

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 14-point question should take 7 minutes. I cannot give extra time because some students have a class after your class.

1) (14 points) Answer EITHER Part A OR Part B.

A) Define a regressive tax. Explain why I feel that most state sales taxes are regressive taxes.

B) All statistics in macroeconomics have problems which limit their usefulness. For example, some things are left out which should not be. What are two problems with the unemployment statistic? Explain your logic.

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

A) Explain the difference between the marginal tax rate and the average tax rate. If the tax is a progressive tax, then which is higher? Explain your logic.

B) We said that *promoting competition* are an economic reason for a government. What are they? Given an example and explain why the government must provide it.

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

A) Explain why fully expected inflation is not an economic problem. What is the problem with fully anticipated inflation?

B) If the CPI last year was 500 and this year was 550, then what was the inflation rate? Show all work and briefly explain what you did. If people had expected inflation of 12%, then who is hurt? Explain your logic.

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

A) Suppose an economy has 100 working age people. 57 people have jobs, 3 people do not have jobs and are looking for a job, 1 person does not have a job but has quit looking for a job, and the rest are either stay at home parents, in jail, or unable to work. Calculate the unemployment rate and the labor force participation rate. Show all work and briefly describe what you did.

B) What happens to the unemployment rate when a stay-at-home parent starts to look for a job? Explain your logic. What happens to the unemployment rate when a lifeguard at an outdoor pool in Pennsylvania gets laid off in October? Explain your logic.

5) (20 points) Answer EITHER Part A OR Part B.

A) What is the problem facing Social Security? How would reducing the Social Security benefits through *means testing* reduce the problem? Would you do it? Explain your logic.

B) What is the problem facing Social Security? How would *reforming immigration* reduce the problem? Would you do it?

6) (20 points) Answer EITHER Part A OR Part B.

A) Draw the supply and demand for gasoline which creates a negative externality. Use the diagram to prove that the socially optimal level of production is not achieved through the market. How do economists say this problem should be addressed? Show that on the graph. Explain how that solves the problem.

B) Draw the supply and demand for a good with a production quota. Prove that the quota hurts the consumer.