

Second Exam

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

18 pts.

- 1) a) Draw a well-labeled indifference curve diagram that shows a decrease of the price of X when X is an inferior good.
- b) Is your good also a Giffen good? Explain.
- c) Show the substitution and income effects in your diagram.
- d) Draw another diagram below your first one that shows the compensated and uncompensated demand curves.

10 pts.

- 2) Your firm spent \$100000 on Asset A that is required to produce Good B. You thought that you could sell 10000 units of B per year at price of \$10 and that A would last 5 years. Variable cost each of those years was expected to be \$80000.
- a) If these are all the costs and revenues, does the investment appear to be profitable? Why?
- b) Now let's say that business turns down and that only 8500 units can be sold at the \$10 price. How does profit appear now? Should you exit the market or not? Explain.

16 pts.

- 3) If $Q = 100L^{1/2}K^{1/2}$
- a) Describe the returns to scale.
- b) What is the MP_L if $L = 16$ and $K = 64$?
- c) Draw the AP and MP curves.
- d) What is the SRMC if $L = 16$ and $K = 64$ and $P_L = 2$

12 pts

- 4) a) Draw a well labeled diagram of LRAC and LRMC with one SRAC and its SRMC.

14 pts

- 5) Use a well-labeled two frame diagram to show the effects of an increase in market demand on P and Q in the short run and long run in a perfectly competitive increasing cost industry.

15 pts.

- 6) In well-labeled diagram show the effect of subsidy on P_{Buyer} , P_{seller} , Q, Gain from trade, Consumer surplus and Producer surplus.

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15 pts.

7) If $Q = 100L^{1/3}K^{2/3}$ and $P_L = 2$ and $P_K = 3$,

Find the least cost way to produce $Q = 10000$

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