EC101 DD/EE Problem Set 5 For discussion on week of October 19, 2021

Government Intervention, Price Controls and Rationing*

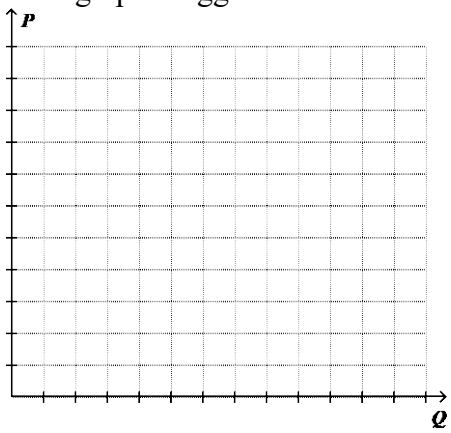
Multiple Choice (MC) questions usually have only one correct answer, although you may be able to defend different answers. Other kinds of questions often have more than one correct answer. Having good reasons for your answers is more important than what your answer is. If you don't understand the meaning of a question, you may write to *your own TF*, but do not expect him/her to give you answers. The problem set will not be graded, but the way you discuss the problems in your discussion section will affect your discussion-section participation score. You are allowed to work on the problem sets with other students.

*Because EC101 DD/EE Lectures scheduled for Tuesday, Oct 12, were canceled, PS5 covers only the lecture of Thursday, Oct 14.

1. *[MC]* A price ceiling imposed on a perfectly competitive market will change equilibrium price and quantity when
   a. it's above the equilibrium price.
   b. it's below the equilibrium price.
   c. when demand is inelastic.
   d. when demand is elastic.

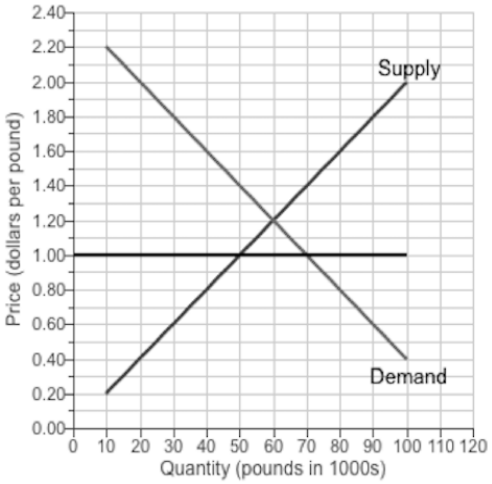
2. The market for beer in the free city of Karalis is perfectly competitive. Worried about alcoholism among young people, the government studies ways of decreasing beer consumption.
   i. Name two different economic policies the government could implement to achieve their goal.
   ii. Which of those two policies would you prefer and why? Explain fully.

3. Draw the graphs suggested below to show the effects of rent control.



   i. Draw a demand curve for apartments and a perfectly inelastic supply of apartments. Label the areas corresponding to renters' surplus (consumer surplus) "CS" and the landlord surplus (producer surplus) "PS".
   ii. The government imposes binding rent control setting rents below the market equilibrium. Draw this on the graph. Label the area corresponding to the additional surplus for renters as "CS+".
   iii. What happens to landlord surplus? Does it increase/decrease? Draw the area that shows the increase/decrease in landlord surplus.
   iv. Why does rent control tend to reduce apartment maintenance?
   v. Suppose a fire burns down several apartments because of poor maintenance and the government decides to eliminate the rent control. In a new graph, draw the supply shift and label the new renter surplus "CS2". What happens to consumer surplus?

4. Suppose the figure on the right represents a local market for meat. What would be the effect of a government price ceiling of $1.00 per pound?
   i. Would it create a shortage? a surplus? How large?
   ii. Would there be nonprice rationing?
   iii. What would the deadweight loss from the price ceiling be? Explain.



5. *[MC]* Which of the following is ***NOT*** an effect of a binding minimum wage (price floor in the labor market)?
   a. People with the lowest opportunity cost of working will get jobs.
   b. Some people won't be able to find jobs.
   c. Employers may discriminate against female job candidates.
   d. Some economic surplus will be lost.
   e. Some of the workers who remain employed will be better off.

6. *[MC]* Which of the following statements are true about rent controls?
   a. Producer surplus increases.
   b. People who value an apartment more are guaranteed to get it.
   c. Consumer surplus will increase for some consumers.
   d. Landlords rent more apartments.

7. When goods are distributed by nonprice rationing, people with lower WTP (less need) may be more successful at obtaining goods than those with higher WTP (greater need). This reduces consumer surplus and economic efficiency. *True or false? Explain carefully.*

8. The graph on the right shows the market for opera tickets. Suppose the National Opera Association says that opera tickets are too cheap, so they force opera theaters to increase ticket prices to P2.
   i. How many opera tickets will be sold at the price P2?
   ii. How many more empty seats will there be at the opera theaters?
   iii. What is the consumer surplus before and after the price change?
   iv. What is the producer surplus before and after the price change?
   v. What was the change in economic surplus?