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ECON 201—Montgomery College
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EXAM 1

Practice Exam A

- 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. C Balance of payments | A. Assumption of human behavior |
| 2. I Diminishing marginal utility | B. Change in total |
| 3. E Lorenz curve | C. Explains why the trade deficit is only half of what's going on. |
| 4. B Margin | D. Required for there to be a market |
| 5. G Opportunity cost | E. Represents the actual distribution of income or wealth. |
| 6. A Rationality | F. The gain from an additional action/item |
| 7. D Scarcity | G. What you must give up |
| | H. When you proceed if the benefits exceed the costs |
| | I. Why demand slopes down |

- The balance of payments states that $NX + CA = 0$, or that the net flow of goods and services plus the net flow of investment equals zero. When evaluating how much the trade deficit matters, remember it's only half of what's going on; it is an arbitrary distinction between the current account (net exports) and the capital account (net investment).*
- Demand is a bunch of marginal benefits, organized in decreasing order.*
- The 45-degree line represents a perfectly equal distribution of wealth or income. The Lorenz curve is the actual distribution: the percent of wealth or income, say, the bottom 20% of the population has or the top 5% of the population has.*
- Margin is, by definition, change in total.*
- Opportunity cost is the net gain of the next best option; if you do X and your next best option is Y, then Y is what you give up.*
- Economists assume, among other things, that people are rational. It's a low bar, but it's an assumption. You could argue H also fits here.*
- If there is no scarcity, there is no question as to how to allocate a resource. Therefore, there is no market.*

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

4 points each.

- What barriers to efficiency does a socialist economic system face?

- a. Decision-makers don't understand how capitalism works
- b. Decision-makers don't know what each part of the economy needs
- c. Decision-makers don't prioritize what's the most efficient use of resources
- d. B & C**
- e. None of the above

Central planners are both unaware of the near endless details that go into making an efficient decision and they lack the incentives necessary for them to care what's best for society. At the heart of the problem is a lack of prices, which not only transfers knowledge (you know what's relatively scarce or abundant) but also acts as an incentive (high prices encourage conserving a resource and low prices encourage utilizing it).

9. We've discussed that income equality had a greater justification than simply good feelings. What is the economic argument in favor for reallocation, ceteris paribus?
- a. It increases productivity
 - b. It increases total utility**
 - c. It decreases waste
 - d. A & C
 - e. None of the above

Much like the Fundamental Theorem of Exchange, reallocation, ceteris paribus, increases total utility. By taking money from those with a low marginal value of money and giving it to those with a high marginal value of money, aggregate satisfaction increases. "All other things being equal" is an important qualifier here: if you reallocate, you can make total utility on net fall because of a drop in efficiency.

10. The demand for shoes would shift to the right if:
- a. A shoe factory was destroyed.
 - b. Tennis became more popular.
 - c. Gasoline prices continued to climb.
 - d. B & C**
 - e. None of the above.

Answer (a) is about the supply shifting to the left. But (b) and (c) represent changes in complements (b) and substitutes (c).

11. Consider this quote from Nobel Laureate F.A. Hayek:

If we were to apply the unmodified, uncurbed, rules of the micro-cosmos (i.e. of the small band or troop, or of, say, our families) to the macro-cosmos (our wider civilisation), as our instincts and sentimental yearnings often make us wish to do, *we would destroy it*. Yet if we were always to apply the rules of the extended

order to our more intimate groupings, we would crush them. So we must learn to live in two sorts of world at once.

—F. A. Hayek, *The Fatal Conceit* (1988) [Original Emphasis]

What are these “two sorts of world” Hayek is referring to?

- a. The Law of Demand versus the Law of Supply
- b. **Communism versus market systems**
- c. What you do versus what you give up
- d. Wealthy versus poor countries
- e. None of the above

Socialist and communist economies try to resemble that of a family; Hayek argues that we should resist the temptation to transplant that organizational structure to the larger order of strangers; that of the “extended order.” Similarly, applying market rules to our friends and family would smother those relationships; thus we must learn to live in two different worlds.

12. Suppose you’re a bank in England, where the pound is the local currency. If you do **not** intend on purchasing any U.S. goods or services, why would you allow people to give you U.S. dollars in exchange for British pounds?
- a. You might be interested in investing in European companies.
 - b. You might be interested in purchasing stock in a U.S. company.
 - c. You might be interested in buying U.S. government bonds.
 - d. **B & C**
 - e. None of the above

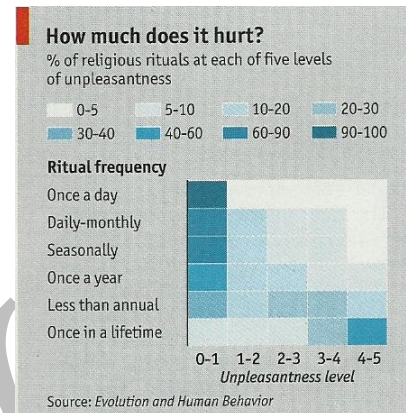
Both B and C are types of investment; the other major reason foreigners want U.S. dollars is to invest in the United States. We see this money come back in the form of the capital account. Investing in European companies would require the Euro, not the dollar.

13. The founder of public choice, Nobel laureate James Buchanan, described it as “politics without romance.” Why?
- a. **Because it assumes political actors aren’t benevolent.**
 - b. Because it assumes government and businesses won’t cooperate (they’re not “in love” with each other).
 - c. Because it assumes political actors are inherently evil.
 - d. A & C
 - e. None of the above

Public choice is not about how political actors are terrible people. It’s about their incentives, and not a desire to “do good”, ultimately govern their behavior.

14. This graph illustrates the work of psychologists Harvey Whitehouse and Quentin Atkinson, as published in the April 23-29 2011 issue of *The Economist*. The “unpleasantness” of religious rituals (0 is low, 5 is high) is along the x-axis. How often the religion requires the ritual to be preformed is along the y-axis. What economic concept does this diagram represent?

- Opportunity cost
- A supply curve
- A demand curve**
- A & C
- None of the above



Another way to think of “unpleasantness” is “price” and another way to think of “frequency” is “quantity.” Thus you get a predictable downward sloping demand curve (though the axes are reversed).

15. One way to tell if a policy is the result of rent seeking is determining if the policy makes society better off as a whole or not. Why would that criteria matter?
- Rent seeking is the act of desperate people. If society is made better off, then it can't be rent seeking because desperate people exploit society. They can't improve it.
 - Improving society requires that people are sometimes charged more than they need to be; that encourages people to start producing who otherwise wouldn't be.
 - Rent for housing is too high; if there are even more renters, then society can't be better off.
 - If society is made better off then the policy is definitely rent; you have to charge rent to incentivize people to build apartment buildings.
 - None of the above**

Two of these options really don't make sense because this question is about economic rent. Rent seeking has nothing to do what price is charged to be in an apartment.

Nor is it true that rents are always done by someone desperate. Indeed, rents are often sought by people who are not desperate as desperate people rarely have the access/influence to successfully seek rents. And while rents incentivize action, they don't incentivize production.

Remember: rents are, by definition, about enriching oneself without enriching society. If society isn't made better off by a policy, then why did the policy happen? It was probably the result of rent seeking.

16. Which of the following individuals are **clearly not** rational?
- a. A mother giving her child a toy after he throws a temper tantrum.
 - b. A young woman eating a cheeseburger.
 - c. A wealthy couple buying a used car without closely inspecting it.
 - d. All of the above.
 - e. **None of the above.**

For all these individuals, it is easy to come up with reasons for why they did what they did. Temper tantrums are annoying; though it might be teaching a poor lesson, it is understandable why someone would prioritize the short-term gain of appeasement.

Cheeseburgers are delicious. Even if the young woman wants to lose weight (which was not evident in the question), it is still rational to eat a burger now and then.

The closest to irrationality is option C, but even that is understandable. Closely inspecting a car can be a time-consuming activity. It is understandable (especially if you are quite wealthy), to avoid that cost.

17. In 2011, the U.S. Senate voted to end ethanol subsidies. If the bill passed, what happens in the market for corn? (Ethanol is made from corn.)
- a. The demand curve will shift, causing the price of corn to rise.
 - b. The supply curve will shift, causing the price of corn to rise.
 - c. The supply curve will shift, causing the price of corn to fall.
 - d. B & C
 - e. **None of the above**

Ending subsidies cause fewer firms to want corn to turn into ethanol (because now ethanol is more expensive to make). Thus the demand curve will shift down, causing the price of corn to fall.

18. In the third season of the superhero television show *Invincible*, the title character refuses to associate work with anyone who has done terrible things. He insists that he can save people without compromising his beliefs. Another, more experienced, character responded with: "We can be the good guys or the guys who save the world. Not both." Invincible refuses to see the wisdom of that response. Which economic idea best capture's Invincible's mistake?
- a. The Fundamental Theorem of Exchange
 - b. **The Nirvana Fallacy**
 - c. The Lump of Labor Fallacy
 - d. Focusing on total benefit/cost instead of marginal benefit/cost.
 - e. Focusing on absolute instead of comparative advantage.

Invincible's committing the Nirvana Fallacy. He's imagining an ideal version of world-saving, where compromises don't have to happen and there are clear lines between good and evil. It's fun to pretend the alternative to the status quo, the way things are currently done, is something perfect where no bad things have to happen, but that's a mistake. If one didn't have to do morally questionable things to save the world, then such a morally questionable world wouldn't exist in the first place.

19. Which of the following is/are **not** capital?

- a. A video game
- b. A delivery van
- c. Electricity
- d. A & C
- e. None of the above

Capital must not only be used to create other goods or services, it must be durable as well. Only (b) fulfills both of these requirements. Option (a) may be durable, but it's a consumption good. Option (c) may be used to create other goods and services, but it's used up as soon as it's consumed (electricity doesn't last...once you use it, it's gone). But a van is both.

Part III: Short Answer. Answer the following.

16 points each.

20. We discussed how prices solve the twin problems of knowledge and incentives that socialism can't overcome. But socialist economies had prices (set by central planning). Why do prices in capitalist economy work, but not in a socialist economy?

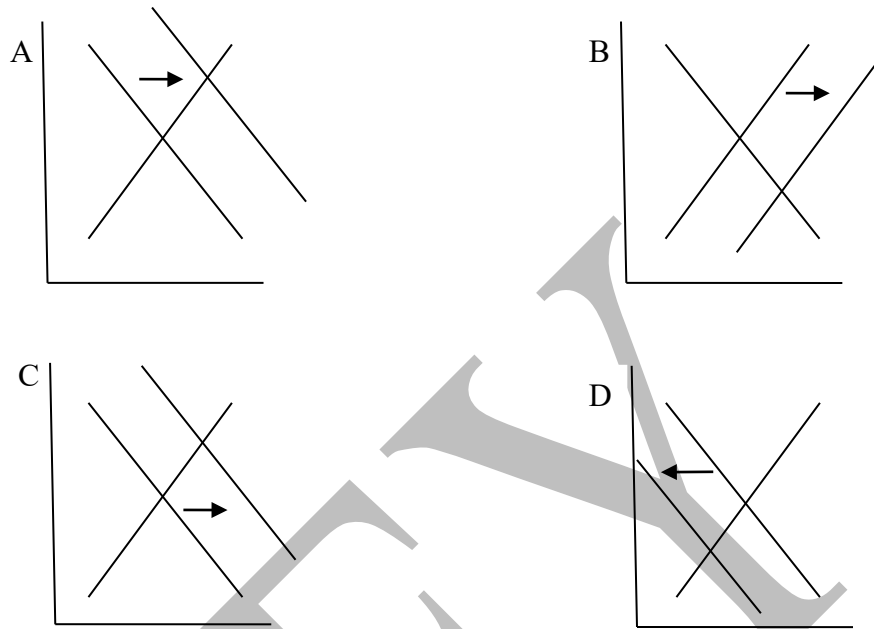
Recall that prices solve these twin problems when they are market prices, or prices discovered by the competitive process. Note the use of the word "discovered." Prices emerge out of countless interactions between many buyers and many sellers, each of whom have a sliver of relevant information. Prices are aggregates of those sources of information.

Prices set by a central planning board contains little relevant information. They are manufactured, not discovered, because they originate from a small group who have limited knowledge and incentive to get the price "right."

21. 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. The local roofing market after a hurricane hits a city.

- b. The market for computers after the microchip was invented.
- c. The market for bread after the price of pastrami falls.
- d. The market for bread after the price of bagels fall.



- A. If a hurricane hits, roofs will be damaged so there will be many people who want the roof fixed. Demand shifts up/right.
- B. Microchips make producing computers a lot cheaper. This results in supply shifts down/right.
- C. Pastrami and bread are complements; if the price of pastrami falls, people will buy pastrami more, resulting in people buying more bread to go with their pastrami. Demand shifts up/right.
- D. Bagels and bread are substitutes. If bagels get cheaper, people will swap out bread for bagels, resulting in fewer people buying bread. Demand shifts down/left.

22. Should a cost-benefit analysis **always** include an opportunity cost? Why or why not?

In general, yes. Opportunity cost is a foundational idea in economics and since economics is about optimality, it would be strange to exclude it. It's not enough to claim that some action is profitable (in the pecuniary or non-pecuniary sense); it must be the most profitable. You can only determine that if you compare the proposed action with the alternative.

In practice, of course, it is hard to determine what the opportunity cost is so any analysis of that opportunity cost will likely not be as detailed as the more direct question being faced. But some sort of attempt or estimate should be made, at the very least to signal you're not so naïve as to think the only thing that matters is what you're currently looking into.

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