

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 150 points (to be scaled up to 210 points) and is scheduled to take 75 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (12 points) For EITHER a public good OR income redistribution, describe what that means and explain why that is an economic reason for having a government.

2) (14 points) Answer EITHER Part A OR Part B.

A) The statement “time is money” comes from economics. Use terminology and logic from economics to explain the meaning of the statement.

B) On the homework question about the opportunity costs of going to college, I often get an answer like, “The costs of a college education are tuition, housing, meal plan and textbooks, because those are the most expensive parts of going to college.” As worded, two of then entries are wrong and something important is missing. EITHER tell me which two entries are wrong and why they are wrong, OR tell me what is missing and why it is important.

3) (16 points) Answer EITHER Part A OR Part B.

A) Draw a PPF for wheat and corn. Illustrate the effects of flooding in the farm country. Explain why the curve moved as drawn.

B) Draw a PPF for shirts and computers. Illustrate the effects of a new computer chip which means the computer can do more calculations and uses less material. Explain why the curve moved as drawn.

4) (16 points) Answer EITHER Part A OR Part B.

A) Draw a PPF for raincoats and umbrellas. Find a point on it where the opportunity costs of an umbrella is approximately two raincoats. Explain me how you know the opportunity costs of an umbrella is approximately two raincoats.

B) Draw the line $Y = 3 - (2/3)X$. Find the Y-intercept, X-intercept, and slope. Show all work. If there is no work, then explain how you got your answer.

5) (18 points) Answer EITHER Part A OR Part B.

A) Draw the supply/demand for hats. Illustrate the effects of hats becoming stylish. Explain why the curve(s) moved. What happens to the price of a hat and the quantity sold?

B) Draw the supply/demand for face masks. Illustrate the effects of the new virus affecting many people. Explain why the curve(s) moved. What happens to the price and quantity sold?

6) (18 points) Answer EITHER Part A OR Part B.

A) Draw the supply/demand for picture frames. Illustrate the effects of an increase in the price of windows for houses. Explain why the curve(s) moved as drawn. What happens to the price of a picture frame and the quantity sold?

B) Draw the supply/demand for stereo systems. Illustrate the effects of a decrease in the price of speakers. Explain why the curve(s) moved as drawn. What happens to the price of stereo systems and the quantity sold?

7) (18 points) Answer EITHER Part A OR Part B.

- A) Suppose there is a project which will cost \$4000. It will enable the organization who does the project to sell 1 item to each of 900 people at \$5 profit per item. There is a negative externality which affects 400 people and it costs each of them \$2 each. Should the project be done? Explain your logic. Would the market provide it? Explain your logic. Would the government provide it? Explain your logic.
- B) Suppose there is a project which will cost \$2000. It will enable the organization who does the project to sell 1 item to each of 800 people at \$2 profit per item. There is a negative externality which affects 600 people and it costs each of them \$1 each. Should the project be done? Explain your logic. Would the market provide it? Explain your logic. Would the government provide it? Explain your logic.

8) (18 points) Answer EITHER Part A OR Part B.

- A) State the “Law of Comparative Advantage”. Does that mean we should restrict imports to save our jobs? Explain your logic. Give a proof that the law is accurate.
- B) What is a negative externality? Prove that they result in a non-optimal level of production. You can do it with mathematics OR a graph assuming you explain what you are doing. Do NOT worry about reducing the problem. (Personally, I think not drawing the graph is easier, but you are welcome to draw the graph.)

9) (20 points) Answer EITHER Part A OR Part B.

- A) Draw a supply and demand diagram for balloons. Add a price floor to the diagram. Explain why the diagram changed as drawn. Are consumers helped or hurt? Explain your logic.
- B) Draw a supply and demand diagram for a winter jackets. Add a price ceiling to the diagram. Explain why the diagram changed as drawn. Are consumers helped or hurt? Explain your logic.