Wilfrid W. Csaplar Jr., Ph.D.   Economics 280   Final Exam   2009/12/10

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 240 points (to be scaled down to 200 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 a class after your class.

1) (12 points) Answer EITHER Part A OR Part B.
A) Suppose at a price of $15/CD, you download 100 songs, but at a price of $12/CD you download 110 songs. Calculate the cross-price elasticity using the point formula. Show all work. What does that number tell you about CDs vs downloads? Explain your logic.
B) Suppose that when your income is $20,000/year you buy three pairs of shoes, but you buy 7 pairs if your income is $30,000/yr. Calculate the income elasticity using the arc formula. Show all work. What does that number tell you about shoes? Explain your logic.

2) (12 points) Answer EITHER Part A OR Part B.
A) What would you expect the own-price elasticity of demand would be for electricity would be? Explain why you chose that number.
B) What would you expect the income elasticity of a briefcase would be? Explain why you chose that number.

3) (12 points each) Answer TWO of the following questions. The regression results on the last page were from running a regression to **predict trailer sales**.
A) Would you consider these results to be overall good results? Briefly explain your logic.
B) Which variables, if any, are significant? Explain your logic.
C) How many trailers would you expect to sell if the price was $30/horse, the price of a trailer was $100/trailer, and income was $1000? Show all work and briefly state what you did. (Don't you wish horses were that cheap?)

4) (14 points) Draw EITHER the TP_L diagram OR the MRP_L graph. Explain why it takes its shape.

5) (16 points) Answer EITHER Part A OR Part B.
A) What is meant by *benchmarking*? Explain why a company might want to do it.
B) What is a *learning organization*? Explain why a company mighty want to be one.

6) (18 points) Answer EITHER Part A OR Part B.
A) Draw a supply and demand diagram for corn. Draw the effects of an increase in the price of oil. Explain why the curve(s) moved as drawn. What happens to the price and quantity?
B) Draw a supply and demand diagram for corn. Draw the effects of an increase in the price of wheat. Explain why the curve(s) moved as drawn. What happens to the price and quantity?

7) (20 points) Answer EITHER Part A OR Part B.
A) Copy the table into your test booklet. Fill it in showing all calculations. If there is no calculation, then explain how you got the number.
B) Suppose the total cost function is given by $TC = 10 + 3Q + 2Q^2$. Calculate MC, ATC, TVC, TFC, ATC, and AFC. Show all work and if there is no work, then explain what you did.

Q	TR	AR	MR
0			
2	10		
4		4	
	18		2

8) (20 points) Use the payoff matrix on the table on the last page to find the following, if they exist: each players' dominant strategy, each players' secure strategy, the Nash equilibrium, and the cooperative equilibrium. Briefly explain how you got each one and show all work. You may write on the matrix itself.

9) (24 points) Answer EITHER Part A OR Part B.
A) Make a payoff matrix which is similar to the prisoners' dilemma, but shows why cartels tend to fall apart. Explain how it proves they tend to fall apart.
B) Draw the MC/D diagram for a cartel and the MC/D diagram for a firm in the cartel. Use it to find out how much the cartel wants each firm to produce at, the price they charge, and to explain why cartels fall apart. Explain how you found each part of this answer.

10) (24 points) Answer EITHER Part A OR Part B.
A) Draw the ATC/AVC/AFC/MC diagram. Britain just imposed a tax on the bonuses of the top executives of banks. Draw the affect of that tax on the diagram. Explain why the curve(s) moved as drawn.
B) Draw the straight-line version of TR/TC. Have the price of the good be $4/unit, the fixed cost be $300, and the AVC = MC = $1/unit. Find the break-even point. If the firm is making 120 units, what is their degree of operating leverage (DOL)? Show all work and briefly explain what you did.

11) (28 points) Answer EITHER Part A OR Part B.
A) Draw the indifference curve/budget constraint diagram for paintings and sculpture. Suppose that paintings cost $10,000/painting and sculptures cost $5,000 per sculpture. Draw the diagram assuming your income was $40,000. Draw a new diagram for if the price of paintings drop to $8,000/painting. Explain how you got the two budget constraints. Use your diagram to find two points on the demand curve for paintings. Explain how you found the two points.
B) Draw the iso-cost/isoquant diagram which has the wage rate half of the rental rate of capital. Draw two iso-cost lines. Explain how you got those lines. Given your graph, are their increasing, constant, or decreasing returns to scale? When you answer that, are you assuming long-run or short-run? Explain your logic for all parts.

12) (28 points) Answer ONE of the following parts.
A) Draw the AVC/ATC/MC/D diagram for a monopoly which is making positive profits. Find the quantity produced, the price charged, and the profits. Explain how you found each item asked for.
B) Draw the AVC/ATC/MC/D/MR diagram for a monopolistically competitive firm in the long-run equilibrium. Find the quantity produced and the price charged. Explain how you found them and how you know that it is in the long-run equilibrium.
C) Draw the kinked demand curve. Explain why it takes its shape. Use your graph to prove that such a firm is unlikely to change their price even if their costs change.

Happy Holidays. Have a good break.

		Mustard Plug	
		High Price	Low Price
Less Than Jake	High Price	900 1250	920 980
	Medium Price	740 1280	750 600

Regression Statistics

Multiple R	0.4168
R Square	0.1737
Adjusted R Square	0.1085
Standard Error	11.35
Observations	42

Analysis of Variance

	df	Sum of Squares	Mean Square	F	Significance F
Regression	3	1029.8	343.2	2.6640	0.0616
Residual	38	4896.8	128.8		
Total	41	5926.6			

	Coefficients	Standard Error	t Statistic	P-value	Lower 95.00	Upper 95.00
Intercept	215.07	62.6592	3.4324	0.0013	88.2284	341.9224
Ptrailers	-0.34	1.1407	-0.3038	0.7627	-2.6560	1.9627
Phorses	2.00	1.1096	1.8019	0.0789	-0.2468	4.2457
Income	-0.11	0.0465	-2.4961	0.0166	-0.2103	-0.0219