IB Economics – Government Intervention

1.10 Subsidies

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1.10 SUBSIDIES: STUDENT LEARNING ACTIVITY

Answer the questions that follow.

1. DEFINITIONS

Define the following terms: **[10 marks]**

- Producer
- Subsidy
- Costs of production
- Unit of output
- Free market
- Government intervention
- Producer surplus
- Consumer surplus
- Demand curve
- Supply curve
- Market price
- Welfare loss
- Opportunity cost
- Quantity demanded
- Quantity supplied
- Law of demand
- Law of supplied
- Subsidy
- Consumer welfare
- Total revenue
- Government expenditure
- Consumer expenditure
- Deadweight loss
- Social surplus
- Competitive free market

2. SHORT-ANSWER QUESTIONS

1. Explain what subsidies are. **[2 marks]**
2. Explain the relationship between subsidies and the laws of demand and supply. **[4 marks]**
3. Outline reasons why governments may grant a subsidy on goods and services. **[6 marks]**

1.10 Subsidies

4. Draw a diagram to show the effect of a subsidy on the market for a good or service. **[2 marks]**

5. Explain the concept of "social welfare" **and** explain how a subsidy will lead to a loss of social welfare. **[2 marks]**

6. Explain the consequences of a subsidy for: **[12 marks]**
   i. Consumers.
   ii. Producers.
   iii. The government.
   iv. Workers.
   v. Society as a whole.
   vi. Foreign producers.

7. Explain why the decrease in price paid by consumers is less than that of any subsidy granted. **[4 marks]**

8. The conservative government of a country is considering a $12 per kilogram subsidy of rice. **[6 marks]**
   i. Illustrate the market for rice before and after the subsidy.
   ii. Analyse the effects of the subsidy on the market for rice.
   iii. Examine the consequences of the subsidy for key stakeholders.

9. The liberal government of a country is considering a $5000 per electric car subsidy. **[10 marks]**
   i. Outline reasons why the government may be considering granting this subsidy.
   ii. Illustrate the market for electric cars before and after the subsidy.
   iii. Analyse the effects of the subsid yon the market for electric cars.
   iv. Examine the consequences of the subsidy for key stakeholders.
   v. Suggest some possible unintended consequences that the liberal government should consider.

10. The moderate government of a country is considering a $25.00 per doctor's visit subsidy. **[12 marks]**
    i. Illustrate the free market equilibrium price and quantity.
    ii. Illustrate the producer and consumer surpluses that arise in the free market.
    iii. Using a new diagram, Illustrate the equilibrium market price and quantity after the subsidy is granted.
    iv. Illustrate the producer and consumer surpluses with the subsidy.
    v. Illustrate the government expenditure on the excise tax.
    vi. Illustrate the loss of social welfare that arises in the market from the subsidy.
    vii. Outline **one** advantage **and one** disadvantage to the government that should arise from this subsidy.

11. Good A has the following functions for demand and supply: **Qd = 60 – 2P** and **Qs = -4 + 2P**. The government will soon grant a $6.00 per unit subsidy. **[20 marks]**
    i. Plot the demand and supply curves that currently exists in the free market for good A.
    ii. Derive the equilibrium price and quantity for good A in the free market.

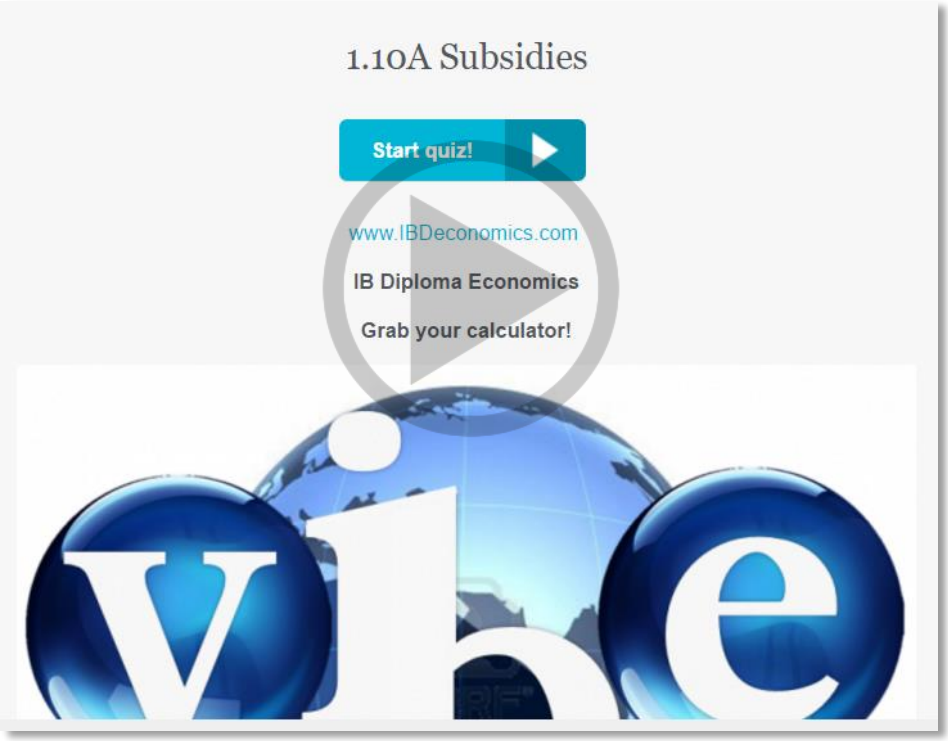
iii. Plot the new supply curve that will exist in the market after the subsidy is granted.
iv. Derive the equilibrium price and quantity for good A in the market after the subsidy is granted.
v. Identify the price paid by consumers and the price received by producers.
vi. Calculate the government expenditure on the subsidy.
vii. Calculate the gain in consumer surplus that arises from the subsidy.
viii. Calculate the gain in producer surplus that arises from the subsidy.
ix. Calculate the loss of social welfare that arises from the subsidy.
x. Identify on your diagram the consumer surplus, the producer surplus, government expenditure and the loss of welfare that arises from the subsidy.

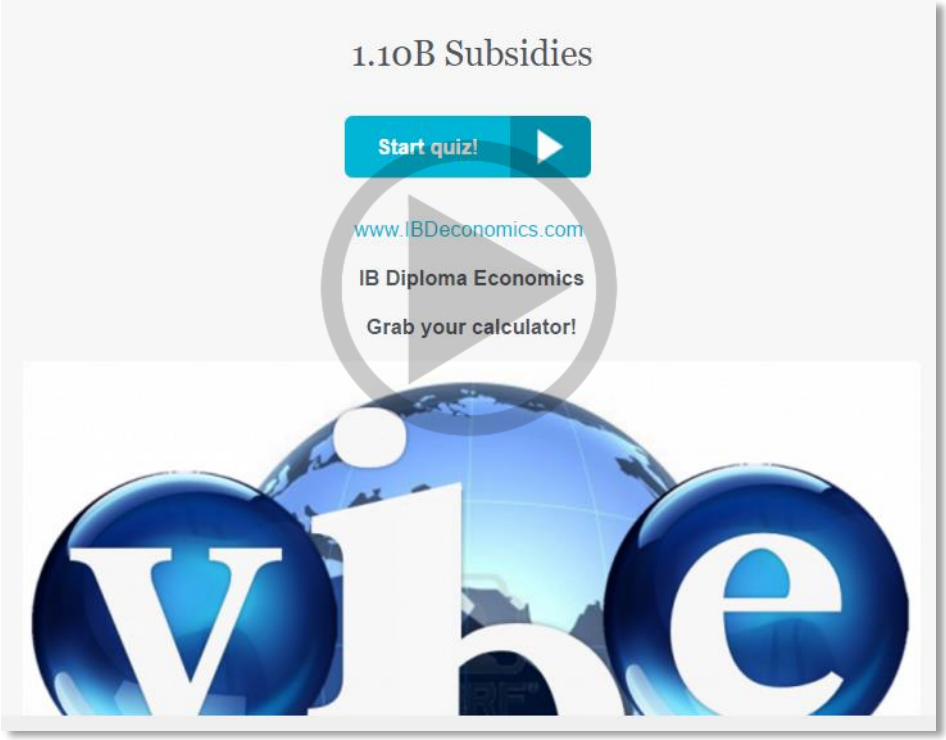
12. Good B has the following functions for demand and supply: **Qd = 1600 – 200P** and **Qs = 600 + 300P**. The government will soon impose a $50.00 per unit subsidy. **[20 marks]**

i. Plot the demand and supply curves that currently exists in the free market for good B.
ii. Derive the equilibrium price and quantity for good B in the free market.
iii. Plot the new supply curve that will exist in the market after the subsidy is granted.
iv. Derive the equilibrium price and quantity for good B in the market after the subsidy is granted.
v. Identify the price paid by consumers and the price received by producers.
vi. Calculate the government expenditure on the subsidy.
vii. Calculate the gain in consumer surplus that arises from the subsidy.
viii. Calculate the gain in producer surplus that arises from the subsidy.
ix. Calculate the loss of social welfare that arises from the subsidy.
x. Identify on your diagram the consumer surplus, the producer surplus, government expenditure and the loss of welfare that arises from the subsidy.

3. MULTICHOICE QUESTIONS

Complete each interactive quiz. **[50 marks]**





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