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 150 points (to be scaled up to 210 points) and is scheduled to take 75 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 public goods OR promoting competition, explain why that is an economic reason for government.

2) (10 points) Answer EITHER Part A OR Part B.
A) At most colleges, assistant professors of business are paid about twice what an assistant professor of English is paid. What is the economic reason for this?
B) The Dropkick Murphys' song "Kiss me I'm sh** faced" says "I make two grand an hour. I make the world's best duck flambé." Assuming what he said is correct, should he make his own duck flambé? Explain your logic using economic reasoning. (At the end of the song, he admits it is all lies.)

3) (10 points) Answer EITHER Part OR Part B.
A) What is the most common form of rationing in the USA? Explain how that works.
B) Without drawing a graph, explain why a price floor hurts the economy.

4) (12 points) Answer EITHER Part A OR Part B.
A) State the Law of Comparative Advantage. What does it imply about whether we should restrict goods imported from other countries? Explain your logic.
B) Some books define economics as the study of incentives. Give an example from the material taught in this class so far where somebody's incentive is changed. Explain your logic.

5) (14 points) Answer EITHER Part A OR Part B.
A) Draw a line through the points (3, 1) and (5, 4). What is the slope of that line? Show all work. Briefly explain how you got each answer.
B) Draw the line $Y = -\frac{1}{2}X + 5$. What are the slope, Y-intercept, and X-intercept? Briefly explain how you got each answer.

6) (16 points) Answer EITHER Part A OR Part B.
A) Draw a PPF for bread and computers. Illustrate the effects on an improvement in fertilizer. Explain why the curve moved as drawn.
B) Draw the PPF for coats and hats. Illustrate the effect of an increase in the population. Explain why the curve moved as drawn.

7) (16 points) Answer EITHER Part A OR Part B.
A) Use the table to the right to determine the marginal tax rate, total taxes paid, and average tax rate for a person earning $50,000. Show all work. If there is no work, then briefly explain what you did.
B) How can increasing the tax rate cause tax revenue to de-

Bracket	Rate
$0 - $20,000	15%
$20,000-$40,000	25%
$40,000-$90,000	35%
>$90,000	40%

crease? Use a numerical example which fits your description.

8) (20 points each) Answer TWO of the following questions.
A) Draw the supply and demand for blueberries. Illustrate the effect of people learning that blueberries are very good for preventing cancer. Explain why the curve(s) moved as drawn. What happens to the price and quantity charged?
B) Draw the supply and demand for toilet paper. Illustrate the effects of an expected increase in the price of toilet paper next year. Explain why the curve(s) moved as drawn. What happens to the price and quantity sold?
C) Draw the supply and demand for grandfather clocks. Illustrate the effects of an increase in the price of window frames. Explain why the curve(s) moved as drawn. What happens to the price and quantity sold?

9) (22 points) Answer EITHER Part A OR Part B.
A) Draw the supply and demand for bread. About five years ago, Zimbabwe had a price ceiling on bread. Illustrate the effects of that ceiling. Prove that it hurt the consumers.
B) Draw the supply and demand for gasoline. Prove that because of the pollution created by gasoline that the socially optimal level of production of gasoline is not produced. What do economists say is the best solution to the problem? Illustrate that on the graph and show that it can result in the optimal level of production.