## **Description of the Examination**

The Principles of Microeconomics examination covers material that is usually taught in a one-semester undergraduate course in introductory microeconomics. This aspect of economics deals with the principles of economics that apply to the analysis of the behavior of individual consumers and businesses in the economy. Questions on this exam require test-takers to apply analytical techniques to hypothetical as well as real-world situations and to analyze and evaluate economic decisions. Test-takers are expected to demonstrate an understanding of how free markets work and allocate resources efficiently. They should understand how individual consumers make economic decisions to maximize utility, and how individual firms make decisions to maximize profits. Test-takers must be able to identify the characteristics of the different market structures and analyze the behavior of firms in terms of price and output decisions. They should also be able to evaluate the outcome in each market structure with respect to economic efficiency, identify cases in which private markets fail to allocate resources efficiently, and explain how government intervention fixes or fails to fix the resource allocation problem. It is also important to understand the determination of wages and other input prices in factor markets, and to analyze and evaluate the distribution of income.

The examination contains approximately 80 questions to be answered in 90 minutes. Some of these are pretest questions that will not be scored.

### Knowledge and Skills Required

Questions on the Principles of Microeconomics examination require candidates to demonstrate one or more of the following abilities:

- Understanding of important economic terms and concepts
- Interpretation and manipulation of economic graphs
- Interpretation and evaluation of economic data
- Application of simple economic models

The subject matter of the Principles of Microeconomics examination is drawn from the following topics. The percentages next to the main topics indicate the approximate percentage of exam questions on that topic.

### 8-14% Basic Economic Concepts

Scarcity, choice and opportunity cost

Production possibilities curve

Comparative advantage, specialization and trade

Economic systems

Property rights and the role of incentives

Marginal analysis

#### 55-70% The Nature and Functions of Product Markets

15-20% Supply and Demand

- Market equilibrium
- · Determinants of supply and demand
- · Price and quantity controls
- Elasticity
- · Price, income and cross-price elasticities of demand
- · Price elasticity of supply
- Consumer surplus, producer surplus and market efficiency
- · Tax incidence and deadweight loss

5-10% Theory of Consumer Choice

- Total utility and marginal utility
- Utility maximization: equalizing marginal utility per dollar
- · Individual and market demand curves
- · Income and substitution effects

10-15% Production and Costs

- Production functions: short and long run
- · Marginal product and diminishing returns
- Short-run costs
- Long-run costs and economies of scale
- · Cost minimizing input combination

25-35% Firm Behavior and Market Structure

- Profit:
  - Accounting versus economic profits
  - Normal profit
  - Profit maximization: MR=MC rule
- · Perfect competition:
  - · Profit maximization
  - Short-run supply and shut-down decision
  - Firm and market behaviors in short-run and long-run equilibrium
  - Efficiency and perfect competition
- Monopoly:
  - Sources of market power
  - Profit maximization



- Inefficiency of monopoly
- Price discrimination
- Oligopoly:
  - Interdependence, collusion and cartels
  - Game theory and strategic behavior
- Monopolistic competition:
  - Product differentiation and role of advertising
  - Profit maximization
  - Short-run and long-run equilibria
  - Excess capacity and inefficiency

#### 10-18% Factor Markets

Derived factor demand

Marginal revenue product

Labor market and firms' hiring of labor

Market distribution of income

#### 12-18% Market Failure and the Role of Government

Externalities

- Marginal social benefit and marginal social cost
- Positive externalities
- Negative externalities
- Remedies

Public Goods

- Public versus private goods
- Provision of public goods

Public Policy to Promote Competition

- Antitrust policy
- Regulation

Income Distribution

- Equity
- · Sources of income inequality

## **Study Resources**

Most textbooks used in college-level introductory microeconomics courses cover the topics in the outline above, but the approaches to certain topics and the emphases given to them may differ. To prepare for the Principles of Microeconomics exam, it is advisable to study one or more college textbooks, which can be found in most college bookstores. There are

many introductory economics textbooks that vary greatly in difficulty. Most books are published in one-volume editions, which cover both microeconomics and macroeconomics; some are published in two-volume editions, with one volume covering macroeconomics and the other microeconomics. A companion study guide/workbook is available for most textbooks. The study guides typically include brief reviews, definitions of key concepts, problem sets and multiple-choice test questions with answers. Many publishers also make available companion websites, links to other online resources or computer-assisted learning packages.

To broaden your knowledge of economic issues, you may read relevant articles published in the economics periodicals that are available in most college libraries. *The Economist, The Wall Street Journal* and *The New York Times*, along with local papers, may also enhance your understanding of economic issues.

A recent survey conducted by CLEP found that the following textbooks are among those used by college faculty who teach the equivalent course. You might find one or more of these for sale online or at your local college bookstore. HINT: Look at the table of contents first to make sure it matches the Knowledge and Skills Required for this exam.

Arnold, Microeconomics, Concise Edition (South-Western)

Bade and Parkin, *Foundations of Microeconomics* (Addison Wesley)

Baumol and Blinder, *Microeconomics: Principles and Policy* (South-Western)

Case and Fair, Principles of Microeconomics (Prentice-Hall)

Colander, Microeconomics (McGraw-Hill)

Frank and Bernanke, *Principles of Microeconomics*, Brief Edition (McGraw-Hill)

Krugman and Wells, Microeconomics (Worth)

Lipsey, Ragan and Storer, Microeconomics (Addison Wesley)

Mankiw, Brief Principles of Microeconomics (South-Western)

McConnell and Brue, Microeconomics (McGraw-Hill)

McEachern, ECON for Microeconomics (South-Western)

Salvatore, Schaum's Outline of Microeconomics (McGraw-Hill)

Samuelson and Nordhaus, Microeconomics (McGraw-Hill)

Schiller, The Micro Economy Today (McGraw-Hill)

Stiglitz and Walsh, Principles of Microeconomics (W. W. Norton)

Taylor and Weerapana, *Principles of Microeconomics* (South-Western)



These resources, compiled by the CLEP test development committee and staff members, may help you study for your exam. However, none of these sources are designed specifically to provide preparation for a CLEP exam. The College Board has no control over their content and cannot vouch for accuracy.

http://www.oswego.edu/~economic/newbooks.htm (list of free online textbooks)

http://oli.web.cmu.edu/openlearning/forstudents/freecourses/economics

(Carnegie Mellon Intro to Economics course)

http://webcast.berkeley.edu/courses.php (free micro and macro webcast courses)

Visit www.collegeboard.com/clepprep for additional economics resources. You can also find suggestions for exam preparation in Chapter IV of the *CLEP Official Study Guide*. In addition, many college faculty post their course materials on their schools' websites.

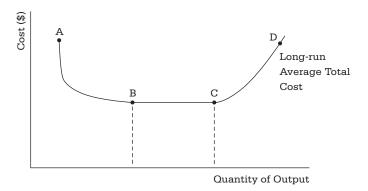
## **Sample Test Questions**

The following sample questions do not appear on an actual CLEP examination. They are intended to give potential test-takers an indication of the format and difficulty level of the examination and to provide content for practice and review. For more sample questions and info about the test, see the CLEP Official Study Guide.

- 1. Which of the following is the underlying reason for the law of increasing opportunity cost?
- (A) Higher prices cause production of all goods to increase.
- (B) Capital goods cannot be divided into smaller units.
- (C) Resources are scarce.
- (D) Resources are not equally suited to the production of all goods.
- (E) Managerial inefficiency results in diseconomies of scale.
- 2. Suppose that oranges and apples are close substitutes. If the price of apples decreases, the equilibrium price and quantity of oranges are expected to change in which of the following ways?

|     | Price of Oranges | <b>Quantity of Oranges</b> |
|-----|------------------|----------------------------|
| (A) | Increase         | Increase                   |
| (B) | Increase         | Decrease                   |
| (C) | No change        | Decrease                   |
| (D) | Decrease         | Increase                   |
| (E) | Decrease         | Decrease                   |

- 3. When the price of a product increases, a consumer's real income decreases, causing the consumer to decrease the quantity of the product demanded. This is known as
- (A) the substitution effect
- (B) the income effect
- (C) income elasticity
- (D) cross-price elasticity
- (E) diminishing marginal utility



- 4. The long-run average total cost curve above shows
- (A) decreasing returns to scale from point A to point B
- (B) increasing returns to scale from point B to point C
- (C) increasing returns to scale from point C to point D
- (D) constant returns to scale from point B to point C
- (E) constant returns to scale from point C to point D
- 5. A profit-maximizing firm will shut down in the short run if
- (A) marginal cost is greater than average total cost
- (B) marginal cost is equal to average total cost
- (C) price is less than average total cost
- (D) price is less than average variable cost
- (E) average variable cost is greater than average fixed cost

- 6. Which of the following is true of the marginal factor cost for a firm hiring labor in a perfectly competitive labor market?
- (A) It is constant and equal to the market wage rate.
- (B) It is greater than the market wage rate.
- (C) It is less than the market wage rate.
- (D) It increases as the number of workers hired increases.
- (E) It decreases as the number of workers hired increases.
- 7. In a competitive market, when a negative externality exists, the private market produces
- (A) more than the socially optimum level because the marginal social cost is less than the marginal private cost
- (B) more than the socially optimum level because the marginal social cost is greater than the marginal private cost
- (C) less than the socially optimum level because the marginal social benefit is less than the marginal private benefit
- (D) less than the socially optimum level because the marginal private benefit is greater than the marginal external cost
- (E) the optimal level of output because marginal private benefits equal marginal social costs

- 8. Antitrust laws are designed mainly to
- (A) protect businesses from unfair foreign competition
- (B) facilitate mergers of firms to increase efficiency
- (C) regulate prices charged by natural monopolies
- (D) promote a competitive market environment
- (E) monitor business compliance with the federal tax code

### **Credit Recommendations**

The American Council on Education has recommended that colleges grant 3 credits for a score of 50, which is equivalent to a course grade of C, on the CLEP Principles of Microeconomics exam. Each college, however, is responsible for setting its own policy. For candidates with satisfactory scores on the Principles of Microeconomics examination, colleges may grant credit toward fulfillment of a distribution requirement, or for a particular course that matches the exam in content. Check with your school to find out the score it requires for granting credit, the number of credit hours granted and the course that can be bypassed with a passing score.

Answers to Sample Questions: 1-D; 2-E; 3-B; 4-D; 5-D; 6-A; 7-B; 8-D.

