

IB Economics – Government Intervention

Exam Practice Questions: 1.10 Subsidies



IB Economics: www.IBDeconomics.com

1.10 SUBSIDIES: EXAM PRACTICE QUESTIONS

Answer the questions that follow.

1. IB ECONOMICS PAPER 1 EXAMINATION QUESTIONS

- a. Explain why a government might grant a subsidy. **[10 marks]**
- b. Explain how a subsidy can result in an over production of a good and a decrease in allocative inefficiency. **[10 marks]**
- c. A subsidy may simultaneously increase consumer and producer welfare and yet still leave these stakeholder groups worse off. Discuss. **[10 marks]**
- The government grants a subsidy of \$100 a tonne of corn.
- d. Analyse the effects on market outcomes (use diagrams). **[10 marks]**
- e. Discuss the consequences for stakeholders of this subsidy. **[15 marks]**

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2. IB ECONOMICS HL PAPER 3 EXAMINATION QUESTIONS

QUESTION ONE

[25 MARKS]

A country has a competitive market for good X. The demand function for A is $Q_d = 10 - P$, and the supply function is $Q_s = -4 + P$. Quantities are in units (000 per day). Price is in dollars.

- a. Calculate equilibrium price and quantity in the market for good X. **[2 marks]**
- b. Draw the demand and supply curves for good X. **[2 marks]**
- c. The government decides to grant a subsidy for good X of \$2 per unit. Draw the new supply curve. **[1 mark]**
- d. Determine the new supply function for good X after the subsidy. **[2 marks]**
- e. Derive the new equilibrium price for X from the supply and demand functions and plot these in your diagram. **[2 marks]**
- f. Explain why the subsidy does not decrease the price to consumers by \$2. **[2 marks]**
- g. Calculate the government expenditure on the subsidy. **[1 mark]**
- h. Calculate the increase in consumer and producer surpluses that arise from the subsidy. **[2 marks]**
- i. Identify consumer surplus, producer surplus, government revenues and social welfare loss after the subsidy is granted. **[4 marks]**
- j. Analyse the impact of the subsidy on allocative efficiency. **[4 marks]**
- k. Outline two stakeholder groups that are advantaged by the subsidy **and** one group that is disadvantaged by it. **[3 marks]**

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QUESTION TWO

[25 MARKS]

A country has a competitive market for good A. The demand function for A is $Q_d = 10 - P$, and the supply function is $Q_s = -4 + P$. Quantities are in units (000 per day). Price is in dollars. The government is considering a \$4.00 per unit excise tax on good A to increase producer incomes.

- a. Draw a competitive market at equilibrium and identify the producer and consumer surplus. **[2 marks]**
- b. Explain why a competitive market equilibrium is necessary to achieve allocative efficiency in the absence of market failure. **[2 marks]**
- c. Calculate the social surplus in the competitive free market. **[3 marks]**
- d. Calculate the consumer and producer surpluses if the subsidy is granted. **[4 marks]**
- e. Calculate the change in consumer and producer surpluses that would arise if the subsidy is granted. **[2 marks]**
- f. Calculate producers' total revenues and total consumer expenditure in the competitive free market. **[2 marks]**
- g. Calculate producers' total revenues and total consumer expenditure in the market if the subsidy is granted. **[2 marks]**
- h. Calculate the change in producers' total revenues and total consumer expenditure in the market after the subsidy is granted. **[2 marks]**
- i. Calculate how much the subsidy will cost the government. **[2 marks]**
- j. Explain why the social surplus if the subsidy is granted will be less than the social surplus in a competitive free market. **[4 marks]**