Wilfrid W. Csaplar Jr., Ph.D. Economics 301 Final Exam 2014/12/12

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 2400 points (to be scaled down to 240 points) and is scheduled to take 120 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 an exam after this.

Quantity Oranges	Price of Oranges	Price of Pears	Income
10	2	5	20K
8	4	6	30K
7	5	6	30K
13	5	4	30K
11	2	5	30K

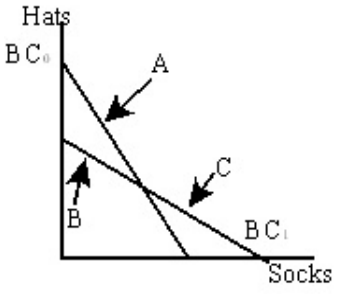
1) (12 points) For **ONE** of the following elasticities, use the table to the right to figure out which pair of rows you can use to calculate the elasticity. Tell me how you decided which rows you used. (Each elasticity has only one pair of rows which is usable.) Calculate the elasticity. Show all work. What does that number tell you? Explain your logic.
A) Cross-price elasticity of demand using arc elasticity.
B) Income elasticity of demand for bananas using point elasticity.

2) (14 points) Answer EITHER Part A OR Part B.
A) What value would you expect the own-price elasticity of demand for your textbook is? Explain your logic.
B) What is meant by *non-satiation*? How does it relate to indifference curves?

3) (14 points) Answer EITHER Part A OR Part B.
A) Explain why a perfectly competitive industry might be an *increasing cost industry*? What does that do to their long-run supply curve?
B) Why do perfectly competitive firms make zero profit in the long run? Is that zero accounting or zero economic profit? State the difference between those.

4) (14 points) Answer EITHER Part A OR Part B.
A) What is the *snob effect*? How does it affect the demand for a good? Explain your logic.
B) We said a Laspeyres Price Index overestimates the harm caused by a price increase. <u>Without drawing the graph</u>, explain the economic reason why this occurs.

5) (16 points) Answer EITHER Part A OR Part B.
A) What is the *equi-marginal principle* as it applies to buying shirts and pants. Explain why it holds.
B) Referring to the graph on the right, suppose a person facing BC_0 the person chooses Point A and when facing BC_1 they choose Point B. Rank their preferences for Points A, B, and C. Explain your logic.



6) (18 points) Do EITHER Part A OR Part B.
A) Draw the supply and demand for salt. Illustrate the effects of an increased number of people with high blood pressure. (High blood pressure is often partially caused by eating too much salt.) Explain why the curve(s) moved as drawn. What happens to price of salt and quantity sold?
B) Draw the supply and demand for windshields. Illustrate the effect of an increase in the price of windows for the house. Explain why the curve(s) moved as drawn. What happens to the price of windshields and the quantity sold?

7) (18 points) Answer EITHER Part A OR Part B.
A) Draw the supply and demand diagram for a perfectly competitive industry where the supply is flat the demand is steep. Place a specific tax on the good. Find who pays most of the tax. Explain why they pay most of the tax.
B) Draw the supply and demand diagram for a perfectly competitive industry which competes against imports. Show the effects of a small tariff on imports on consumer surplus, producer surplus, and government tax revenue. Prove that society as a whole is hurt.

8) (24 points) Answer EITHER Part A OR Part B.
A) Suppose that if you buy 200 bushels of apples, they cost $40 per bushel, but if you buy 140 bushels of apples, they cost you $50 per bushel. You can sell apples for $60 per bushel. If you do not sell the apples, they rot so you are out the money you paid. Suppose that there is a 60% chance that you can sell 200 bushels and 40% chance that you can only sell 140 bushels. What are the expected profits if you order 140 bushels and if you order 200 bushels? If you knew beforehand what the state would be, so none would rot, then what would the expected profits be? How much would you be willing to pay for the information about the state? Show all work and briefly state what you did.
B) Draw the diagram with the portfolio return on one axis and the standard deviation on the other axis. Suppose the riskless return is 2% and the risky return is 12% with a σ_M of .5. Draw the budget constraint. Draw normal shaped indifference curves for a risk averse person who puts 75% of their portfolio in the stock market. Prove that this person's portfolio should be 75% in stocks. What is their expected return and what is their standard deviation? Briefly explain how you found the budget constraint, the return and the standard deviation.

9) (30 points) Answer EITHER Part A OR Part B.
A) Draw the AFC/ATC/AVC/AFC/MC diagram. Illustrate an increase in the leather for a shoe manufacturer. Explain why the curve(s) moved as drawn. Explain why you chose variable costs or fixed costs.
B) Draw an isoquant/iso-cost diagram with two of each and the wage rate being ½ of the rental rate for capital. Set it up so you can tell if there are increasing, constant, or decreasing returns to scale in the long-run. State what you did to enable you to find the returns to scale. Which type of returns to scale is it? How can you tell? Show all work.

10) (40 points) Answer EITHER Part A OR Part B.
A) Draw a firm's ATC/AVC/MC/D diagram with the price set so the firm is making profits. Beside it, draw the industry's short-run supply and demand. Find the profits on the graph. Explain how you found them. Without drawing the movements, explain what will happen in the industry and why it will occur.
B) Draw a firm's LRATC/LRMC diagram. Add to that two SRMC and SRATC curves. Explain why the LRATC is the envelope of the SRATC curves but the LRMC is not the envelope of the SRMC curves.

11) (40 points) Answer EITHER Part A OR Part B.
A) Draw an indifference curve/budget constraint diagram for bananas and pears. Have your diagram show the price of bananas as $2/lb and the price of pears is $3/pear while your income is $30. Illustrate the effect of the price of bananas going up to $6/lb. Explain why the curve(s) moved as drawn. Draw an additional line to find the income and substitution effects. Explain how you found the two effects. Given your diagram, are bananas and pears substitutes or complements? Explain your logic.
B) Draw an indifference curve/budget constraint diagram for coats and gloves. Start with the price of a coat being $50/coat, the price of a pair of gloves being $20/pair, and your income is $200. Suppose you wanted to draw an Engle Curve, what more information would you need? Make up numbers for the missing information. Draw the new lines and explain how you got them. Also draw the Engle Curve and explain how you got it.