Wilfrid W. Csaplar Jr., Ph.D.   Economics 280   Exam #2   2008/3/12

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 100 points (to be scaled up to 180 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) (8 points each) Answer THREE of the following questions using the table on the back. I was trying to predict sales of bananas. For each question other than Part A, assume the regression results are high quality. For all parts, keep your explanations brief.
A) Are the results of the regression good and reliable? Explain your logic.
B) Which variables are significant and which are not? How can you tell?
C) Given the statistics, do you feel bananas and cherries are substitutes, complements, likely substitutes, likely complements, or too difficult to tell? Explain your logic.
D) Would you do advertising? Why or why not?
E) If the price of cherries was $2/lb, the price of bananas, $1/lb, your income, $60,000, and the firm did $100 worth of advertising, then how many bananas would you expect to be bought? Show all work.

2) (10 points) Answer EITHER Part A OR Part B.
A) What is the slope of the isoquants? Why does that make sense?
B) What is the equi-marginal principle for consumption? Explain the <u>economics</u> as to why this would make sense for utility maximization.

3) (16 points) Answer EITHER Part A OR Part B.
A) What type of product would you use a consumer survey for? Why would you use a survey for that type of good?
B) What type of product would you use a consumer clinic for? Why would you use a survey for that type of good?

4) (20 points) Answer EITHER Part A OR Part B.
A) Draw the MP_L/AP_L Diagram. Illustrate an improvement in the technology. Explain why the curve(s) moved as drawn.
B) Draw the MRP_L/MRC_L diagram. Illustrate an increase in the amount of capital. Explain why the curve(s) moved as drawn.

5) (30 points) Answer EITHER Part A OR Part B.
A) Draw an indifference curve/budget constraint diagram for bananas and tea. Let the initial income be $30, the price of bananas is $5/lb, and the price of blueberries is $3/lb. Draw an increase in the price of blueberries to $4/lb. Show the income and substitution effects. Explain why the curve(s) moved as drawn, how you found the income and substitution effects. Given your drawing, are they substitutes or complements? How you can tell.
B) Draw an indifference curve/budget constraint diagram for shampoo and conditioner. Have the initial price of shampoo is three times the price of conditioner. Assume they are complements. Illustrate what happens when the price of conditioner decreases. Explain why the curve(s) moved as drawn, how you found the income and substitution effects, and how you can tell your graph shows complementary goods.

Regression Statistics

Multiple R	0.316234
R Square	0.100004
Adjusted R Square	0.074105
Standard Error	28.42507
Observations	144

Analysis of Variance

	df	Sum of Squares	Mean Square	F	Significance F
Regression	4	12479.4	3119.8476	3.8613	0.0052
Residual	139	112309.8	807.9844		
Total	143	124789.2			

	Coefficients	Standard Error	t Statistic	P-value	Lower 95.00	Upper 95.00
Intercept	-44.0308	30.7780	-1.4306	0.1547	-104.8844	16.8227
Pbananas	-2.1011	0.9233	-2.2756	0.0244	-3.9267	-0.2755
Pcherry	-0.4129	2.7325	-0.1511	0.8801	-5.8156	4.9898
Income	0.1149	0.1435	0.8005	0.4248	-0.1689	0.3986
Adverts	0.8659	0.3007	2.8791	0.0046	0.2712	1.4605