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1.9 INDIRECT TAXES: STUDENT LEARNING ACTIVITY

Answer the questions that follow.

1. DEFINITIONS

Define the following terms:

[10 marks]

- Specific tax
- Ad valorem tax
- Producer
- Indirect tax
- Excise tax
- Direct taxes
- Costs of production
- Unit of output
- Free market
- Government intervention
- Price elasticity of demand
- Producer surplus
- Consumer surplus
- Demand curve
- Supply curve
- Market price
- Welfare loss
- Incidence of tax

2. SHORT-ANSWER QUESTIONS

1. Explain what indirect taxes are. [2 marks]
2. State **four** examples of indirect taxes. [2 marks]
3. Explain why indirect taxes are termed “indirect”. [2 marks]
4. Outline reasons why governments may impose indirect taxes on goods and services. [6 marks]
5. Use diagrams and examples to distinguish between specific **and** ad valorem taxes. [2 marks]

IB Economics – Government Intervention

1.9 Indirect Taxes

6. Explain the concept of "social welfare" **and** explain how an indirect tax will lead to a loss of social welfare. **[2 marks]**
7. Explain the consequences of indirect excise taxes for: **[10 marks]**
- Consumers.
 - Producers.
 - The government.
 - Workers.
 - Society as a whole.
8. Explain why the increase in price paid by consumers is less than that of any excise tax imposed. **[4 marks]**
9. The conservative government of a country is considering a \$12 per packet of cigarettes excise tax. **[10 marks]**
- Explain whether this is a specific or ad valorem tax.
 - Illustrate the market for cigarettes before and after the excise tax.
 - Analyse the effects of the excise tax on the market for cigarettes.
 - Examine the consequences of the excise tax for key stakeholders.
10. The liberal government of a country is considering a 30% per litre of petrol excise tax. **[10 marks]**
- Explain whether this is a specific or ad valorem tax.
 - Outline reasons why the government may be considering imposing this tax.
 - Illustrate the market for petrol before and after the excise tax.
 - Analyse the effects of the excise tax on the market for petrol.
 - Examine the consequences of the excise tax for key stakeholders.
 - Suggest some possible unintended consequences that the liberal government should consider.
11. The moderate government of a country is considering a \$2.00 excise tax on sugary breakfast cereals. **[12 marks]**
- Illustrate the free market equilibrium price and quantity.
 - Illustrate the producer and consumer surpluses that arise in the free market.
 - Using a new diagram, illustrate the equilibrium market price and quantity after the imposition of the tax.
 - Illustrate the producer and consumer surpluses with the excise tax.
 - Illustrate the government revenue generated from the excise tax.
 - Illustrate the loss of social welfare that arises in the market from the excise tax.
 - Outline **two** benefits to the government that should arise from this excise tax.
12. Good A has the following functions for demand and supply: $Q_d = 60 - 2P$ and $Q_s = -4 + 2P$. The government will soon impose a \$6.00 per unit excise tax. **[20 marks]**
- Plot the demand and supply curves that currently exists in the free market for good A.
 - Derive the equilibrium price and quantity for good A in the free market.
 - Plot the new supply curve that will exist in the market after the imposition of the excise tax.

1.9 Indirect Taxes

- iv. Derive the equilibrium price and quantity for good A in the market after the imposition of the excise tax.
 - v. Identify the price paid by consumers and the price received by producers.
 - vi. Calculate the government revenue generated from the excise tax.
 - vii. Calculate the loss of consumer surplus that arises from the excise tax.
 - viii. Calculate the loss of producer surplus that arises from the excise tax.
 - ix. Calculate the loss of social welfare that arises from the excise tax.
 - x. Identify on your diagram the consumer surplus, the producer surplus, government revenue and the loss of welfare that arises from the excise tax.
13. Good B has the following functions for demand and supply: $Q_d = 1600 - 200P$ and $Q_s = 600 + 300P$. The government will soon impose a \$1.00 per unit excise tax. **[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 imposition of the excise tax.
 - iv. Derive the equilibrium price and quantity for good B in the market after the imposition of the excise tax.
 - v. Identify the price paid by consumers and the price received by producers.
 - vi. Calculate the government revenue generated from the excise tax.
 - vii. Calculate the loss of consumer surplus that arises from the excise tax.
 - viii. Calculate the loss of producer surplus that arises from the excise tax.
 - ix. Calculate the loss of social welfare that arises from the excise tax.
 - x. Identify on your diagram the consumer surplus, the producer surplus, government revenue and the loss of welfare that arises from the excise tax.
14. Use diagrams to explain **two** factors that determine who will bear the burden of an indirect tax. **[6 marks]**
15. Use diagrams to show the consumer and producer incidence of an ad valorem tax when supply is elastic. **[4 marks]**
16. Use diagrams to show the consumer and producer incidence of an ad valorem tax when supply is inelastic. **[4 marks]**
17. Use diagrams to show the consumer and producer incidence of an ad valorem tax when demand is elastic. **[4 marks]**
18. Use diagrams to show the consumer and producer incidence of an ad valorem tax when demand is inelastic. **[4 marks]**

IB Economics – Government Intervention

1.9 Indirect Taxes

3. MULTICHOICE QUESTIONS

Complete each interactive quiz.

[50 marks]

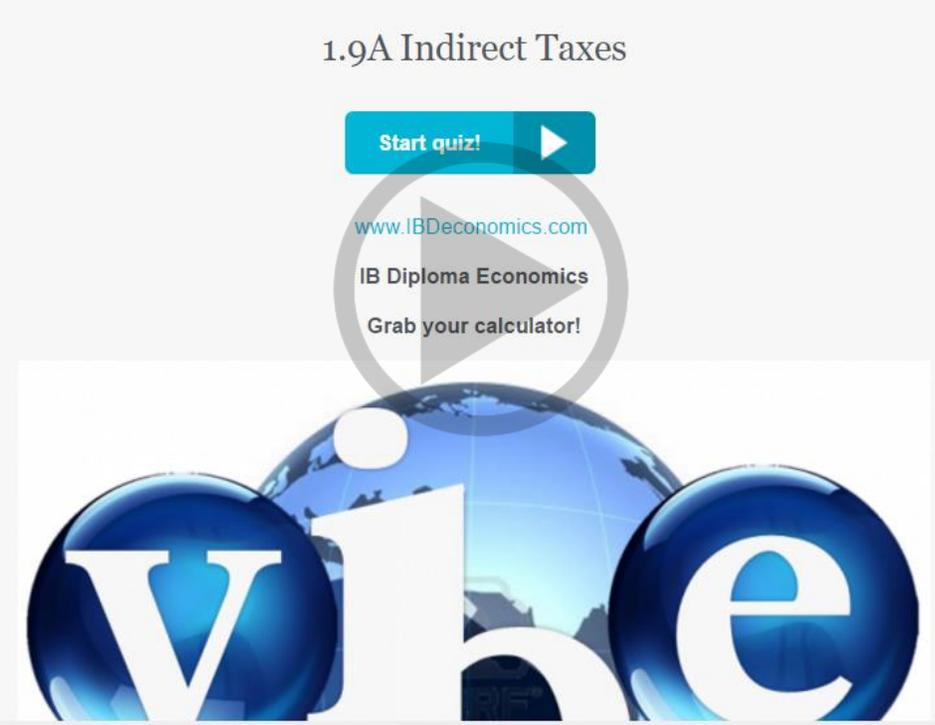
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