Econ 3303   Fall 2007
Intermediate Microeconomics   R. Claycombe

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 in the price
of good X and the old and new optimums. Draw it so that Y is an inferior good.
b) Under this circumstance, is good X normal or inferior? Explain.
c) Be sure to identify the income and substitution effects in your diagram.

10 pts.
2) Firm X has book value of $10 million for plant and equipment. These assets are
highly specialized and not useful for other types of production. Demand is down in X's
market, such that over the remaining life of the assets, TR is $20 million and VC is $18
million. Firm Y has offered to buy all of Firm X's assets for $3 million. Should X sell or
stay in business? Explain.

18 pts.
3) If $Q = 10L^{.5}K^{.25}$ and $P_L = 1$ and $P_K = 2$, find the maximum Q possible for a cost of
$100.

18 pts.
4) a) Give an example of a Cobb Douglas production that has decreasing returns to
scale.
b) Draw a well-labeled diagram of a LRAC curve that the production function in part a
would have.

18 pts.
5 a) Draw a well-labeled 2-frame diagram of an constant cost competitive industry
where fixed cost has increased.
b) Does the price rise in the short run? In the long run? Explain.
c) Does the profit fall in the short run? In the long run? Explain.
d) What might cause FC to rise?

24 pts.
6. a) If price ceiling has been imposed that makes a difference, which price is it?
b) If the price is P_c, what does excess supply equal?
c) If the price is P_c, which area(s) represent(s) consumer surplus?
d) If the price is P_c, which area(s) represent(s) producer surplus?   What have you assumed?
e) If the price is P_c, which area(s) represent(s) the gain from trade?   What have you assumed?
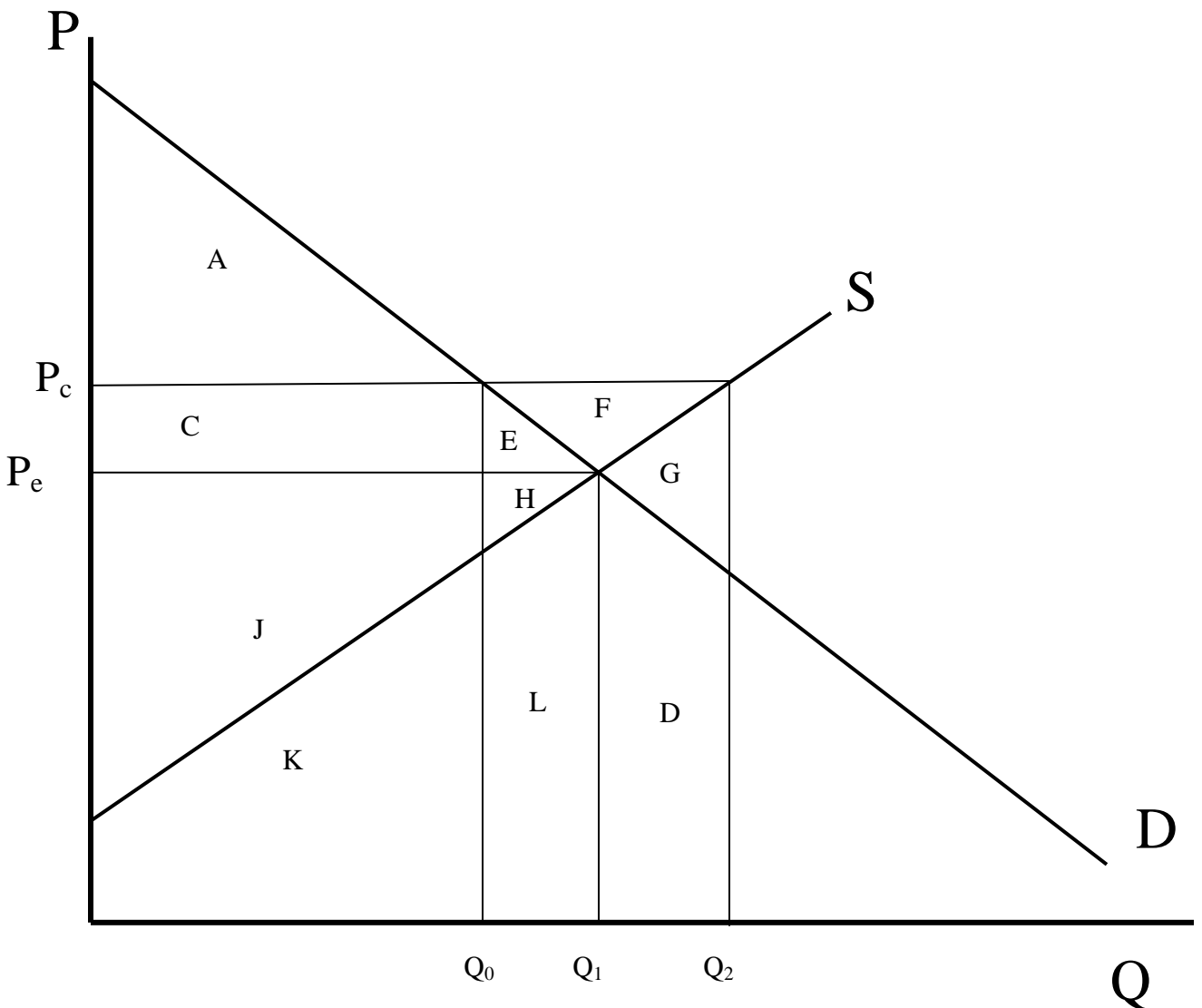
I have neither given nor received unfair aid on this test nor am I aware of anyone else who has.

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