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 220 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. **Except for Question #1, I will not grade what is written on this sheet.**

1) (12 points) For this question, you can draw directly on the graph. **However, do all calculations and explanations in the bluebook.** Answer EITHER Part A OR Part B.
A) Approximately, what is the opportunity costs of the 10th coat? Show all work in the bluebook and briefly explain how you found it.
B) Approximately, what is the opportunity costs of the 5th fan? Show all work in the bluebook and briefly explain how you found it.

2) (10 points) Answer EITHER Part A OR Part B.
A) Some textbooks describe economics as "the study of incentives." Explain how that relates to one of the curves we studied this semester.
B) *Ceteris paribus* is a Latin phrase which should be said often in this class. What does it mean and why should it be said often?

3) (10 points) Answer EITHER Part A OR Part B.
A) Use terminology and logic from economics to explain the phrase, "Time is money."
B) Use terminology and logic from economics to explain why Accounting and Engineering professors are paid more than Art and Psychology professors.

4) (14 points each) Answer EITHER Part A OR Part B.
A) Suppose a project would cost $400, benefit 200 people $3 each and hurt one person $300. Should this project be done? Explain your logic. Would voting result in the project's being done? Explain your logic. Would the market result in the project's being done? Explain your logic.
B) Explain the difference between the market and voting. Explain the advantage of each of them.

5) (18 points) Answer EITHER Part A OR Part B.
A) Draw a PPF for hats and coats. Illustrate the effects of a war. Explain why the curve moved as drawn.
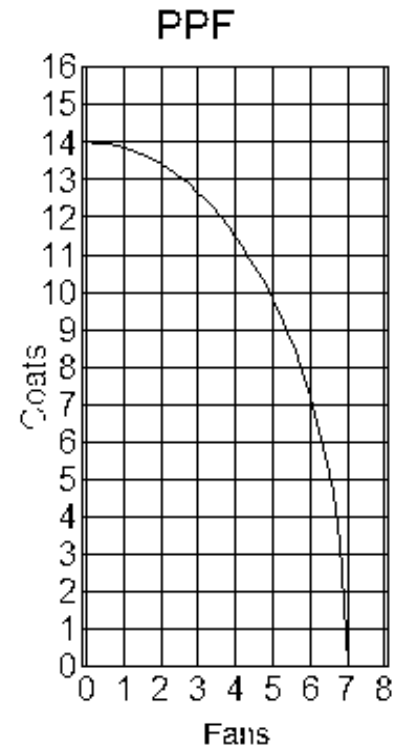B) Draw a PPF for cucumbers and smart phones. Illustrate the effects of an improved computer chip. Explain why the curve moved as drawn.

6) (20 points each) Answer TWO of the following questions.
A) Draw the supply and demand for compact disks. Illustrate the effects of the introduction of digital music online. (I.e., what happened about 2 decades ago.) Explain why the curve(s) moved as drawn. What happens to the price charged and quantity sold for compact disks?
B) Draw the supply and demand for a Bethany College education. Illustrate the effects of paying the professors more. Explain why the curves moved as drawn. What happened to the price and quantity sold?
C) Draw the supply and demand for corn on the cob in grocery stores. Illustrate the effects of an increase in

the price of ethanol. Explain why the curve(s) moved as drawn. What happens to the price and quantity sold?

7) (22 points) Answer EITHER Part A OR Part B.
A) Draw the supply and demand for a product which creates a negative externality. Prove that the equilibrium is not the socially optimal point. Find the consumer surplus, producer surplus, damage done outside the market, and dead weight loss at the equilibrium. Explain how you found each of them.
B) For BOTH *income redistribution* AND *promoting competition*, define the phrase and explain why they are economic reasons for government.

8) (24 points) Answer EITHER Part A OR Part B.
A) Draw the supply and demand for rental apartments. Draw the effects of a price ceiling (rent control). Find the new consumer surplus, producer surplus, dead weight loss, and any other area you feel is relevant. Explain how you found each of them.
B) Draw the supply and demand for textbooks. Draw the effects of a tax on textbooks. Find the new consumer surplus, producer surplus, dead weight loss, and any other area you feel is relevant. Explain how you found each of them.