Econ 3303 Intermediate Microeconomics

## Second Exam

Write all answers in your blue book and show all work there. Return your exam in your blue book.

22 pts.

1) True or false? For most goods, the uncompensated demand curve is more elastic than the compensated one. (Explain with a well-labeled diagram that shows substitution and income effects.)

## 22 pts.

- 2) Suppose that U = XY.
- a) If Income is 20 and  $P_X$  is 1 and  $P_Y$  is 2, what is the utility maximizing combination of X and Y?
- b) Are X and Y normal goods? Explain.

12 pts.

3) a) Suppose that Otan has been bombing Aibres for a week at great cost, but without achieving its goal. The ASU president argues that even if the goal is achieved soon, the benefit will not justify the total cost. Therefore, the bombing should stop. Is this view logical? Explain.

b) The Chnerf premiere argues that with Aibres air defenses now destroyed, that bombing should be increased. Is this view logical? Employ chapter 5 principals to make your case.

22 pts.

4) Suppose that technology is such that there are only two plant sizes that your firm can use. The cost functions are given below as  $TC_s$  and  $TC_L$ .

 $TC_{S} = 64 + Q^{2}$ 

 $TC_L = 96.4 + .1Q^2$ 

a) Draw a well-labeled diagram showing the two SRTC curves together, taking care to solve for the Q where the large plant becomes less costly.

b) Show the LRTC curve in your diagram.

c) Draw a well-labeled diagram showing the SRAC curves together, taking care to solve for the quantity where SRAC is minimized in each case. Show the LRAC curve in your diagram.

d) Draw all the marginal cost curves into your part c diagram.

22 pts.

5) Draw a well-labeled set of diagrams that shows the effect of an increase in fixed cost on price in a competitive market. Be sure to say what happens to price in the short run and the long run. Also, indicate if your model, represents an increasing, decreasing or constant cost industry.

I have neither given nor received unfair aid on this test.