

## Chapter 3

### Multiple Choice Questions

1. A business owner makes 1000 items a day. Each day he or she contributes 8 hours to produce those items. If hired, elsewhere he/she could have earned \$250 an hour. The item sells for \$15 each. Production does not stop during weekends. If the explicit costs total \$150,000 for 30 days, the firm's accounting profit for the month equals:
  - a. \$300,000
  - b. \$60,000
  - c. \$450,000
  - d. \$240,000
  
2. A business owner makes 1000 items a day. Each day he/she contributes 8 hours to produce those items. If hired, elsewhere he/she could have earned \$250 an hour. The item sells for \$15 each. Production does not stop during weekends. If the explicit costs total \$150,000 for 30 days, the economic profit for the month equals:
  - a. \$300,000
  - b. \$60,000
  - c. \$450,000
  - d. \$240,000
  
3. If a firm is earning negative economic profits, it implies
  - a. That the firm's accounting profits are zero
  - b. That the firm's accounting profits are positive
  - c. That the firm's accounting profits are negative
  - d. More information is needed to conclude about accounting profits
  
4. Opportunity costs arise due to
  - a. Resource scarcity
  - b. Interest rates
  - c. Limited wants
  - d. Unlimited scarcity
  
5. After graduating from college, Jim had three choices, listed in order of preference: (1) Move to Florida from Philadelphia, (2) work in a car dealership in Philadelphia, or (3) play soccer for a minor league in Philadelphia. His opportunity cost of moving to Florida includes
  - a. The benefits he could have received from playing soccer
  - b. The income he could have earned at the car dealership
  - c. Both a and b
  - d. Cannot be determined from the given information
  
6. Economic Value Added helps firms to avoid the hidden-cost fallacy
  - a. by ignoring the opportunity costs to using a capital

- b. by differentiating between sunk and fixed costs
  - c. by taking all capital costs into account including the cost of equity
  - d. none of the above
7. The fixed-cost fallacy occurs when
- a. A firm considers irrelevant costs
  - b. A firm ignores relevant costs
  - c. A firm considers overhead or depreciation costs to make short-run decisions
  - d. Both a and c
8. Mr. D's Barbeque of Pickwick, TN produces 10,000 dry-rubbed rib slabs per year. Annually Mr. D's fixed costs are \$50,000. The average variable cost per slab is a constant \$2. The average total cost per slab then is
- a. \$7.
  - b. \$2.
  - c. \$5.
  - d. impossible to determine.
9. All the following are examples of variable costs, except
- a. Labor costs
  - b. Cost of raw materials
  - c. Accounting fees
  - d. Electricity costs
10. The U.S. Government bought 112,000 acres of land in southeastern Colorado in 1968 for \$17,500,000. The cost of using this land today exclusively for the reintroduction of the black-tailed prairie dog
- a. is zero, because they already own the land.
  - b. is zero, because the land represents a sunk cost.
  - c. is equal to the market value of the land.
  - d. is equal to the total dollar value the land would yield if used for farming and ranching.
  - e. depends on the value to society of black-tailed prairie dogs.

Multiple Choice Key

- 1. A
- 2. D
- 3. D
- 4. A
- 5. B
- 6. C
- 7. D
- 8. A
- 9. C
- 10. C

### Short Answer Questions

#### **3-1 Concert Opportunity Cost**

You won a free ticket to see a Bruce Springsteen concert (assume the ticket has no resale value). U2 has a concert the same night, and this represents your next-best alternative activity. Tickets to the U2 concert cost \$80, and on any particular day, you would be willing to pay up to \$100 to see this band. Assume that there are no additional costs of seeing either show. Based on the information presented here, what is the opportunity cost of seeing Bruce Springsteen?

#### **3-2 Concert Opportunity Cost 2**

You were able to purchase two tickets to an upcoming concert for \$100 apiece when the concert was first announced three months ago. Recently, you saw that StubHub was listing similar seats for \$225 apiece. What does it cost you to attend the concert?

#### **3-3 Housing Bubble**

Due to the housing bubble, many houses are now selling for much less than their selling price just two to three years ago. There is evidence that homeowners with virtually identical houses tend to ask for more if they paid more for the house. What fallacy are they making?

#### **3-4 Opportunity Cost**

The expression "3/10, net 45" means that the customers receive a 3% discount if they pay within 10 days; otherwise, they must pay in full within 45 days. What would the seller's cost of capital have to be in order for the discount to be cost justified? (Hint: Opportunity Cost)

#### **3-5 Starbucks**

Starbucks is hoping to make use of its excess restaurant capacity in the evenings by experimenting with selling beer and wine. It speculates that the only additional costs are hiring more of the same sort of workers to cover the additional hours and costs of the new line of beverages. What hidden costs might emerge?

#### **3-6 Dropping University Courses**

Students doing poorly in courses often consider dropping the courses. Many universities will only offer a refund up to a certain date. Should this affect their drop decisions?

### Short Answer Key

#### **3-1 Concert Opportunity Cost**

\$20. Opportunity cost is the value of your next best alternative. In this case, your next best alternative is attending the U2 concert. Your value for this alternative is \$100 with a corresponding cost of \$80 leaving a net value of \$20.

Note: This question is adapted from Paul J. Ferraro and Laura O. Taylor (2005) "Do Economists Recognize an Opportunity Cost When They See One? A Dismal Performance from the Dismal Science", Contributions to Economic Analysis & Policy: Vol. 4: No. 1, Article 7.

#### **3-2 Concert Opportunity Cost 2**

What you paid three months ago is irrelevant to your costs now. The decision you are facing is to attend the concert or not. If you do not attend, you can sell the tickets for \$225 (ignoring any brokering fees and hassle costs). Thus, you forego \$450 to attend the concert.

#### **3-3 Housing Bubble**

These two homeowners have virtually identical houses that should sell at virtually identical prices. The purchase price from years ago is a sunk cost and therefore irrelevant to the pricing decision. They are committing the sunk cost fallacy.

### 3-4 Opportunity Cost

The "opportunity cost" of receiving a late payment is the foregone benefit of receiving the money early. This is determined by a firm's cost of capital. A 3% interest rate for 35 days corresponds to an annual rate of about  $3\% \times (365/35) = 31\%$ .

### 3-5 Starbucks

There could be many hidden costs. Here are a few examples:

- Some of Starbucks current baristas are underage and are not permitted to serve alcohol. Hiring new bartenders may raise the labor costs.
- The storage and preparation of cold drinks, like beer and wine, differs considerably from the storage and preparation of hot drinks, like coffee. This suggests two separate "production lines" at each store.
- The Starbucks brand is known for signaling a quiet, comfy place to linger in small groups or alone. Serving alcohol may change the atmosphere enough that traditional coffee drinkers in the afternoon and early evening will be turned off.
- The Starbucks brand is also known for high quality coffees that are high quality partly because of the care in choosing beans, roasting them and brewing on the premises. It is not clear that there is much scope for care in 'preparing' beer and wine beverages to add similar value. If not, this brand extension could dilute the signal of the brand.

### 3-6 Dropping University Courses

Before this date, the tuition is avoidable. After this date, it is sunk. Before this date, students compare the expected benefits to the tuition cost. After this date, they compare the expected benefits only to avoiding the hassle costs of continuing to participate in the course.

