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 public goods. Explain why it is an economic reason for a government. Make sure you define it.

2) (12 points) All statistics have problems which make their interpretation less than ideal. For EITHER the inflation rate OR the unemployment rate, explain a problem with measuring that statistic.

3) (12 points) For EITHER the event in Part A OR the event in Part B, determine how much GDP changes. If GDP is not affected, tell me why. If GDP is affected, tell me which part and why you chose that part of GDP.
A) A) You buy $500 worth of Ford stock because you think the Volkswagen scandal will help Ford. You pay $10 in commissions.
B) I pay you $50 to mow my lawn.

4) (14 points) Answer EITHER Part A OR Part B.
Use the table to the right to calculate the marginal tax rate, total taxes paid, and average tax rate for a person earning $100,000. Show all work and if there is no work, state how you found the answer.
B) Explain the economic reasoning as to how increasing a tax can bring in less revenue. Use a mathematical example to illustrate the point you are making.

Tax Bracket	Tax Rate
$0 - $20,000	15%
$20,000 - $60,000	25%
$60,000 - $120,000	40%
> $120,000	50%

5) (16 points) Draw the supply and demand diagram for EITHER a negative externality OR a positive externality. Use the diagram to prove we do not produce the socially optimal point. Explain your logic. Do not worry about fixing the problem.

6) (16 points) Answer EITHER Part A OR Part B.
A) Suppose at the beginning of a year, the CPI was 300. People expected 10% inflation. At the end of the year, the CPI was 315. Calculate the inflation rate showing all work. Name two groups of people helped by the actual inflation. Explain why you said they are helped.
B) There are two costs to high inflation which is accurately predicted. Explain how inflation causes them.

7) (20 points) Answer EITHER Part A OR Part B.
A) What is the problem facing Social Security? What are the two long-term causes of this problem? One of the proposals for solving it is to increase the return on the Social Security fund. How would that be achieved and how would it reduce the problem? Would you use that as part of the plan to save it? Explain your logic.
B) What is the problem facing Social Security? What are the two long-term causes of this problem? One of the proposals for solving it is to increase the Social Security tax. How would that reduce the problem? Would you use that as part of the plan to save it? Explain your logic.