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) Answer EITHER Part A OR Part B.

- A) All statistics have problems with their definitions. What are two problems with the definition of the unemployment rate which makes it less useful than we would like? Explain how those problems affect the unemployment rate.
- B) What is the full employment rate of unemployment? What two types of unemployment explain why it is not 0%.
- 2) (12 points) For EITHER *promoting competition* OR *providing a legal system*, explain why that is an economic reason for having a government.

3) (14 points) Answer EITHER Part A OR Part B.

- A) Suppose a project would result in a product which result in a product which 400 people would be willing to pay \$8 each. The direct costs of the project is \$4000. There is a negative externality which would negatively affect 300 people \$1 each. Should this project be done? Would the market provide it? Would the government provide it? Explain your logic for all three parts.
- B) Suppose a project would result in a product which result in a product which 200 people would be willing to pay \$8 each. The direct costs of the project is \$2000. There is a positive externality which would positively affect 300 people \$1 each. Should this project be done? Would the market provide it? Would the government provide it? Explain your logic for all three parts.

4) (14 points) Answer EITHER Part A OR Part B.

- A) What is the economic reasoning that an increase in a tax could result in a reduction in tax revenue? Explain it in general and then give a specific numerical example which proves your point.
- B) What is meant by a regressive tax? Explain why I feel that most sales taxes are regressive.

5) (14 points) Answer EITHER Part A OR Part B.

- A) Suppose the price level at the start of the year was 700 and people expected 3% inflation. At the end of the year, the price level was 707. What was the inflation rate? Show all work. Who is helped and who is hurt by this inflation? Explain your logic mentioning at least two groups of people in each category and explaining how they are helped or hurt.
- B) Why can't we say, "Higher inflation means people cannot afford to buy as much as before. That is why high inflation is bad."?

6) (16 points) Answer EITHER Part A OR Part B. Assume we will act to save Social Security.

- A) What is the big problem with Social Security? What are the two long-term trends that mean the problem will get worse for the next decade at least? One proposal to reduce the problem with Social Security is to means test benefits. What does that mean? How would that reduce the problem? Would you include that as part of your package to save Social Security? Explain your reasoning.
- B) What is the big problem with Social Security? What are the two long-term trends that mean the problem will get worse for the next decade at least? One proposal to reduce the problem with Social Security is to raise the retirement age for those more than a decade away from retirement. How would that reduce the problem? Would you include that as part of your package to save Social Security? Explain your reasoning.

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

- A) Draw the supply and demand diagram for a good which creates a <u>positive</u> externality. Use the diagram to prove the optimal amount of the good is not produced. Do NOT worry about correcting the situation.
- B) Draw the supply and demand diagram for a good which creates a <u>negative</u> externality and has a steep demand, but flat supply curve. Draw the effects of what economists feel is the best solution to that problem. Explain why the curve(s) moved as drawn. Who is affected the most by that solution, producers or consumers? Explain your logic.