Econ 3324   Spring 2004

Managerial Economics   R. Claycombe

First Exam

Write all answers in your blue book and show all work there. Return your exam and printout(s) in your blue book.

20 pts.

1) There are a total of 100000 shares or XYZ corp stock issued and they currently sell for 10 dollars per share. XYZ currently has an annual profit of 90000 which is received evenly through the year. It has plant and equipment worth 1.2 million now, but that is expected to depreciate to only .2 million 10 years from now.

a) If you intend to hold the stock for ten years, what is the present value of the profit stream (r = .05) if it continues at its present level over that time.

b) If you intend to hold the stock for ten years, what is the present value of the assets, if they are sold at that time.

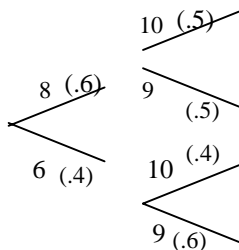c) Based on parts a and b, does the XYZ corp seem like a good buy at 10 dollars per share?

20 pts.

2) Find the present value of 100 dollars received 15 months from now if

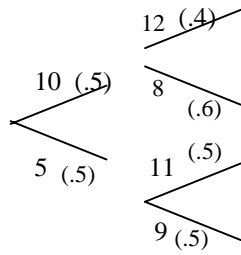a) we have annual compounding.

b) we have quarterly compounding.

20 pts.

3) You have two strategies from which to choose.

S1 has possibilities and probabilities in ( ) as follows.

S2 has


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                    12  (.4)
        10 (.5)    8
                       (.6)
                       (.5)
        5  (.5)   11
                    9  (.5)
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Evaluate and compare the strategies with all the decision criteria that we have studied.

20 pts

4) In June 40000units were sold at a price of 10 dollars. In July price was cut to 9 dollars and 60000 units were sold. Average variable cost is thought to be constant at 5 dollars.

a) Use the information to calculate an arc elasticity.

b) Use the information to find a demand curve.

c) Use the information to find the profit maximizing price.

d) What major concern do you have about using the data as you have in the parts above?

20 pts

5) Consider the demand equation given below; t statistics are given in ( ) .

$$Q_d = 10000 - 200P + 10A + 300Y \qquad R^2$$
$$(4.5) \quad (3.3) \quad (2.7)$$

a) If $A = 1000$ and $Y = 35$, find the elasticity of demand.

b) If $A = 1000$ and $Y = 35$, find the price that maximizes revenue.

c) Which of the independent variables seem to have statistically significant effects on Q_d?

d) How well does the equation explain the variation of demand? Suggest why its not better.

I have neither given nor received unfair aid on this test nor am I aware of anyone else who has.

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