

Name: \_\_\_\_\_  
ECON 202—Montgomery College  
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## EXAM 1

- There are 110 possible points on this exam. The test is out of 100.
- You have one class session to complete this exam, but you should be able to complete it in less than that.
- Please turn off all cell phones and other electronic equipment.
- You are allowed a calculator for the exam. This calculator cannot be capable of storing equations. This calculator cannot double as a cell phone.
- Be sure to read all instructions and questions carefully.
- Remember to show all your work.
- Try all questions! You get zero points for questions that are not attempted.
- *Please print clearly and neatly.*

**Part I: Matching.** Write the letter from the column on the right which best matches each word or phrase in the column on the left. You will not use all the options on the right and you cannot use the same option more than once.

2 points each.

- |                                     |  |
|-------------------------------------|--|
| 1. ___ Consumer surplus             | A. Assumption of human behavior                                  |
| 2. ___ Deadweight loss              | B. If the maximum price for cars was \$1,000, this would happen. |
| 3. ___ Diminishing marginal utility | C. Market price – reservation price                              |
| 4. ___ Producer surplus             | D. Never greater than zero in an efficient market                |
| 5. ___ Rationality                  | E. Reservation price – opportunity cost                          |
| 6. ___ Shortage                     | F. Result of putting a price floor set above market price        |
| 7. ___ Surplus                      | G. Result of putting a price floor set below market price        |
|                                     | H. Why demand slopes down  |
|                                     | I. You get this on most things you buy                           |

**Part II: Multiple Choice.** Choose the best answer to the following.

4 points each.

8. If the supply curve shifts up and its slope remains the same, what happens to consumer surplus?
- It increases
  - It decreases
  - It stays the same
  - It is impossible to tell given the information provided
  - None of the above
9. Suppose you were going to spend \$40 to buy a new video game you valued at \$60. Before you could buy it, a prankster friend of yours pours dirt in your gas tank. While the act results in \$10 worth of satisfaction from your prankster friend, it costs you \$40 to fix your car and as a result you do not buy the video game. Considering all people (including your prankster friend), what is the economic profit from having dirt poured in your tank versus it not being poured in your tank (i.e. was society better off that gas was poured in your tank)?
- \$10
  - \$60
  - \$100
  - There is not enough information to determine the answer
  - None of the above

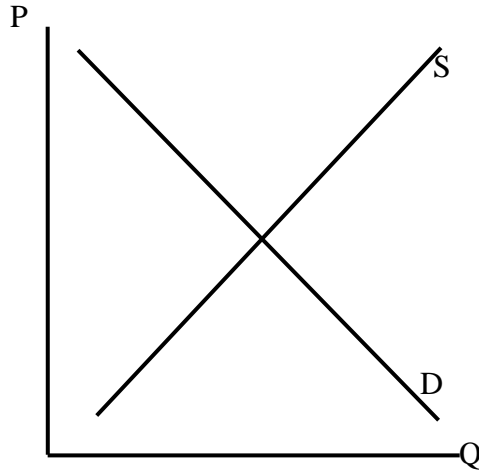
10. Frank points out a puzzle concerning why people don't travel far to save \$10 on a laptop but will make the same trip to save \$10 on an alarm clock. According to Frank, what mistake are they making?
- They are looking at percent saved, not total savings.
  - They are mistaking deadweight loss for productive activity.
  - They are not considering their comparative advantage.
  - B & C
  - None of the above
11. An inferior good:
- Is an undesirable good.
  - Experiences a falling demand as incomes rise.
  - Has few complements and many substitutes.
  - A & B
  - None of the above.
12. In his classic essay, *I, Pencil*, Leonard Read illustrated which economic concept?
- Supply and demand
  - Opportunity cost
  - Emergent order
  - Deadweight loss
  - None of the above
13. What's the difference between a shortage and scarcity?
- Scarcity is functionally unavoidable while a shortage is the result of inefficiency.
  - Scarcity is when there's not enough of something to buy while a shortage is the result of people not having enough money.
  - Scarcity results from panic while a shortage creates panic.
  - There is no difference.
  - There is a difference, but not one listed here.
14. Arbitrage is a term that describes taking advantage of price differences to buy low and sell high. Profit made from arbitrage, including speculation, is not popular in the public's mind as such individuals are assumed to not "produce" anything. But that does not mean these individuals do not make the economy better off. What economic value does arbitrage add?
- It disincentivizes prices from being too high or too low.
  - It encourages people to move goods and resources from low value places/times to high value places/times.
  - It allows entrepreneurs to break into an industry, giving them valuable experience they can leverage later into a value-creating company.
  - It creates opportunities for people who have few skills, thus preventing the government from having to support them while also giving them a sense of meaning in their lives.
  - None of the above

15. Which of the following is an example of positive economics?
- Price controls always result in deadweight loss.
  - The government spends money less efficiently than individuals.
  - If people recycle less paper, the market price of trees increases.
  - B & C
  - None of the above
16. If the price of plastic increases, what does that tell us about the market for plastic?
- The quantity of plastic bought and sold falls.
  - The quantity of plastic bought and sold rises.
  - Plastic has become harder to produce, which is why its price rose.
  - A & C
  - None of the above
17. Buying a book at \$8 when you would have paid \$10 creates:
- Consumer surplus
  - Producer surplus
  - Equilibrium
  - A & C
  - None of the above
18. The demand for shoes would shift to the right if:
- A shoe factory was destroyed.
  - Tennis became more popular.
  - Gasoline prices continued to climb.
  - B & C
  - None of the above.
19. Which of the following is an example of emergent order?
- How much the Department of Defense spends per year.
  - How people don't skate into each other at an ice-skating rink.
  - What time you decide to get up every day.
  - A & C
  - None of the above

**Part III: Short Answer.** *Answer the following.*

16 points each.

20. The Californian state government makes it difficult to increase the price of water, effectively creating a price control below the equilibrium market price. Using the supply and demand graph for water below, illustrate the effects of this price control. Make sure to indicate the true price, the price control (labeled as a ceiling or floor, as appropriate), where there's a surplus or shortage, and the quantity supplied and demanded. Finally, illustrate the area of deadweight loss (if any).



21. Suppose a tornado destroys a farmhouse. The family has no insurance and collectively values the house at \$250,000. It costs \$100,000—money that was sitting in their child's college fund—to fix the house. Finally, suppose the family collectively values sending the child to college at \$200,000. Calculate the economic profit of having a tornado destroy the house. Remember to show your work.

22. Using a complete and fully labeled diagram, illustrate the effects of the following (4 points each). Remember: do **not** shift more than one curve.

- a. In the market for houses, what happens if the price of lumber rises?
- b. In the market for books, what happens if video streaming services become cheaper?
- c. In the market for bottled water, what happens if people exercise more?
- d. In the market for laptops, what happens if the profitability of tablets rises?

