

# **Monday 16 May 2016 – Morning**

### AS GCE ECONOMICS

F581/01 Markets in Action

Candidates answer on the Question Paper.

OCR supplied materials:

None

Other materials required:

· Calculators may be used

**Duration:** 1 hour 30 minutes



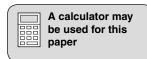
Candidate forename					Candidate surname				
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#### **INSTRUCTIONS TO CANDIDATES**

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer all the questions.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
- Do **not** write in the bar codes.

#### **INFORMATION FOR CANDIDATES**

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- The quality of your written communication will be taken into account in the marking of your answer to the question labelled with an asterisk (\*).
- This document consists of 16 pages. Any blank pages are indicated.





#### **Controlling Carbon Emissions**

Emissions trading is a modern market-based approach to controlling pollution. Traditional methods to control pollution have been regulation, based on the threat of penalties, or taxation to increase the price of fuel. By creating tradable pollution permits, the new method combines regulation and the profit motive as an incentive for good performance.

Developed in the 1970s and 1980s, emissions trading was introduced initially to combat acid rain. More recently it has grown in prominence as a way of tackling greenhouse gas emissions linked to climate change.

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The main form of emissions trading is known as 'cap and trade'. A cap on emissions is set and then permits are created up to the level of this limit. These permits are then allocated or sold by a central authority. The companies or other entities covered by the scheme need to buy one permit for every tonne of pollution they emit. The cap may be reduced year by year, reducing the availability of permits. Allowing a trade in these permits effectively puts a price on pollution. It creates flexibility as to how, and where, pollution is reduced by allowing producers to buy and sell permits.

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In theory, setting a limit on pollution and allowing the market mechanism to decide how to stay within that limit is ideally suited to reducing carbon emissions. These carbon emissions come from almost all forms of economic activity and often have global effects. The market should ensure that the emissions cuts happen at the lowest possible cost. So the system works through the creation of incentives to reduce pollution in order to increase profits.

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However, critics often emphasise the degree to which emissions trading has been weakened by inappropriate caps, free handouts of permits to the biggest polluters, and the purchase of 'offsets'. Offsets are carbon credits bought from outside the cap and trade system from carbon reduction projects in the developing world.

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So far, carbon trading schemes have been aimed at producers. Policies to reduce domestic fuel consumption and therefore cut carbon emissions have focused on raising indirect taxes. However, the effectiveness of this policy has been questioned. In recent years, the relative impacts of fuel price increases and income changes on demand for domestic fuel are unclear.

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Year	Price of domestic fuel (gas and electricity)	Demand for domestic fuel	Average household income
2011	+4.8%	-20.0%	-5.0%
2012	+5.5%	+12.5%	+0.9%
2013	+5.7%	+0.1%	+0.3%

Fig. 1 Changes in European domestic energy prices, demand for domestic fuel and average household income, compared with previous year

## Answer all questions.

1	(a)	What is meant by the term 'the market mechanism'? (line 15)
		[2]
	(b)	Describe how a competitive market would react to excess supply.
		[4]

(c)	Using a demand and supply diagram, explain how an increase in taxes on domestic fuel will affect the domestic fuel market.
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	[6]
	[•]

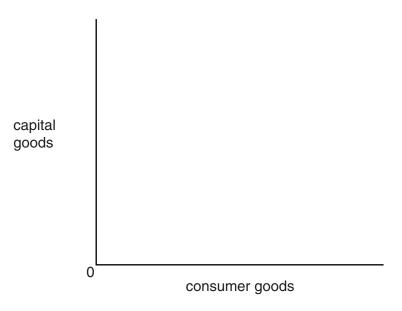
2	(a)	Give the formula for income elasticity of demand.
		[2]
	(b)	Using information from Fig. 1, calculate the income elasticity of demand for domestic fuel in 2011.
		[6]

(c)	With reference to Fig. 1, comment on the relative significance of household income and the price of domestic fuel as factors affecting the demand for domestic fuel.
	[6]

3	(a)	What is	shown	by a	production	possibility	/ curve?
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[0]
121

(b) Using a diagram, show the impact on world output of the depletion in non-renewable resources, such as oil and gas. [4]



(a)	What is meant by a 'negative externality'?
	[2]
(b)	State and explain <b>two</b> ways in which domestic fuel consumption gives rise to negative externalities.
	1
	2
	[6]

5	Comment on the extent to which the problem of pollution caused by carbon emissions is a result of information failure.
	[c]

reduced external	d each yea	a pollution ar, is the m	ost effect	tive way	to reduc	e the ma	rket failur	e arising	from ne	gative [18]

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**END OF QUESTION PAPER** 

## **ADDITIONAL ANSWER SPACE**

If additional space is required, you should use the following lined page(s). The question number(s must be clearly shown in the margin(s).										
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