

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) Give an example of EITHER frictional unemployment OR structural unemployment. Explain why your example fits that category.

2) (12 points) For EITHER providing a legal system OR promoting competition, explain why that is an economic reason for a government.

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

A) Suppose there is a project which will cost \$1000. It will enable the organization who does the project to sell 1 item to each of 700 people at \$5 profit per item. There is a negative externality which affects 900 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) What is the advantage of voting over spending? Explain your logic. What is the advantage of spending over voting? Explain your logic.

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

A) What is the economic reason that increasing a tax rate could result in less tax revenue? Explain it in a general manner which would apply to all taxes. Give a numerical example using an excise tax which shows what you described. Use it to prove that the higher tax rate yields less revenue.

B) We said that for a tax to be a good tax, it needs to only cause small distortions. What are distortions and why do we want them to be small?

5) (16 points) Answer EITHER Part A OR Part B.

A) Suppose there is a country with 1000 people 16 and older. 450 have jobs. 50 people are not working, but are looking for a job. 200 are stay-at-home parents. 240 people are retired. The remaining 60 do not have a job and are not looking. Calculate the labor force participation rate and the unemployment rate. Briefly explain why you did the calculations in the manner you did and show all work.

B) Suppose at the start of the year, the CPI was 800 and people expected 15% inflation. At the end of the year, the CPI was 880. Calculate the inflation rate. Show all work. Name two groups of people who are hurt by this inflation rate. Explain why they are hurt.

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

A) What are the costs of high, fully anticipated inflation? Explain how inflation causes those problems.

B) All statistics have problems with their definition and/or how they are calculated which cause them to be less useful than we would like. What are two problems with the inflation rate? Explain why they make it less useful than we would like.

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

A) Draw the S/D diagram for a product which creates a positive externality, like vaccinations. Use the diagram to prove that the market will not provide the optimal quantity of vaccinations. Explain why your diagram looks as drawn and how it shows the market is not producing the optimal quantity. Do NOT worry about solving the problem.

B) Draw the S/D diagram for hats. Draw the demand steep and the supply flat. Illustrate the effects of a tax on hats. Explain why the curve(s) moved as drawn. As drawn, who pays most of the tax? Explain how your graph shows that.