1.27 Tradable Pollution Permits, Regulation and Government Failure: 10-minute Pack

Total Marks

AQA 7136 · Calculators not allowed · about 10 minutes

Name: _____ Date: ____ / ____ / _____

Answer all questions. Write full sentences for the levels-marked questions only. No calculator is required. Time guidance: approximately 10 minutes.

1 Define a tradable pollution permit in the context of a cap-and-trade environmental policy for UK industry.

(Total for Question 1 is 2 marks)

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2 Explain how a cap-and-trade scheme for air pollution, operating in the UK, provides firms with a financial incentive to reduce emissions. Draw a simple diagram showing firm marginal abatement cost and the permit price, and indicate the effect of a permit price above the firm's marginal abatement cost.



(Total for Question 2 is 4 marks)

3 Define regulation in the context of environmental policy, naming a typical command-and-control measure used in UK pollution control.

(Total for Question 3 is 2 marks)

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Mark scheme · 1.27 Tradable Pollution Permits, Regulation and Government Failure: 10-minute Pack

Question 1

a permit is a government issued allowance giving the holder the legal right to emit a specified quantity of pollutant, usually measured in tonnes **B1**

permits are tradable, meaning firms can buy and sell allowances so the total emissions stay within the cap **B1**

Answer: A government issued allowance to emit a specified quantity of pollutant, tradable between firms so total emissions respect the cap.

Question 2

states that a permit price creates an opportunity cost of emitting, so firms face a cost per extra tonne emitted **M1**

diagram: correctly labelled axes, upward sloping MAC curve, horizontal permit price line and old and new emission points **M1**

explains that if permit price is higher than the firm's marginal abatement cost for an extra tonne, the firm will abate that tonne instead of buying a permit **A1**

explains trading outcome: firms with low abatement cost sell permits, firms with high abatement cost buy permits, achieving cost-effective overall abatement **A1**

Answer: A permit price makes emitting costly. Firms abate up to the point where MAC equals the permit price; if MAC is below the permit price they reduce emissions rather than buy permits, and trading lets abatement occur where it is cheapest across firms.

Question 3

regulation is government-imposed rules or standards that firms must follow to limit harmful behaviour or protect public goods **B1**

example given, e.g. emission limit values, technology standards, or mandatory filters on smokestacks **B1**

Answer: Regulation is government rules setting required standards or limits; example: mandatory emission limit values or required use of specified abatement technology.

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