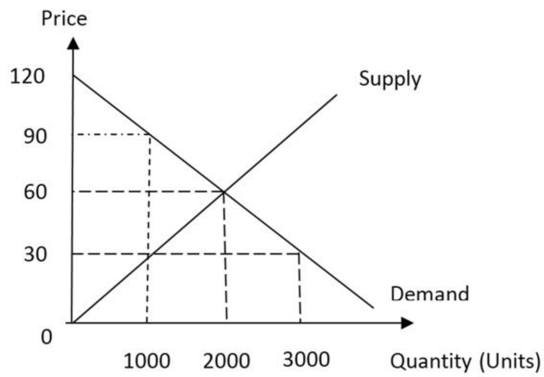
1. Assume that the market demand curve for sugar is Qd = 100 – 2p and the market supply curve of sugar is Qs = - 75 + 3p. Government impose 5/- unit tax.
2. Assume that the market demand curve for sugar is Qd = 260 – 4p and the market supply curve of sugar is Qs = - 40 + 2p. Government impose 6/- unit tax.
3. Assume that the market demand curve for sugar is Qd = 400 –p and the market supply curve of sugar is Qs = 4p. Government impose 10/- unit tax.
4. Assume that the market demand curve for sugar is Qd = 500 – 2p and the market supply curve of sugar is Qs = - 150 + 3p. Government grant 5/- unit tax.
5. Assume that the market demand curve for sugar is Qd = 100 – 2p and the market supply curve of sugar is Qs = - 20 + p. Government grant 9/- unit tax.
6. Assume that the market demand curve for sugar is Qd = 90 – 3p and the market supply curve of sugar is Qs = - 30 + 3p. Government grant 12/- unit tax.

Past Paper Questions

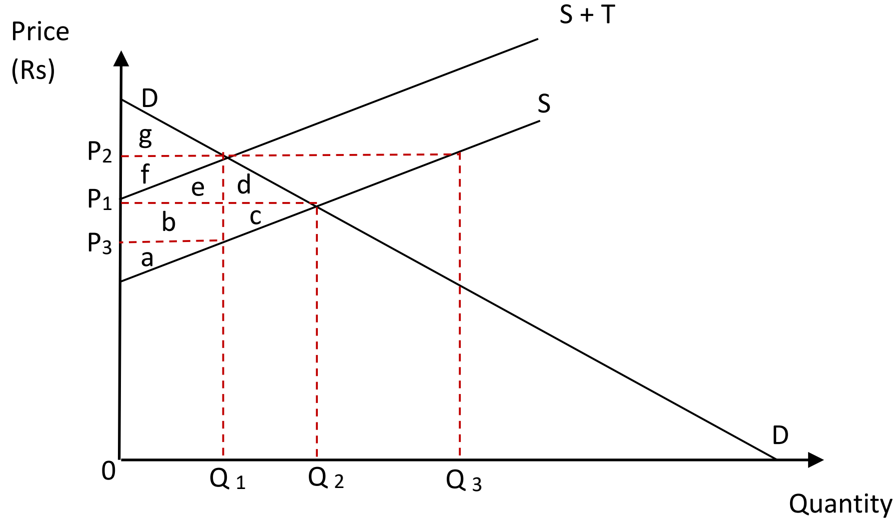
1. The diagram below shows demand and supply curves for a good sold in a competitive market. Assume that the government has now imposed an excise tax of Rs. 60 per unit on producers in this market. (A/L 2016)



   a) By how much will consumer surplus change as a result of the tax? (02 marks)
   b) By how much will producer surplus change as a result of the tax? 02 marks)
   c) How much revenue will the government collect from the excise tax? (02 marks)
   d) Calculate the dead-weight loss created by the tax. (02 marks)

2. Who pays most of the burden of a specific (unit) tax on producers when supply is inelastic? Explain your answer using an appropriate diagram. (4 marks) (A/L 2015)

3. In this diagram, DD represents demand curve, S and S + T represent respectively supply curve before and after specific production tax imposed by the government. (A/L 2011)



a) At the equilibrium price before the tax is imposed, what area represents consumer surplus? What area represents producer surplus? (02 marks)
b) After the tax is imposed on the producers, what area represents the consumer surplus? What area represents producer surplus? (02 marks)
c) What area represents the dead-weight loss of the tax? (02 marks)
d) What area represents the revenue raised by the government? (02 marks)

4. The following equations describe the market demand and supply functions of a commodity. (A/L 2015)

   $Q_d = 100 - 4P$ (Demand) $Q_S = -30 + 6P$ (Supply)

   a) Calculate the equilibrium price and quantity using the equations and show this equilibrium accurately on a graph. (2 marks)
   b) Calculate producer surplus and consumer surplus at market equilibrium and show them on a graph. (2 marks)

5. For an equilibrium in a free market, the minimum quantity supplied should be less than the maximum quantity demanded. Explain this statement using a diagram. (5 marks) (A/L 2014)

6. The demand and supply equations for a particulate good are given bellow; (A/L 2014)

   Qd = 150 – 5P (Demand equation)

   Qs = 78 + 10P (Supply equation)

   Calculate the following using the above information;

   i) Market equilibrium price and quantity. (2 marks)
   ii) Value of consumer surplus at the market equilibrium. (3 marks)
   iii) The values of price elasticity coefficient of demand and supply at the equilibrium. (4 marks)
   iv) If the government imposes a unit tax of Rs. 1.50 on this good.
      a) New equilibrium price and quantity after the tax. (2 marks)

b) Tax revenue of the government. (3 marks)
c) The influence of tax on consumer surplus. (3 marks)
d) The value of dead weight loss to the society due to the tax (3 marks)

7. Some of the data relevant for market demand and supply schedules are given below. (A/L 2013)

Price (Rs.)	Quantity Demanded (Q_d)	Quantity Supplied (Q_s)
4	84	12
8	68	44

a) Assuming that both demand and supply curves are linear, derive the equations for market demand and supply curves. (04 marks)
b) Compute the equilibrium price and quantity using demand and supply equations. (04 marks)
c) Assuming that the government imposes a specific tax of Rs. 3 per unit and compute the price received by the producers after the tax and the tax revenue of the government. (04 marks)

8. Assume that the market demand curve for sugar is $Q_d = 260 - 3P$ and the market supply curve of sugar is $Q_s = -140 + 2P$ (A/L 2010)

a) Suppose the government imposes an excise tax of Rs. 5 per unit of sugar. What is the price the consumers pay for a unit of sugar after the tax is implemented? (02 marks)
b) What is the change in consumer surplus as a result of the tax? (04 marks)

9. The following table shows market demand and supply schedules of commodity X. (A/L 2006)

Price per Unit (Rs.)	Quantity Demanded	Quantity Supplied
4	16	4
6	12	6
8	8	8
10	4	10
12	0	12

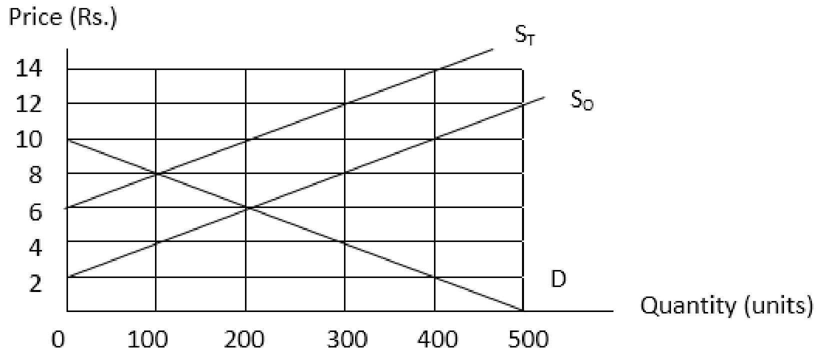
i) Draw the market demand and supply curves from the data given in the above table and estimate the equilibrium price in the market? (3 marks)
ii) Assume that the government now imposes a value added tax of 50%. Show the effect of this on the diagram. (2 marks)
iii) What is the new equilibrium price and quantity? (2 marks)
iv) What is the tax per unit? (2 marks)

v) What is the incidence of tax per unit on (i) the consumers and (ii) the producers? (2 marks)

vi) What is the total government revenue from the tax? (2 marks)

By how much will the before tax revenue of producers change? (2 marks)

10. (A/L 2004)



Answer the following questions using the graph below that shows the effect of a unit tax on producers.

i) What is the equilibrium price and quantity before the tax and after the tax?(2 marks)

ii) What is the amount of total tax brome by the consumers? (2 marks)

iii) What is the total tax revenue collected after the tax is implemented? (3 marks)

iv) What is the producer surplus when the market is in equilibrium before the tax?(4 marks)

v) What is the consumer surplus when the after the tax? (4 marks)