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) For EITHER *providing a legal system* OR *providing a public good*, explain why that is an economic reason to have a government. Make sure you define the phrase.

2) (12 points each) For TWO of the following events, tell me what happens to GDP. Tell me which part of GDP is affected and the logic you used to determine that.
A) You buy a car made in Japan.
B) You buy $5000 used car which cost the dealer $3000.
C) Your grandmother gets paid $200 in Social Security.

3) (14 points) Answer EITHER Part A OR Part B.
A) Use the table to the right to calculate the marginal tax rate, total taxes paid, and the average tax rate for a person earning $50,000. Show all work and if there is no work, the explain how you got the number.
B) Suppose the price level at the end of last year was 500 and at the end of this year the price level was 525. What is the inflation rate? If people had expected the inflation rate to be 8%. Who is hurt and who is helped by the inflation rate? Show all work and briefly explain your logic.

Income	Rate
$0 - $20,000	10%
$20,000 - $40,000	15%
$40,000 - $90,000	20%
> $90,000	30%

4) (14 points) Answer EITHER Part A OR Part B.
A) What is wrong with the argument that when inflation is higher, nobody can afford as much as they could before. That is why fully anticipated inflation hurts the economy.
B) Suppose somebody is unemployed for so long that they quit looking for a job. What happens to the unemployment rate and the labor force participation rate? Explain your logic.

5) (18 points) Answer EITHER Part A OR Part B.
A) Draw the supply and demand for a good which causes a positive externality. Prove it results in the wrong quantity produced. Why does it result in the wrong quantity? Do NOT worry about solving the problem.
B) Draw the supply and demand for a good which causes a negative externality. Prove it results in the wrong quantity produced. Why does it result in the wrong quantity? Do NOT worry about solving the problem.

6) (20 points) Answer EITHER Part A OR Part B.
A) What is the problem facing Social Security? Briefly explain why it has this problem. How would *raising the return on the lockbox* reduce the problem? Would you support doing that making sure you explain how that would be achieved? Why or why not?
B) What is the problem facing Social Security? Briefly explain why it has this problem. How would decreasing the Social Security benefits for those not yet retire the problem? Would you support doing that? Why or why not?