2021/10/1

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) (10 points) Answer EITHER Part A OR Part B.

- A) We said the full employment is not 0% unemployment? What is the correct value? What type(s) of unemployment do we have then? Briefly explain your logic.
- B) Why do I say that a general sales tax is regressive? Explain my logic.

# 2) (12 points) Answer EITHER Part A OR Part B.

- A) We said that positive externalities are a reason for government involvement in the market. What does that mean? WITHOUT drawing a graph, explain the logic. Do NOT worry about solving it.
- B) We said that promoting competition is a reason for government interference in the market. What does that mean? Explain why we need a government for that.

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

- A) Increasing a tax can reduce the revenue received. Explain the logic in a general manner which applies to all taxes. Then give a numerical example of an excise tax to prove your point.
- B) Draw the Laffer Curve. Explain why it takes its shape.

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

- A) Suppose a country has 1000 people who are 16 or older. 630 have jobs. 70 are unemployed but looking for a job. 20 are unemployed and guit looking for a job. 80 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) Every statistic has problems with the definition which makes the statistic less meaningful than we would like. What are two problems with the unemployment statistic which means it is less meaningful than we would like? Explain your logic.

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

- A) Suppose that at the start of the year, the price level was 900 and people expected 8% inflation. At the end of the year, the price level was 918. 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.
- B) Suppose that there is high inflation, but people accurately predict its value. What are two problems caused by the accurately predicted high inflation? Explain how high inflation causes that.

### 6) (16 points) Answer EITHER Part A OR Part B.

- A) Suppose that a project costs \$3000. If completed, it would allow the firm to sell 1 item to each of 200 people at a profit of \$20 per item. There is a negative externality which affects 300 people at a cost of \$3 per person. Should this project be done? Would the market provide it? Would the government provide it? Show all work for each calculation and briefly explain what you did.
- B) Suppose that a project costs \$4000. If completed, it would allow the firm to sell 1 item to each of 400

people at a profit of \$9 per item. There is a positive externality which affects 200 people at a benefit of \$3 per person. Should this project be done? Would the market provide it? Would the government provide it? Show all work for each calculation and briefly explain what you did.

# 7) (20 points) Answer EITHER Part A OR Part B.

- A) What is the long-term problem facing Social Security? What are the two long-term trends which mean the problem will be getting worse for at least a decade? One of the proposals to reduce the problem is to means test benefits. How would that reduce the problem? If you were the president, would you use that proposal as part of the solution? Explain your logic.
- B) What is the long-term problem facing Social Security? What are the two long-term trends which mean the problem will be getting worse for at least a decade? One of the proposals to reduce the problem is to increase the Social Security tax. How would that reduce the problem? If you were the president, would you use that proposal as part of the solution? Explain your logic.