



## Review Test Submission: M7 Practice Final Exam

User	ADAM L ZIOLKOWSKI
Course	BU.220.620.31.SU22 Business Microeconomics
Test	M7 Practice Final Exam
Started	7/13/22 7:18 PM
Submitted	7/13/22 8:28 PM
Status	Needs Grading
Attempt Score	Grade not available.
Time Elapsed	1 hour, 9 minutes
Results Displayed	All Answers, Submitted Answers, Correct Answers, Feedback, Incorrectly Answered Questions

## Question 1

0 out of 0 points



True/False. No Explanation Needed. "Employers are always hurt by minimum wage laws, and workers always benefit."

Selected Answer: ☒ FalseAnswers: ☐ True☒ False

## Question 2

0 out of 0 points



True or False? No explanation needed. "If a person is offered a certain amount of \$2500 or a gamble with an expected outcome of \$2500, both a risk averse and risk neutral person would definitely (i.e. strictly) prefer the certain amount."

Selected Answer: ☒ FalseAnswers: ☐ True☒ False

## Question 3

0 out of 0 points



Select all of the answers that are true. That is, there may be more than one correct statement.

A firm in a perfectly competitive market:

- Selected Answers: ☒ profit-maximizes where  $P = MC$   
☒ faces a demand curve that is horizontal at the market price
- Answers: ☒ profit-maximizes where  $P = MC$   
☒ profit-maximizes where  $MR = MC$   
☐ is a price setter  
☒ faces a perfectly elastic demand curve  
☒ faces a demand curve that is horizontal at the market price

#### Question 4

0 out of 0 points



Select all of the answers that are true. That is, there may be more than one correct statement.

A monopolist:

- Selected Answers: ☒ profit-maximizes where  $MR = MC$   
☒ is a price setter  
☒ typically faces a perfectly *inelastic* demand curve.
- Answers: ☐ profit-maximizes where  $P = MC$   
☒ profit-maximizes where  $MR = MC$   
☒ is a price setter  
☐ typically faces a perfectly *inelastic* demand curve.  
☐ faces a demand curve that is horizontal at the market price.

#### Question 5

0 out of 0 points



Two firms are situated next to a lake, and it costs each firm use filters that avoid polluting the lake. However, each firm must use the lake's water in production, so it is also costly to have a polluted lake. The following is the payoff matrix that represents the payoffs associated with each firms' decisions based upon the other firm's decision.

***Nessie Corp.***

		Pollute	Don't pollute
<b><i>Loch Inc.</i></b>	Pollute	-\$2000, -\$2,000	-\$1000, -\$2500
	Don't pollute	-\$2500, -\$1000	-\$1500, -\$1500

Assume that these firms participate in a one-shot, simultaneous game.

**Choose ALL statements below that are TRUE. There may be more than one answer.**

Note: all payoffs and outcomes are written as (Loch Inc., Nessie Corp.)

Selected Answers: ☒ The Nash Equilibrium is (Pollute, Pollute).

☒ Both firms have a dominant strategy.

Answers: The Nash Equilibrium is (Don't Pollute, Don't Pollute).

☒ The Nash Equilibrium is (Pollute, Pollute).

There are multiple Nash Equilibria: (Pollute, Pollute) and (Don't Pollute, Don't Pollute).

There is no Nash Equilibrium.

☒ Both firms have a dominant strategy.

Only one firm has a dominant strategy.

No firm has a dominant strategy.

**Question 6**

0 out of 0 points



Marge has a demand for 2-liter bottles of Diet Coke given by the demand curve  $P = 15 - 0.5Q$  (or  $Q = 30 - 2P$ ), where  $P$  is the price of each 2-liter bottle and  $Q$  is the quantity of bottles consumed. Suppose the price schedule for 2-liter bottles of Diet Coke at Marge's local supermarket is as follows:

- First 15 bottles are \$4/bottle
- All remaining bottles are only \$2/bottle

How many 2-liter bottles does Marge consume?

Selected Answer: ☒ None of the above are correct.

Answers: 13

14

22



26

48

None of the above are correct.

**Question 7**

0 out of 0 points



Consider a firm that sells a single product, wants to maximize profits, and faces a linear, downward sloping demand curve. Marginal cost is equal to \$1. If the firm is setting its output level and price where demand elasticity is equal to -0.8, which of the following statements is true?

Selected Answer: The firm is not maximizing profit and should increase the price.

Answers: The firm is maximizing profit and should change nothing.



The firm is not maximizing profit and should increase the price.

The firm is not maximizing profit and should choose the output level at which demand is unit-elastic.

The firm is not maximizing profit and should lower the price.

The firm is not maximizing profit and should increase output.

**Question 8**

0 out of 0 points



A market is in perfect competition with the market demand curve  $Q_D = 800 - 400P$ . The short-run market supply curve is  $Q_S = 600P$ . There are 100 firms in the market. Each firm in this market therefore faces the following individual demand curve (where  $P$  is graphed on the vertical axis and  $Q$  is graphed on the horizontal axis):

Selected Answer:  $P = 0.8 - 0.001Q$

Answers:  $P = 0$

$P = 2 - 0.000025Q$

$P = 0.8 - 0.001Q$



$P = \$0.80$

$P = 2 - 0.0025Q$

**Question 9**

0 out of 0 points



The "short run" is

Selected Answer: ☒ a time period in which at least one input is fixed.

Answers: a time period in which at least one set of outputs has been decided upon.  
three years.

- ☒ a time period in which at least one input is fixed.  
less than a year.  
however long it takes to produce the planned output.

### Question 10

0 out of 0 points



The long-run market supply curve in a "constant cost", competitive industry is:

Selected Answer: ☒ horizontal

Answers: vertical

- ☒ horizontal  
upward sloping  
downward sloping  
None of the above.

### Question 11

0 out of 0 points



Which of the following makes is harder to maintain a cartel?

Selected Answer: ☒ D. Both A and B are correct

Answers: ☒ A. A large number of firms

- B. If the expected payoff from cheating is less than the expected payoff from cooperating  
C. If there is a high cost of entry into the market  
D. Both A and B are correct  
E. Both A and C are correct

## Question 12

0 out of 0 points



Tatiana just bought a house for \$450,000. She lives in an earthquake-prone region where the probability of a major earthquake occurring in any given year is 2%. Tatiana estimates that in the event of such a quake, the property would be worth \$100,000 (the value of the land). An insurance company offered her an insurance contract that in exchange for \$10,000 annual premium would pay \$350,000 if her house is destroyed in a major earthquake. Assume that if the house is not destroyed, it maintains its market value of \$450,000. Which of the following statements is correct?

Selected Answer: ☒ B. Tatiana will definitely refuse to purchase the proposed earthquake insurance if she is risk neutral.

Answers:

- ☐ A. Tatiana will definitely purchase the proposed earthquake insurance if she is risk neutral.
- ☒ B. Tatiana will definitely refuse to purchase the proposed earthquake insurance if she is risk neutral.
- ☐ C. Tatiana will definitely purchase the proposed earthquake insurance if she is risk averse.
- ☐ D. Tatiana will definitely refuse to purchase the proposed earthquake insurance if she is risk averse.
- ☐ E. Both A and D are correct.

## Question 13

0 out of 0 points



You own a smartphone for which you originally paid \$249. A friend recently sold her smartphone (same model and year as yours and in similar condition) on e-Bay for \$60. A new version of your smartphone costs \$399. Clearly, your smartphone has lost value over time. Which of the following statements is true?

Selected Answer: ☒ The value of your smartphone dropped by \$189 and this represents a sunk cost.

Answers:

- ☒ The value of your smartphone dropped by \$189 and this represents a sunk cost.
- The value of your smartphone dropped by \$249 and this represents an avoidable cost.
- The value of your smartphone dropped by \$150 and this represents an opportunity cost.
- The value of your smartphone dropped by \$249 and this represents a sunk cost.
- The value of your smartphone dropped by \$150 and this represents a sunk cost.
- The value of your smartphone dropped by \$150 and this represents an avoidable cost.
- The value of your smartphone dropped by \$189 and this represents an avoidable cost.
- The value of your smartphone dropped by \$249 and this represents an opportunity cost.
- The value of your smartphone dropped by \$189 and this represents an opportunity cost.

## Question 14

0 out of 0 points



A consumer has an annual demand curve for concentrated tomato paste given by:  $P = 50 - 2Q$  (or  $Q = 25 - 0.5P$ ), where  $P$  is price in dollar and  $Q$  is tubes of tomato paste. If the per-unit price is \$2/ tube of tomato paste, what is the maximum fixed fee a consumer would be willing to pay to consume the tomato paste at that price?

Selected Answer: 600

Correct Answer:

Evaluation Method	Correct Answer	Case Sensitivity
Contains	576	

## Question 15

0 out of 0 points



Tom has purchased a non-refundable \$120 ticket for a music concert in Baltimore (assume there is no pandemic). Transportation, including gas and parking, will cost \$50. Unexpectedly, two opportunities have come up for the same weekend. Tom's company is looking for employees to put in overtime that weekend, and will pay \$350; also, there is a consulting opportunity to earn \$500. If he takes on either weekend work (he cannot do both), he would not have time for the concert, but he could sell the ticket to a friend for \$100. What is the total economic cost to Tom of going to the concert? Enter a number.

Selected Answer: 600

Correct Answer:

Evaluation Method	Correct Answer	Case Sensitivity
Contains	650	

## Question 16

0 out of 0 points



The U.S. strawberry jam industry is perfectly competitive and all firms have the cost structure:

- $TFC = \$11,375$  per year
- $TVC = 0.01q^2$
- $MC = 0.02q$

where  $q$  is the number of cases of jam produced by a typical firm in a year. The market price is \$5 per case.

Answer the following questions (each blank is 3 points each):

- What is the profit-maximizing quantity sold? Enter a number. **[a]**
- What is the **average total cost** at this profit-maximizing quantity? Enter a number. **[b]**
- Would you advise the firm to shut-down in the short run? Enter yes or no. **[c]**

Specified Answer for: a 250

Specified Answer for: b 48

Specified Answer for: c ☒ no

Correct Answers for: a		
Evaluation Method	Correct Answer	Case Sensitivity
<input checked="" type="checkbox"/> Contains	250	
Correct Answers for: b		
Evaluation Method	Correct Answer	Case Sensitivity
<input checked="" type="checkbox"/> Contains	48	
Correct Answers for: c		
Evaluation Method	Correct Answer	Case Sensitivity
<input checked="" type="checkbox"/> Contains	no	

## Question 17

0 out of 0 points



Bacon consumption has been in decline over the past several years as more studies have been made public detailing the carcinogenic properties of bacon. Assume that the bacon industry is perfectly competitive and consists of firms with U-shaped long-run average cost curves. Suppose the industry was in long-run equilibrium before the decline began. Now consider a permanent decrease in demand for bacon. Assume this is a constant cost industry.

Fill in the blank for the following questions. (Each blank is worth 3 points each.)

- Compared to the original long-run equilibrium, will the market equilibrium price rise, fall, or stay the same in the short run? Pick one. **[A]**
- Compared to the original long-run equilibrium, will the output per firm rise, fall, or stay the same in the short run? Pick one. **[B]**
- Compared to the original long-run equilibrium, will the market equilibrium price rise, fall, or return to the original equilibrium level in the long run? Pick one. **[C]**
- Compared to the original long-run equilibrium will output per firm rise, fall, or return to the original equilibrium level in the long run? Pick one. **[D]**

Specified Answer for: A ☒ fallSpecified Answer for: B ☒ stay the sameSpecified Answer for: C ☒ fallSpecified Answer for: D ☒ return to the original equilibrium level

Correct Answers for: A		
Evaluation Method	Correct Answer	Case Sensitivity
<input checked="" type="checkbox"/> Contains	fall	
Correct Answers for: B		
Evaluation Method	Correct Answer	Case Sensitivity
<input checked="" type="checkbox"/> Contains	fall	
Correct Answers for: C		



Evaluation Method	Correct Answer	Case Sensitivity
✔ Contains	return	
<b>Correct Answers for: D</b>		
Evaluation Method	Correct Answer	Case Sensitivity
✔ Contains	return	

**Question 18**

Needs Grading



Is the following sentence True or False? **Explain your answer in two sentences or less.**

"It is possible in the short-run for the minimum point on a firm's average variable cost curve to be the same as the minimum point on a firm's average total cost curve."

Selected Answer: True - the firm could have no fixed costs.

Correct Answer: ✔ True. When AFC = 0.

Response Feedback: [None Given]

**Question 19**

Needs Grading



A monopolist faces the following market demand curve:  $P = 200 - 0.5Q$ , where  $Q$  is units per year and  $P$  is \$/unit. Marginal cost is given by  $MC = 4Q$ .

Answer the following questions. Please clearly indicate which question you are answering with the appropriate letter.

- a. (4 points) What is the profit-maximizing price and quantity?
- b. (4 points) What is the price elasticity of demand at this profit-maximizing price and quantity?
- c. (4 points) What is the consumer surplus at this price and quantity?

Selected Answer: a.)  $P = 177.78$ ,  $Q = 44.44$   
 b.) 8  
 c.) 493.72

Correct Answer: a.)  $P = 180$ ,  $Q = 40$   
 b.) -9  
 ✔ c.)  $CS = 400$

Response Feedback: [None Given]

**Question 20**

Needs Grading



Two home improvement retailers, the Home Center (HC) and Lowe's Depot (LD), are deciding whether to invest more in "do-it-yourself" (DIY), where customers do their own home remodel or repairs, or "we-do-it" (WDI) services, where the home improvement store does the work for the customer. The payoffs for the firms are given below, where HC's profit is listed before the comma, and LD's profit is listed after the comma.

		<i>LD</i>	
		DIY	WDI
<i>HC</i>	DIY	150, 75	120, 300
	WDI	400, 150	50, 50

Answer the following three questions, assuming this is a one-shot simultaneous game:

- (3 points) Which firms (if any) have a dominant strategy?
- (5 points) What is the Nash Equilibrium (or equilibria) of this game, if any?
- (2 points) Is this game an example of a prisoner's dilemma?

Selected Answer: a.) None  
b.) (HC-WDI + LD-DIY)  
c.) No

Correct Answer: a. Neither firm has a dominant strategy  
b. 2 NE (WDI, DIY) and (DIY, WDI)  
c. This game is not a prisoner's dilemma.

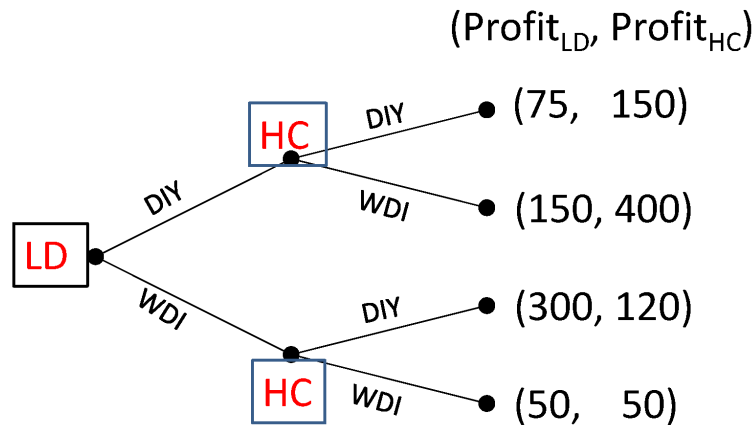
Response Feedback: [None Given]

## Question 21

Needs Grading



Suppose it is possible for LD to be a first-mover in this game. The sequential game tree looks as follows, where payoffs for LD are listed to the left of the comma and payoffs for HC are listed to the right of the comma:



What is the Nash Equilibrium of this sequential game?

Selected Answer: LD-DIY + HC-WDI  
and  
LD-WDI + HC-DIY

Correct Answer: ☒ (WDI, DIY), where outcomes are (LD, HC)

Response Feedback: [None Given]

## Question 22

0 out of 0 points



In the reality TV show *Storage Wars*, people bid on the contents of repossessed storage units without being able to evaluate the contents. This is an example of a \_\_\_\_\_ auction.

Selected Answer: ☒ common value

Answers: ☒ common value  
☐ private value  
☐ Dutch  
☐ second-price

## Question 23

0 out of 0 points

In Dutch or first-price sealed-bid auctions, participants will bid less than their highest valuation.



Selected Answer: ☒ True

Answers: ☒ True  
☐ False

Response Feedback: They do so because they have to balance the benefit of paying less with the cost of not getting the good.

### Question 24

0 out of 0 points



A market is congested if it is not sufficiently thick. That is, there are not enough participants on one side of the market to satisfy the demand on the other side of the market.

Selected Answer: ☒ False

Answers: ☐ True  
☒ False

Response Feedback: Correct. Congested markets are most often thick markets in which matching and transactions are not fast enough to support the market thickness.

### Question 25

0 out of 0 points



What is the main function of platforms?

Selected Answer: ☒ Matching.

Answers: ☐ Making money.  
☒ Matching.  
☐ Gathering consumer data.  
☐ The production of goods and services.

Wednesday, July 13, 2022 8:28:21 PM EDT

← OK