

ECO 201A
Problem Set 2

1. Consider the following market demand and supply functions, respectively:

$P = 100 - X$ and $P = 4X$ where P is the price of the good and X is the amount demanded and supplied.

- (a) Is the market demand price elastic at the equilibrium point? What is the price elasticity of supply? Suppose government decides to control the price of the product at Rs 60 because it feels that the free market price is too high. Discuss.
- (b) Is the market stable?
- (c) How much is the market consumer surplus? How much is the market producer surplus?

2. Consider the following information to estimate the linear demand function.

Equilibrium price and quantity are respectively, $P = \text{Rs } 400$, $Q = 1000$ tons. And price elasticity of demand is -0.5 .

3. Consider the following price – demand combinations between two goods X and Y :

$P(X) :$	2	4	in rupees
$D(Y) :$	10	20	in kilogram

- (a) What is the cross price elasticity of demand?
 - (b) Are the goods complementary or substitute?
4. During harvest seasons there is a tendency for agricultural prices to fall. Government often attempts to arrest such price declines by procuring the product at a price higher than the market price, and then releasing the product through its fair price shops at a lower than equilibrium price for the benefit of the poor consumers. Discuss its consequences for market imbalance and government finance.
5. Despite rising demand for electronic goods, their prices are falling over time. Explain.
6. Consider the world oil market which has two groups of producers. One is the OPEC countries who produce a fixed amount per year and the other group consists of competitive producers. In the short run, both the demand and supply curves are very inelastic. However, in the long run the two functions become more elastic. Discuss the consequences for the world oil market in the short run and in the long run when OPEC suddenly cuts back on its output.
7. Discuss the market consequences of ‘rent control’ and ‘minimum wage laws’.