



General Certificate of Education
Advanced Level Examination

ECONOMICS

ECON3

Unit 3 Business Economics and the Distribution of Income

Specimen paper for examinations in June 2010 onwards

This question paper uses the [new numbering system](#) and [new AQA answer book](#)

For this paper you must have:

- an AQA 12-page answer book.

You may use a calculator.

Time allowed

- 2 hours

Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Write the information required on the front of your answer book. The **Examining Body** for this paper is AQA. **The Paper Reference** is ECON3.
- In **Section A**, answer **EITHER** Question 1 **OR** Question 2.
- In **Section B**, answer **one** question.

Information

- The maximum mark for this paper is 80 marks.
- There are 40 marks for **Section A** and 40 marks for **Section B**.
- The marks for questions are shown in brackets.
- This paper is synoptic. It assesses your understanding of the relationship between the different aspects of Economics.
- You will be marked on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

Advice

- You are advised to spend 1 hour on **Section A** and 1 hour on **Section B**.

Section A

Answer **EITHER** Question 1 **OR** Question 2.

EITHER**Total for this question: 40 marks****Question 1****THE GLOBAL CONTEXT**

Study **Extracts A, B and C**, and then answer **all** parts of Question 1 which follows.

Extract A: Global greenhouse gas emissions in 2000, by source

Energy emissions		Non-energy emissions	
Power	24%	Land use	18%
Transport	14%	Agriculture	14%
Industry	14%	Waste	3%
Buildings	8%		
Other energy related	5%		

Energy emissions are mostly CO₂ (some non-CO₂ in industry and other energy related).
 Non-energy emissions are CO₂ (land use) and non-CO₂ (agriculture and waste).

Source: from official figures

Extract B: Climate change and global market failure

Greenhouse gases are, in economic terms, an externality. Economic activities that Produce greenhouse gas emissions are bringing about climate change. Climate change imposes costs, both on the world today, and on future generations. However, the people responsible for greenhouse gas emissions do not themselves face the full consequences of their actions.	1 5
Climate change thus presents a unique challenge for economics; it is the greatest and widest-ranging market failure ever seen. If an appropriate price can be placed on carbon emissions, people will then be faced with the full social cost of their actions. This will cause individuals and businesses to switch away from goods and services associated with high carbon emissions, choosing instead low-carbon alternatives. Taxation and carbon trading can both be used to price carbon emissions. Pricing carbon emissions may then start to reduce the adverse economic effects of climate change.	10
The greenhouse gas emissions of most countries are small relative to the global total. A very large reduction in emissions is required to stabilise the concentration of greenhouse gases in the atmosphere. This means that the international management of common resources is needed to prevent countries free riding. However, it will take many years before actions undertaken now to reduce climate change yield results. The long lead time means that costs are incurred in the short term, but the resulting benefits are long term.	15 20

Extract C: Climate change market could be worth billions to UK business

Introducing policies to reduce global warming could create a market valued at more than £25bn for UK businesses over the next ten years. Worldwide, the market created by concerted action to stop the rise in greenhouse gas emissions could be worth £750bn over the first five years alone. In the UK, government will be mostly responsible for the climate-change market growing so rapidly. Government action includes the extension of renewable energy schemes, the introduction of more environmentally-friendly fuels and of measures to tackle the energy efficiency of the housing stock, and the tightening of building standards.	1 5
The introduction of new building regulations for industrial use and commercial use is expected to generate a market worth £950m by 2010. This will provide a big opportunity for smaller businesses. Other markets likely to grow include those for renewable electricity, biofuels for road transport and domestic energy efficiency. These markets are expected to grow by £800m, £500m and £400m respectively. There are many other ways in which private sector businesses are driving the climate-change market.	10

Question 1

0 1 Using **Extract A**, compare the contributions of energy emissions and non-energy emissions to total global greenhouse gas emissions in 2000. *(5 marks)*

0 2 'Taxation and carbon trading can both be used to price carbon emissions' (**Extract B**, line 12).

Explain how a government can use taxation **and** carbon trading to price carbon emissions. *(10 marks)*

0 3 Using the data and your economic knowledge, discuss whether government policies that aim to reduce the rate at which climate change is occurring benefit or harm UK firms. *(25 marks)*

Turn over for the next question

Turn over ►

Do **not** answer Question 2 if you have answered Question 1.

OR

Total for this question: 40 marks

Question 2

THE EUROPEAN UNION CONTEXT

Study **Extracts D, E and F**, and then answer **all** parts of Question 2 which follows.

Extract D: Total production capacity of the member companies of the British Cement Association, 2006, tonnes

1. Lafarge Cement UK	5 795 000
2. Castle Cement	3 100 000
3. CemexUK Cement	2 250 000
4. Buxton Lime Industries	750 000
Notes	
(i)	Companies 1 and 2 are subsidiaries of much larger European Union building materials companies. Company 1 is part of the Lafarge Group and Company 2 is owned by the German company, Heidelberg. Company 3 is a subsidiary of a Mexican company.
(ii)	Lafarge, Castle and Cemex own a large number of cement-making plants located throughout the UK, which were previously owned by smaller UK companies. In recent years, Lafarge and Cemex respectively acquired the UK firms Blue Circle Industries (BCI) and the Ready Mixed Concrete (RMC) Group.

Source: British Cement Association, www.cementindustry.org, accessed December 2006

Extract E: An industry prone to price-fixing and cartels

What is it that makes cement manufacturers so prone to operating market-sharing and price-fixing cartels? The huge capital investment required to build a modern cement works benefiting to the full from economies of scale (a medium-sized plant costs well over £100 million) means that national markets have become dominated by a small number of large companies.	1 5
In theory, the cement industry should not be particularly prone to international price fixing. The weight of cement and its relatively low price per tonne, means it makes little economic sense to transport cement further than 100 miles from its point of manufacture. However, there is a counter argument. Selling a relatively low-value product to a highly cyclical construction industry tempts producers to try to ensure price stability by making secret arrangements.	10

Extract F: How the cement cartel came unstuck

In 2003, the German cartel office slapped record fines totalling €660 million on six European cement companies, including Britain's Ready Mixed Concrete (RMC) group (which has since become owned by CemexUK Cement, itself a subsidiary of a Mexican company which is the world's largest cement company). The companies were fined for operating a cartel whose aim was to carve up the European market. Cement and other building materials markets have for many years attracted the attention of the EU Commission, as well as national competition authorities such as the UK's Office of Fair Trading (OFT) and the German cartel office.	1 5
When senior executives negotiate an illegal price-fixing agreement with their competitors, they do indeed meet in the dimly-lit backrooms of some hotel. In an earlier case involving the cement industry, the European Commission launched a dawn raid which set in motion a predictable pattern of events. First came the pleas of innocence. Then came the co-operation of the most faint-hearted suspects. Next came the lawyers and the legal challenges. And finally there were the pleas for mercy on the grounds of the 'difficult economic climate' or some other excuse.	10
In the 2003 case, RMC escaped relatively lightly with a fine of €12m because it provided the German authorities with details of the cartel's illicit price-fixing agreement. As in a game theory model, RMC 'blew the whistle' on other cartel members in order to escape heavy punishment. The biggest fine of €252m was imposed on Germany's Heidelberg Cement, owners of the UK Castle Cement Group. The German company pleaded it had joined the cartel to defend itself against cheap imports from Asia and eastern Europe, but denied that it had harmed its customers. However, the German cartel office said cement users and buyers had been 'massively damaged' by the cartel. Decades of collusion between cement producers have almost completely prevented competition in the building materials market.	15 20
So, who would want to defend price-fixing and other forms of collusion? Some might because countries have often secretly supported cartels in order to aid their inefficient industries.	25

Question 2

- 0 4** Using information in **Extract D**, comment on the structure of the UK cement market (5 marks)
- 0 5** **Extract E** (lines 2-3) states that cement producers benefit from economies of scale. With the help of a cost curve diagram, explain how **both** a firm **and** its consumers may be affected by economies of scale. (10 marks)
- 0 6** **Extract F** (line 24) asks 'who would want to defend price-fixing and other forms of collusion?' In the light of the information in the data and using your economic knowledge, assess the view that collusion by firms is always against the public interest. (25 marks)

Turn over for the next question

Turn over ►

Section B

Answer **one** question from Section B.

Each question carries 40 marks.

Question 3

0 7 With the use of examples, explain how technical progress may affect **both** costs of production **and** the demand for goods and services. *(15 marks)*

0 8 Do you agree that the main economic effect of technical progress is to make markets more competitive? Justify your answer. *(25 marks)*

Question 4

0 9 Explain how the level of employment is determined in a perfectly competitive labour market, **both** for the whole market **and** for one employer operating within the labour market. *(15 marks)*

1 0 Discuss how a national minimum wage may affect employment in **both** perfectly competitive **and** imperfectly competitive labour markets. *(25 marks)*

Question 5

‘Rather than simply providing a safety net against absolute poverty, government policy should focus mainly on reducing relative poverty. Tackling poverty also involves much more than the redistribution of income through the welfare benefits system.’

1 1 Explain the causes of absolute **and** relative poverty in the UK. *(15 marks)*

1 2 Evaluate the view that the best way to reduce poverty is to redistribute income through the welfare benefits system. *(25 marks)*

END OF QUESTIONS

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