

## ECONOMICS 2

### FIRST MIDTERM EXAMINATION

#### INSTRUCTIONS

1. Put your name, your SID number, and your GSI's name or your section number in the blanks provided on the front of the exam. ***Please do not put your name or your GSI's name anywhere else on the exam.***
2. The exam is written on ***both sides of the page***. Be sure to answer all the questions.
3. Write all of your answers directly on the exam in the spaces provided. **Use a dark enough pen so that answers remain legible** after electronic scanning.
4. Use blank pages at the back for scratch paper NOT your own paper.
5. The exam consists of three parts. There are 21 points in total. Part I counts for 7 points; Part II counts for 7 points; and Part III counts for 7 points.
6. Turn off and put away all cellphones and other electronics.
7. We collect the exams at exactly 6:30 p.m.

**PLEASE DO NOT OPEN THE EXAM UNTIL INSTRUCTED TO DO SO.**

Name \_\_\_\_\_

SID Number \_\_\_\_\_

GSI or Section Number \_\_\_\_\_

***During the exam, I will NOT obtain help from anyone, provide help to anyone else, or use any notes or other resources. Sign below:***

\_\_\_\_\_

**PAGE FOR GRADING ONLY (STUDENTS SHOULD SKIP IT)**

PROBLEM 1: \_\_\_\_\_

PROBLEM 2a: \_\_\_\_\_

PROBLEM 2b: \_\_\_\_\_

PROBLEM 2c: \_\_\_\_\_

PROBLEM 3: \_\_\_\_\_

PROBLEM 4a: \_\_\_\_\_

PROBLEM 4b: \_\_\_\_\_

MULTIPLE CHOICE: \_\_\_\_\_

**TOTAL:** \_\_\_\_\_

**PART I: PROBLEMS****[14 POINTS TOTAL]**

Answer all questions. Be sure to explain your answers and to draw diagrams where they are appropriate.

1. Suppose improved agricultural practices lead to a reduction in the marginal cost of producing blueberries (which are bought and sold in a highly competitive market). If the price elasticity of demand for blueberries is greater than 1, will total spending on blueberries rise or fall as a result of the fall in marginal cost? **[2 points]**

2. Let us consider a market for a specific good with a monopoly producer.
  - a. **[2 points]** Draw a graph to explain how the monopoly chooses production  $Q$  and price  $P$ , and why the outcome is inefficient.

- b.** Suppose the government introduces a subsidy  $\$S$  per unit for consumers in this monopoly market: When a consumer buys one unit, it pays  $P$  to the monopoly but the consumer receives  $S$  from the government. Explain graphically how the subsidy affects the demand curve. If the monopoly does NOT change production  $Q$ , what happens to its profits and consumer surplus. **[2 points]**

- c. Show graphically that with the subsidy, the monopoly finds it profitable to increase the quantity produced relative to part (a) [HINT: use part (b) as a starting point]. Does the subsidy increase, reduce, or does not change deadweight loss relative to part (a)? **[2 points]**

3. Marketing analysts believe that the pandemic experience may have permanently reduced American households' enjoyment of travel. **[2 points]**
- a. Consider a household that buys two goods, travel services and everything else. What will the change in the enjoyment of travel do to the amount of travel services and everything else that the household wants to consume at the initial prices for the two goods?
- b. What will this do the household's demand curve for travel services? How will the change in the enjoyment of travel affect the equilibrium price and quantity in the market for travel services?

4. Many people are concerned about the high level of rents in Berkeley.
  - a. Suppose the City Council imposes a price ceiling that is below the current equilibrium rent. What would this do to the quantity of apartments rented in Berkeley? What would be the effect on the *producer* surplus in the market for rental housing? [**2 points**]



- b.** Suppose instead that the City Council decides to give a per-unit subsidy to landlords that reduces the equilibrium rent to the same level as the price ceiling described in part (a). In which case (the price ceiling or the subsidy to landlords) will the **consumer** surplus in the market for rental housing be larger? **[2 points]**

**PART II: MULTIPLE CHOICE QUESTIONS****[7 POINTS TOTAL]**

Each question is worth 1 point. Please write the letter of the **best** answer for each multiple choice questions below, like so:

1.   **F**  

2.   **E**  

...

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

1. In an hour, Lars can do 2 Econ 2 problems, or read 4 chapters of a book, or play 6 video games. The opportunity cost to Lars of doing 1 Econ 2 problem is:
  - A. the number of additional points Lars would earn on the Econ 2 exam by doing the problem.
  - B. reading 2 chapters of a book and playing 3 video games.
  - C. either reading 2 chapters of a book or playing 3 video games, depending on which activity Lars would choose if they didn't do the Econ 2 problem.
  - D. zero, since none of the possible activities involve earning or spending money.
  
2. Consider a household's budget constraint between food and clothing, with food on the vertical axis. If the household's income does not change but the prices of both food and clothing double, the budget constraint will:
  - A. not change.
  - B. shift out.
  - C. shift in.
  - D. it is not possible to tell.

3. The demand curve facing an individual firm in a perfectly competitive market (over the range of quantities the firm could plausibly produce) is:
- A. the same as its marginal revenue curve.
  - B. perfectly elastic at the prevailing market price.
  - C. the same as its marginal cost curve.
  - D. always above the firm's average total cost curve.
  - E. (A) and (B).
  - F. (A) and (C).
  - G. (B) and (D).
  - H. (C) and (D).
4. If we observe increases in both the price and quantity of a good that is produced and sold in a perfectly competitive market, we can deduce that:
- A. the supply curve must have shifted.
  - B. the demand curve must have shifted.
  - C. the supply and the demand curve must both have shifted.
  - D. we cannot deduce anything about shifts of the curves.
5. A drought in blueberry-growing areas will cause:
- A. both the price and quantity of blueberries to fall.
  - B. both the price and quantity of blueberries to rise.
  - C. the price of blueberries to fall and their quantity to rise.
  - D. the price of blueberries to rise and their quantity to fall.
6. A utility-maximizing household will allocate its spending so that:
- A. the total utility it gets from each good is the same.
  - B. the additional utility it gets from one more unit of each good is the same.
  - C. the additional utility it gets from spending one more dollar on each good is the same.
  - D. the average utility it gets per dollar spent is the same for each good.
7. Suppose the price elasticity of supply in a competitive market is very high. Then an outward shift of the demand curve will tend to cause:
- A. a large rise in quantity and a small rise in price.
  - B. a small rise in quantity and a large rise in price.
  - C. a large fall in quantity and a small rise in price.
  - D. a small fall in quantity and a large rise in price.

**SCRATCH 1**

## **SCRATCH 2**

### **SCRATCH 3**

## **SCRATCH 4**

**SCRATCH 5**