

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 100 points (to be scaled up to 160 points) and is scheduled to take 50 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) Without drawing a graph, explain why EITHER positive *externalities* OR *promoting competition* means we need government intervention in the market. Make sure you define the term in your explanation.
- 2) (12 points) Every statistic has problems with its definition which renders it less useful than we would like it to be. For EITHER the unemployment rate OR the CPI, explain two problems with the definition. Make sure you explain why they are problems.
- 3) (14 points) Answer EITHER Part A OR Part B.
 - A) What is the economic reason that an increase in a tax rate can sometimes cause less tax revenue to come in? Explain your logic in a general manner which applies to all taxes. Give a numerical example of an excise tax which illustrates your point. Briefly explain your argument.
 - B) I said that at some point, all sales taxes eventually become regressive. Explain my logic and give a numerical example which proves your point.
- 4) (14 points) Answer EITHER Part A OR Part B.
 - A) What is the advantage of buying something on the market rather than voting? What is the advantage of voting rather than using the market? Explain your logic.
 - B) Suppose a factory costs \$1000 to build. It will be able to make 500 items which can be sold for a profit of \$5 per unit. (Assume each item is sold to a different person). The factory will affect 600 people negatively, hurting each person \$2 each. Should the factory be built? Will the industry do it? Would the government do it? For all three parts, show all work and explain how you reached the conclusion.
- 5) (14 points) Answer EITHER Part A OR Part B.
 - A) What value is the unemployment rate in the USA, when the seasonally adjusted unemployment is at full employment? Which two types of unemployment do we have then? Briefly explain why you chose those two.
 - B) In this course, we say that inflation has very small costs and almost nobody is hurt. However, in the news in the past year, we regularly hear that people are being hurt by the high inflation. Both statements are true. How can both be correct?
- 6) (16 points) Answer EITHER Part A OR Part B.
 - A) Suppose a country has 1000 people who are 16 or older. 540 have jobs. 60 are unemployed but looking for a job. 50 are unemployed and quit looking for a job. 150 are stay-at-home parents, and the rest are retired. What are the labor force participation rate and unemployment rate? Show all work and briefly explain what you did.
 - B) Suppose that at the start of the year, the price level was 800 and people expected 10% inflation. At the end of the year, the price level was 840. What was the inflation rate? Show all work. Who was hurt by the inflation? Cite two groups hurt by the inflation and explain how they were hurt.
- 7) (18 points) Answer EITHER Part A OR Part B.
 - A) What are the two long-term trends which will cause the Social Security Trust Fund to keep shrinking? One possible solution is to eliminate the cap on taxable income. What does that mean? How would that reduce the problem? If you were the President, would you include that as part of your solution? Explain your logic.
 - B) What are the two long-term trends which will cause the Social Security Trust Fund to keep shrinking? One possible solution is to decrease benefits for everybody. How would that reduce the problem? If you were the President, would you include that as part of your solution? Explain your logic.