

ASSIGNMENT
BA (H) ECONOMICS SEM I
INTRODUCTORY MICROECONOMICS

DATE: 13 November 2023

Instructions:

- All questions are to be solved.
- Writing must be legible.
- Only a hard copy of the assignment is accepted.
- Last date of submission: 25th November 2023
- There will be penalty for late submission.

Question 01: If the minimum wage is above the equilibrium wage in the competitive labour market, what effect will this have on employment? Show using a diagram. (5)

Question 02: Explain why we expect housing shortage to be more in the long run than in the short run if government imposes a binding rent control. (4)

Question 03: Consider the market for rubber bands.

- a) If this market has very elastic supply and very inelastic demand, how would the burden of a tax on rubber bands be shared between consumers and producers? Use the tools of consumer surplus and producer surplus in your answer.
- b) If this market has very inelastic supply and very elastic demand, how would the burden of a tax on rubber bands be shared between consumers and producers? Contrast your answer with your answer to part (a).

Question 04: What is the difference between a positive statement and a normative statement? Explain using examples.

Question 05: Why is the production possibility curve bowed outward? Illustrate using diagram. If a new invention increases the productivity of one good while the productivity of another good remains unchanged. Explain the changes in the PPC.

Question 06: Calculate cross price elasticity between wheat and rice using midpoint method from the following information:

Time period	1	2
Price of wheat (in Rs. Per Kg.)	20	24
Quantity of rice (in Kg.)	200	240

Question 07: What is the Deadweight loss of taxation? How does the deadweight loss change with the change in size of the tax? Give reasons.

Question 08: The market for vanilla ice cream is given by the following information:

$$Q^d = 800 - 30 P^v + 10 P^c$$

$$Q^s = 250 + 30 P^v - 10 P^m$$

where Q^d is the quantity demanded, Q^s is quantity supplied, P^v is the price of vanilla ice cream, P^c is the price of chocolate ice-cream and P^m is the price of milk.

- (i) Let $P^c = 10$ and $P^m = 5$. Calculate the equilibrium price and quantity in the vanilla ice-cream market. Compare the own-price elasticity of demand and supply at equilibrium.
- (ii) Calculate cross-price elasticity of demand for vanilla ice-cream. What does the sign of the elasticity tell you about the relationship between vanilla and chocolate ice-cream?
- (iii) Suppose the price of milk rises to 6 per unit due to taxation in the milk market. Show the impact of this on equilibrium price and consumer welfare in the vanilla market.

Question 09: Consider a market for cloth masks. The demand curve is given by $Q^d = 100/P$ and the supply curve is given by $Q^s = 10P$. Show that if a unit tax 't' per unit is imposed in the market, the sellers and buyers will share the burden of the tax equally.

Question 10: Both public goods and common resources involve externalities.

- a. Are the externalities associated with public goods generally positive or negative? Use examples in your answer. Is the free-market quantity of public goods generally greater or less than the efficient quantity?
- b. Are the externalities associated with common resources generally positive or negative? Use examples in your answer. Is the free-market use of common resources generally greater or less than the efficient use?

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