrate on learning economics.

Second, in addition to the solved problems in each chapter, I have included three chapters devoted solely to real–world applications: Chapter 5 "Applications Using Consumer Theory"; Chapter 11, "Applications Using the Competitive Model"; and Chapter 13, "Applications Using the Monopoly Model." These applications

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illustrate how to apply the concepts and techniques developed in the theory chapters to a variety of important economic issues. For example, in Chapter 11, "Applications Using the Competitive Model," the theory developed in Chapters 3–4 and 6–10 is used to examine the economic effects of excise taxes, income taxes, wage and price controls, cost-saving innovations, and trade restrictions.

Third, in contrast to most texts, which place the discussion of input markets near the end of the book, I discuss input markets simultaneously with output markets. For example, Chapter 8 discusses both output supply and input demand for a competitive firm, Chapters 9 and 10 discuss competitive output and input markets respectively, and Chapter 11 considers how the policy being analyzed affects both output and input markets. I have found that discussing input and output markets together results in a more efficient presentation of material and helps reinforce the circular flow nature of a market economy.

Fourth, I discuss economic efficiency and market failure in a partial equilibrium framework (Chapter 15) immediately after the discussion of price and output determination in competitive and imperfectly competitive markets. Most other texts place much of this material in the last chapter of the book. However, the ordering here seems preferable since in many of the field courses—public finance, labor economics, industrial organization, and international trade, for example—partial equilibrium analysis is used extensively to analyze the welfare implications of government intervention in competitive markets, the regulation of monopoly, and other forms of market failure.

Fifth, I have designed the last two chapters in the book, Chapters 17, "Investment Decisions and Capital Markets," and 18, "Decision Making and Risk," in such a way that either or both can be assigned right after the discussion of competitive markets. This gives the instructor the option of modifying the course to fit the needs of the students.

Finally, I have provided between 15 and 25 questions and problems at the end of each chapter. These problems range from easy to difficult and are meant to give students ample opportunity for practicing what they have learned in the chapter. The end-of-chapter questions are an essential part of this book and I encourage students to work them all.

I have written this book for undergraduate students who have had one course in principles of microeconomics. The only prerequisites needed are an elementary understanding of algebra and graphs plus a willingness to learn new concepts.

Many economics programs, including the one here at Arizona

State University, require students to take at least one calculus course prior to enrolling in intermediate microeconomics. Although in the main body of this textbook no calculus is used, most chapters have an appendix that contains a calculus treatment of the basic topics covered in that chapter as well as more advanced topics. While these appendixes are not meant to be rigorous mathematical analyses, they do provide a fairly complete introduction to the mathematical tools used by economists and allow the instructor to use calculus when desired.

Intermediate Microeconomics offers instructors enough flexibility to design a course to meet their needs. For a one-quarter or one-semester course emphasizing the core principles and techniques of microeconomics, I would suggest using Chapters 1–4, 6–10, 12, 14–15, and selected applications from Chapters 5, 11, and 13. A more rigorous course would include Chapters 16–18 and most of the appendixes. A course designed primarily for business majors would include Chapters 17 and 18 and all of Chapter 13.

After completing this course, students should be able, on their own, to translate an economic issue into a problem that they can analyze using the tools developed during the course. I firmly believe that the best way for students to achieve this goal is to practice. For this reason, Dr. Catherine Schneider, Boston College, and I have prepared a Workbook that should be used along with the textbook. The Workbook contains additional examples that are carefully designed to aid students in learning how to use their newly acquired tools. Each problem in the workbook begins on a new page and leaves plenty of room for "scratch work." This makes it easy to assign and grade workbook problems.

I have also written an Instructor's Manual to accompany the textbook. This contains three sections. Section I gives solutions to all of the end-of-chapter questions and problems while Section II gives answers to all of the workbook questions and problems. I think having the author's suggested answers makes it easier for the instructor to choose problems to assign as homework or to use on examinations. Finally, Section III contains a test bank of multiple-choice questions for those instructors teaching large sections.

The approach taken in this book is the result of the many discussions I have had over the years with friends and colleagues who have taught microeconomic theory. In particular, Raymond Battalio, Texas A&M University, Timothy Gronberg, Texas A&M University, and Jack Meyer, Michigan State University provided

invaluable insights into teaching economic theory to undergraduates.

I have had the assistance of many people who reviewed the manuscript at various stages. Their comments and suggestions improved the book substantially and I would like to thank them all: William Carlisle, University of Utah; Yang-Ming Chang, Kansas State University; Eleanor Craig, University of Delaware; Larry DeBrock, University of Illinois at Urbana-Champaign; Carroll B. Foster, University of California, San Diego; Gary Fournier, Florida State University; James P. Gander, University of Utah; Jim Hagermann, Reed College; Simon Hakim, Temple University; George Heitman, Pennsylvania State University; Walter "Dub" Lane, University of New Orleans; Ashley Lyman, University of Indiana; Daniel Orr, University of Illinois; Catherine Schneider, Boston College; Charles T. Strein, University of Northern Iowa; Steven Tomlinson, University of Texas; Nancy Virts, California State University at Eau Claire; Harry Watson, George Washington University; Kathleen West, California State University at Fullerton; Greg Wozniak, University of Tulsa; and Mark Zupan, University of Southern California.

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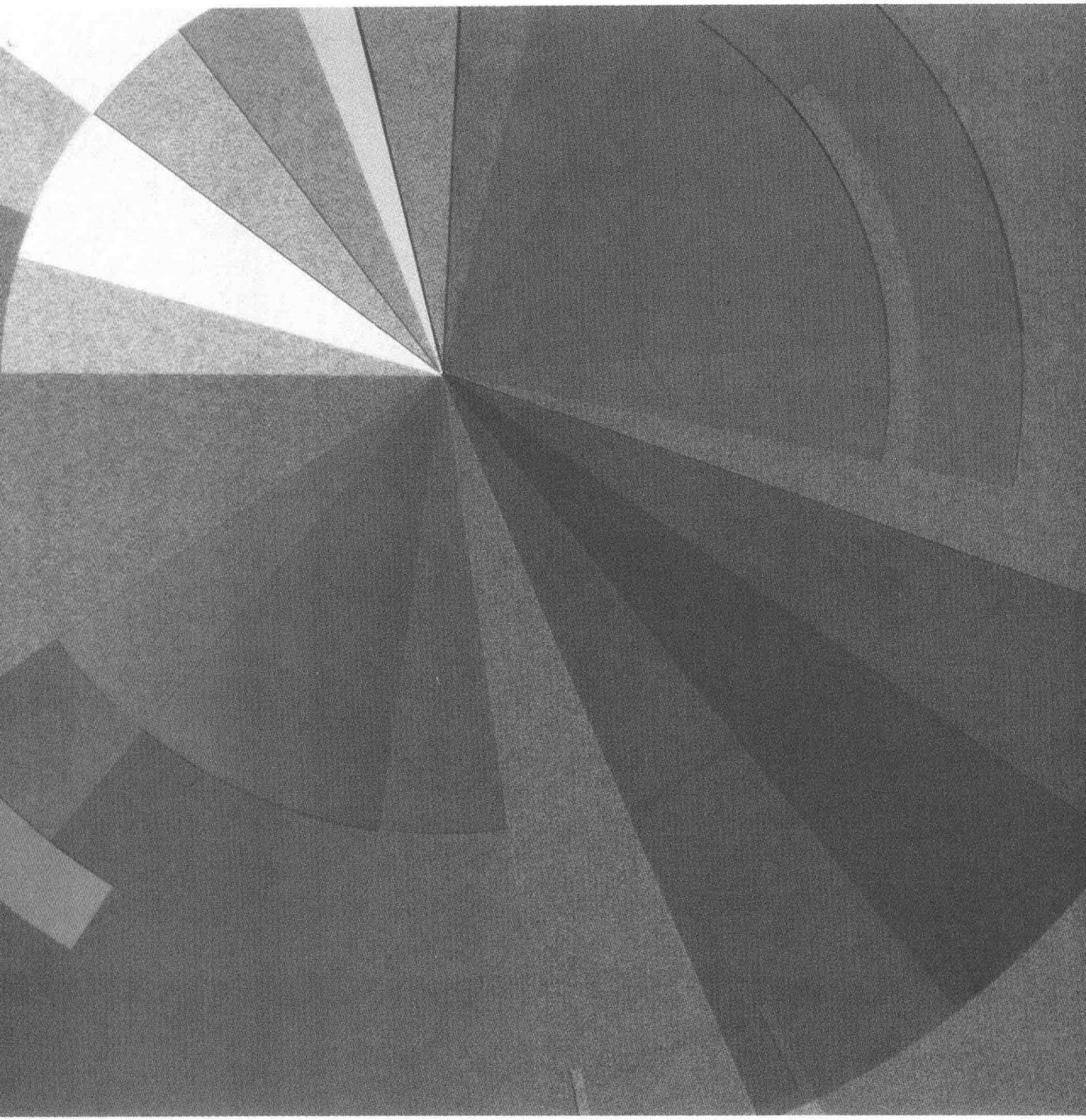

CONTENTS

PART 1 PRELIMINARIES 1

CHAPTER 1 Introduction to Microeconomics 3

1.1 The Role of Theoretical Models 4

1.2 Positive and Normative Analysis 6

1.3 The Importance of Microeconomics: A Preview of What Lies Ahead 6

1.4 The Market Economy Model 8

Markets and Prices 9

The Circular Flow of Economic Activity 9

Government and the Market Economy Model 11

SUMMARY 12

CHAPTER 2 Problem Solving in Microeconomics 14

2.1 Types of Economic Problems 15

2.2 Equilibrium Problems: Supply and Demand 15

Demand and Supply Curves 16

Finding the Equilibrium Price and Quantity Using Supply and Demand Curves 18

Market Economies and the Invisible Hand 18

Finding the Equilibrium Price and Quantity Using Linear Supply and Demand Functions 19

Changes in Demand or Supply 20

2.3 Optimization Problems 23

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SUMMARY 32

APPENDIX Mathematical Tools 37

A2.1 Functions and Graphs 37

A2.2 Types of Functions 38

A2.3 Equations and Identities 38

A2.4 Derivatives and Slopes 39

A2.5 Rules for Finding Derivatives 41

A2.6 Unconstrained Optimization 41

A2.7 Constrained Optimization 43

PART 2 CONSUMER CHOICE AND DEMAND 47

CHAPTER 3 The Theory of Consumer Choice 49

3.1 The Budget Constraint 51

The Intercepts of the Budget Constraint 51

The Slope of the Budget Constraint 52

Using a Composite Good 53

Shifts in the Budget Constraint 54

The Budget Set 56

3.2 Preferences of Consumers 58

The Axioms of Preference 58

Using Indifference Curves to Represent Preferences 60

Properties of Indifference Curves 60

The Marginal Rate of Substitution 63

Using Utility Functions to Represent Preferences 68

3.3 Consumer Choice 72

Maximizing Satisfaction 72

Marginal Utility and the Optimality Condition 75

A Corner Solution 77

SUMMARY **78**

APPENDIX Consumer Theory: A Calculus Approach **84**

A3.1 Indifference Curves 84

A3.2 Deriving the First Order Conditions Using Calculus 85

CHAPTER 4 Individual and Market Demand **87**

4.1 Individual Demand 88

The Individual Consumer's Demand Curve 90

4.2 Changes in Demand 91

Changes in Income 91

Complements and Substitutes 93

4.3 Income and Substitution Effects of a Price Change 95

The Substitution Effect for a Decrease in Price 95

The Income Effect for a Decrease in Price 97

Positively Sloped Demand Curves or Giffen's Paradox 97

4.4 Market Demand 102

Aggregating Individual Demands to Obtain Market Demand 103

4.5 Demand Elasticities 108

The Price Elasticity of Demand 108

Using the Price Elasticity of Demand to Analyze Consumer Expenditures 113

Two Other Demand Elasticities 115

4.6 Consumer Surplus 116

Consumer Surplus and Indifference Curves 118

SUMMARY **123**

APPENDIX Demand: A Calculus Approach **129**

A4.1 Demand Functions 129

A4.2 Consumer Surplus 132

CHAPTER 5 Applications Using Consumer Theory **134**

5.1 Price Discounts 135

5.2 Nonprice Rationing 138

5.3 Excise Subsidies 142

5.4 Fixed-Quantity Subsidies 145

5.5 The Consumption–Leisure Choice and Work Effort 149

5.6 Individual Choices over Time 155

SUMMARY **161**

APPENDIX Measuring Changes in Real Income **165**

A5.1 Compensating and Equivalent Variation 165

A5.2 Revealed Preference and the Consumer Price Index 168

PART 3 THE COMPETITIVE FIRM: OUTPUT SUPPLY AND INPUT DEMAND 175

CHAPTER 6 Firms, Economic Profit, and Production 177

6.1 The Nature of Firms 178

Why Do Firms Exist? 179

Types of Firms 179

6.2 Profit Maximization 181

6.3 The Meaning of Economic Profit 182

Defining the Costs of Production 182

Economic Profit 185

6.4 Describing a Firm's Technology: Production Tables and Production Functions 187

The Production Table 187

The Production Function 188

6.5 Describing a Firm's Technology: Isoquants 189

Properties of Typical Isoquants 190

Isoquants and Indifference Curves 192

6.6 The Long and Short Runs 192

6.7 Production in the Short Run 194

The Total Product Curve 194

The Average Product Curve 195

The Marginal Product Curve 196

The Law of Diminishing Marginal Productivity 196

6.8 Production in the Long Run 197

The Marginal Rate of Technical Substitution 197

Marginal Products and the Marginal Rate of Technical Substitution 198

Returns to Scale 200

SUMMARY 203

APPENDIX Production Theory: A Calculus Approach 209

A6.1 Isoquants 209

CHAPTER 7 The Theory of Cost 211

7.1 Production Costs in the Short Run 212

Fixed Costs 212

Variable Costs 213

Total Cost 214

Average and Marginal Cost 215

The Determinants of Short-Run Costs 215

7.2 Short-Run Cost Curves 217

The Average Cost Curves 218

7.3 Production Costs in the Long Run 223

Input Prices and Isocost Lines 223

Minimizing Production Costs 225

The Expansion Path 230

7.4 Long-Run Cost Curves 230

Long-Run Average and Marginal Costs 232

Economies and Diseconomies of Scale 232

7.5 Public Policy and Long-Run Costs 234

Input Taxes and Long-Run Costs 234

Input Restrictions and Long-Run Costs 236

7.6 Comparing Short- and Long-Run Costs 239

STC and LTC 239

LAC and SATC 241

A Brief Comment on Capacity 242

SUMMARY 243

APPENDIX Short-and Long-Run Cost Functions: The Calculus Approach 247

A7.1 Deriving the Long-Run Total Cost Function 247

A7.2 Short- and Long-Run Cost Functions 249

CHAPTER 8 Profit Maximization: The Competitive Firm 251

8.1 The Meaning of Perfect Competition 252

The Requirements for Perfect Competition 252

Why Study Perfect Competition? 253

Alternative Types of Markets 254

8.2 Profit Maximization and Output 255

Marginal Revenue for a Competitive Firm 255

Determining the Profit-Maximizing Output Rate: The Total Revenue–Total Cost Approach 256

Determining the Profit-Maximizing Rate of Output: The Marginal Revenue–Marginal Cost Approach 261

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