1.26 Government Intervention: Indirect Taxes, Subsidies and Price Controls: Test Pack

Total Marks

AQA 7136 · Calculators not allowed · about 20 minutes

Name: _____ Date: ____ / ____ / _____

Answer all questions in full sentences where required. Show working for calculations. Draw diagrams where asked and label axes and shifts. Time guidance 20 minutes.

1 Multiple choice, context: a market for frozen pies where the government introduces a specific indirect tax paid by sellers.

- ☐ A: A specific tax shifts the demand curve left by a fixed amount
- ☐ B: A specific tax shifts the supply curve vertically upwards by the tax amount
- ☐ C: A specific tax changes only the slope of the supply curve
- ☐ D: A specific tax shifts both demand and supply curves rightwards

(Total for Question 1 is 1 mark)

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2 Draw and label a supply and demand diagram showing the effect of an ad valorem tax of 20% on the good's price and quantity. In your prompt specify that candidates should show the initial equilibrium, the new supply curve (steeper), and the two equilibrium points, and label the consumer price and producer price after tax. Then state in one sentence why an ad valorem tax causes a wedge that increases with the price.

(Total for Question 2 is 4 marks)

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3 Short calculation: a firm faces a marginal cost schedule such that at output 100 units MC = £5 and at output 110 units MC = £6. If the government introduces a specific tax of £2 per unit payable by firms, what will be the new marginal cost at 110 units and by how much does MC at 110 increase? State both figures.

(Total for Question 3 is 5 marks)

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4 Explain, with a labelled diagram, the effect of a unit subsidy on the market for electric bicycles. In your prompt include: draw supply and demand axes, show the original equilibrium, show the supply shift due to a per unit subsidy received by producers, and label the new consumer price, producer price received, and quantity. Then briefly explain why consumer price falls but producer price received may rise by less than the subsidy.

(Total for Question 4 is 4 marks)

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Mark scheme · 1.26 Government Intervention: Indirect Taxes, Subsidies and Price Controls: Test Pack

Question 1

B, specific taxes add a fixed amount to firms' marginal cost, shifting supply up by the tax per unit	**B1**

Answer: B

Question 2

diagram with correctly labelled axes, initial demand and supply and initial equilibrium	**M1**
supply curve after ad valorem tax drawn steeper or as a curve above original, showing larger vertical gap at higher prices	**M1**
shows new equilibrium with higher consumer price and lower quantity and labels producer price received	**A1**
one-sentence statement that ad valorem tax is a percentage of price so the absolute tax amount rises as price rises, creating an increasing wedge	**A1**

Answer: Diagram showing steeper supply after 20% ad valorem tax, higher consumer price, lower quantity and producer price lower than consumer price; ad valorem tax increases in absolute terms as price rises, so the wedge between consumer and producer price grows with price.

Question 3

adds tax to MC at 110: 6 + 2	**M1**
new MC at 110 = £8	**A1**
computes increase: 8 - 6	**M1**
MC increases by £2	**A1**
both figures stated correctly	**B1**

Answer: New MC at 110 units = £8; increase in MC at 110 = £2.

Question 4

diagram with correctly labelled axes, initial demand and supply curves and initial equilibrium point	**M1**
supply curve shifts down/right by the amount of the per unit subsidy, new equilibrium labelled	**M1**
labels showing a lower consumer price, a higher quantity, and a producer price received that equals consumer price plus the subsidy (or producer price received which may increase by less than full subsidy), all correctly placed	**A1**
explanation that subsidy lowers firms marginal cost so supply increases; consumer price falls and quantity rises; incidence shared between consumers and producers depending on elasticities, so producers do not capture all of the subsidy if demand is relatively inelastic	**A1**

Answer: Supply shifts down by subsidy, consumer price falls, quantity rises, producers receive consumer price plus subsidy but may capture less than the full subsidy if demand and supply elasticities cause incidence to be shared.

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