



General Certificate of Education
Advanced Subsidiary Examination
January 2009

Economics

ECON1

Unit 1 Markets and Market Failure

Friday 16 January 2009 9.00 am to 10.15 am

For this paper you must have:

- an objective test answer sheet
- a black ball-point pen
- an 8-page answer book.

You may use a calculator.

Time allowed

- 1 hour 15 minutes

Instructions

- In **Section A**, answer **all** questions on your objective test answer sheet.
- In **Section B**, answer **EITHER** Question 26 **OR** Question 27 in your answer book.
- Do all rough work in your answer book, **not** on your objective test answer sheet.

Section A

- Use a black ball-point pen. Do **not** use pencil.

Section B

- 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 ECON1.

Information

- The maximum mark for this paper is 75.
- There are 25 marks for **Section A** and 50 marks for **Section B**.
- In **Section A**, each question carries 1 mark. No deductions will be made for wrong answers.
- In **Section B**, the marks for questions are shown in brackets.
- 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 no more than 25 minutes on **Section A** and at least 50 minutes on **Section B**.

SECTION A: OBJECTIVE TEST

Answer **all** questions in **Section A**.

Each question carries 1 mark. No deductions will be made for wrong answers.

You are advised to spend no more than 25 minutes on **Section A**.

For each question there are four alternative responses, **A**, **B**, **C** and **D**. When you have selected the response which you think is the best answer to a question, mark this response on your objective test answer sheet. If you wish to change your answer to a question, follow the instructions on your objective test answer sheet.

1 Choice is an important element in the basic economic problem because

- A** wants increase with income.
- B** incomes are distributed unequally.
- C** high demand leads to high prices.
- D** limited resources have alternative uses.

2 A misallocation of resources is most likely to occur in monopoly if

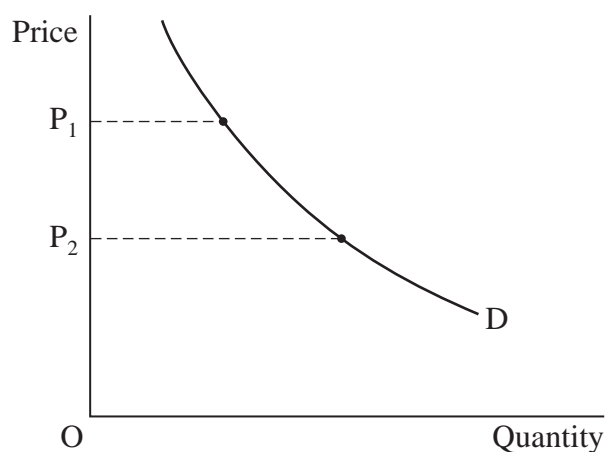
- A** other firms enter the industry.
- B** higher prices are charged than under competitive conditions.
- C** market output increases.
- D** there are economies of scale.

3 An economy is always productively efficient if it

- A** continually increases its average standard of living.
- B** maximises investment in capital goods.
- C** is operating with full employment of labour.
- D** can only produce more of one good by producing less of another.

-
- 4** Which one of the following would shift the supply curve for a good to the left?
- A decrease in
- A** demand for the good
 - B** subsidies granted to producers
 - C** the rate of growth of labour productivity
 - D** the elasticity of supply of the good
- 5** Negative externalities exist in a market for a good giving rise to a misallocation of resources. This misallocation is most likely to have resulted from
- A** the product being over-priced.
 - B** over-production of the product.
 - C** too little consumption of the product.
 - D** too few resources devoted to producing the product.
- 6** In a buffer-stock scheme
- A** an organisation might buy in the open market to maintain a minimum price in the market for a product.
 - B** governments restrict supplies of a product coming onto an open market in order to lower prices of the product.
 - C** buffer stocks are kept to sell if the price of a product starts to fall.
 - D** buffer stocks are sold when there are surpluses in the market.

7 The diagram below shows the market demand curve for apples.



Assuming OP_1 to be the original equilibrium price, a decrease in price to OP_2 could have been caused by a decrease in

- A the wages of apple pickers.
- B real incomes in the economy.
- C the price of substitutes.
- D the popularity of apples.

8 The table below shows estimates of UK consumers' income elasticity of demand for holidays in four different countries.

Country	Income elasticity of demand
China	0.8
Peru	1.0
Italy	1.4
Spain	2.0

From the data it may be concluded that a 10% rise in real incomes would lead to

- A a fall in demand for holidays in China.
- B no change in demand for holidays in Peru.
- C a 14% increase in demand for holidays in Italy.
- D a 2% increase in demand for holidays in Spain.

9 Which one of the following situations would lead to an increase in equilibrium price?

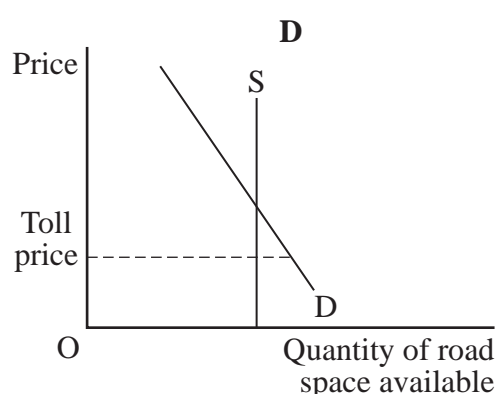
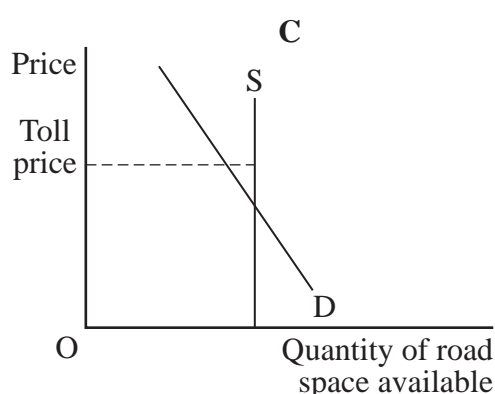
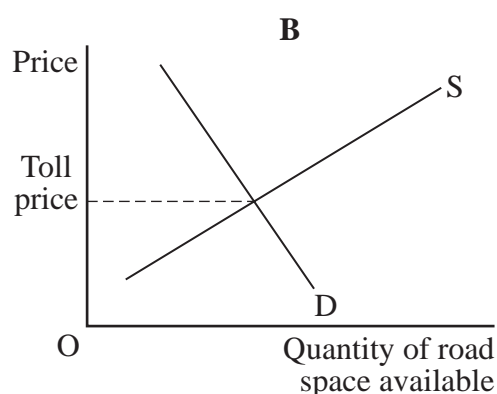
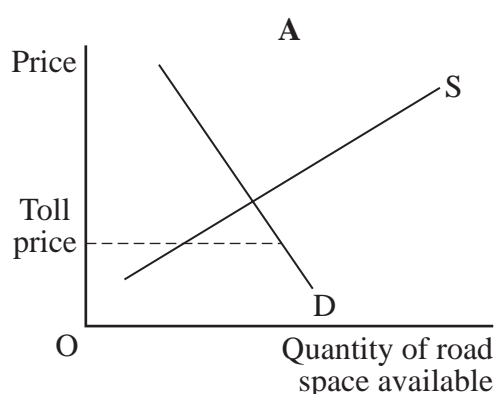
- A Demand is perfectly inelastic and a firm's labour costs fall.
- B Demand is perfectly elastic and a firm's labour costs rise.
- C Supply is perfectly elastic and the price of a substitute good falls.
- D Demand is perfectly inelastic and a firm's labour costs rise.

10 Which one of the following is true?

- A A positive statement is one which can be tested against the facts.
- B A positive statement is one which never contains words such as 'could' or 'should'.
- C A normative statement is one which can be scientifically proven to be true or false.
- D A normative statement is one which never contains words such as 'is' or 'will' or 'always'.

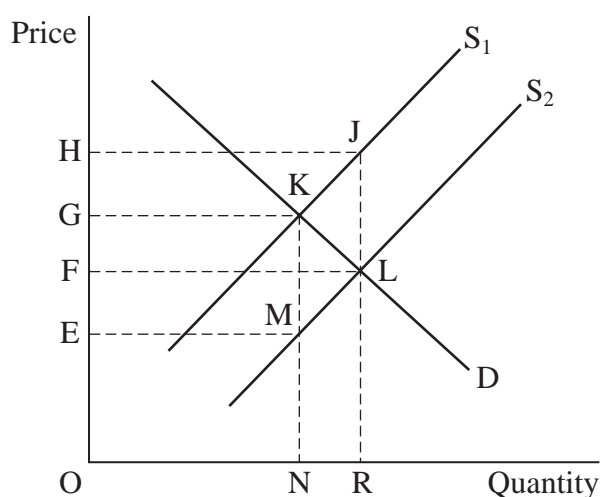
11 In 2003, a new motorway, the M6 Toll Road, was opened to the east of Birmingham. To use this motorway, drivers are currently charged a fee of up to £9 per vehicle. The price has led to there being considerable excess capacity on the motorway.

Which one of the following diagrams, **A**, **B**, **C** or **D**, shows that there is 'excess capacity on the motorway'?



Turn over ►

- 12** The price mechanism helps to allocate resources efficiently because
- A** it results in lower rewards being paid to factors of production when demand for the output they produce increases.
 - B** it will lead to a distribution of output amongst individuals on the basis of greatest need.
 - C** the prices of non-renewable resources will tend to rise as the stock of such resources nears depletion.
 - D** it will always ensure that competition between firms prevents high profits being earned.
- 13** The cross elasticity of demand between two complementary products is always
- A** negative.
 - B** positive.
 - C** zero.
 - D** greater than 1.
- 14** In the diagram below, the government grants a subsidy to manufacturers of loft insulation. This shifts the market supply curve from S_1 to S_2 .



The total amount spent by the government on subsidies is represented by the area

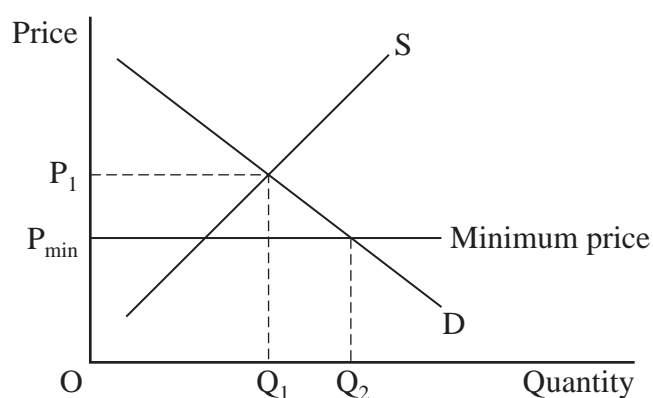
- A** OHJR.
- B** FHJL.
- C** OFLR.
- D** EGKM.

-
- 15** Which one of the following is an appropriate form of government intervention for the problem identified?
- A** The introduction of pollution permits to limit positive externalities
 - B** The use of a buffer-stock scheme to stabilise the price of a public good
 - C** The imposition of a maximum price for a merit good
 - D** The provision of a subsidy for a product which generates negative externalities
- 16** Which one of the following is associated with a missing market?
- A** A monopoly restricting output
 - B** The production of a negative externality
 - C** A firm deciding to produce a private good
 - D** A government subsidising agricultural production
- 17** At current levels of output, the marginal social benefit of a good is greater than its marginal private benefit. As a result, there are likely to be
- A** positive externalities in consumption.
 - B** positive externalities in production.
 - C** negative externalities in consumption.
 - D** negative externalities in production.

Turn over for the next question

Turn over ►

18 The diagram below shows the supply and demand curves for sugar.



Price is initially at P_1 . If the producers now set a minimum price of OP_{\min} , what effect would this have?

- A** Equilibrium price and quantity would remain at OP_1 and OQ_1 .
- B** It would encourage suppliers to increase production from OQ_1 to OQ_2 .
- C** The amount sold would increase from OQ_1 to OQ_2 .
- D** The market price would fall from OP_1 to OP_{\min} .

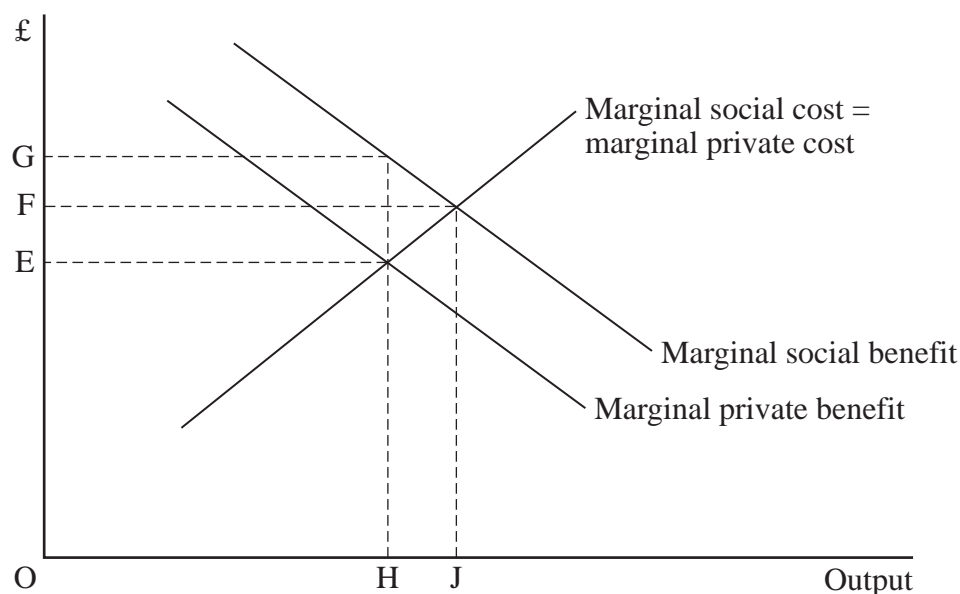
19 An airline announces that it is 'slashing fares on all of its flights'. Given a fare reduction of 35%, what would be the expected percentage rise in demand for those flights if the company has estimated their price elasticity of demand is -2.0?

- A** 17.5
- B** 175.0
- C** 7.0
- D** 70.0

- 20** 'Electricity suppliers are required to buy a growing amount of electricity from renewable energy generators. By 2010, this must amount to at least 10 per cent of total electricity bought from all generators. Green energy generators are paid more for their electricity because there is a scarcity of supply of electricity generated from renewable resources.'

It can be deduced from the data above that

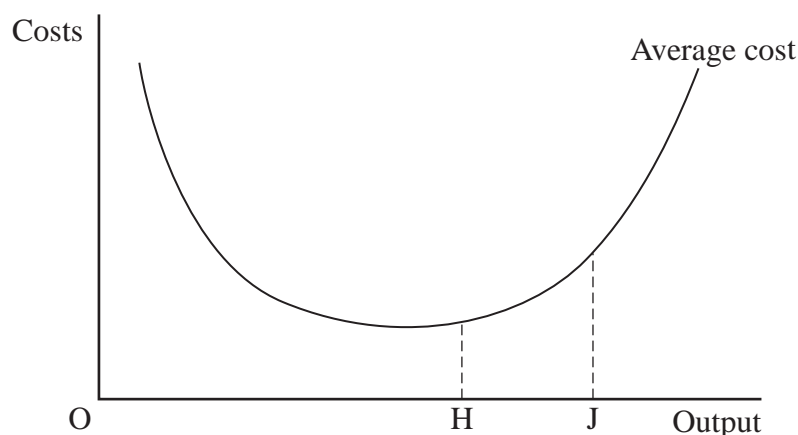
- A** the government is subsidising the production of renewable energy.
 - B** the social cost of electricity generated from renewable resources is greater than the private cost.
 - C** the government is subsidising the negative externalities arising from the production of 'green energy'.
 - D** electricity suppliers are paying higher average prices for their electricity because some of the electricity is generated from 'green sources'.
- 21** The diagram below shows the market for a merit good.



In the absence of government intervention in this market, a misallocation of resources is likely to occur because

- A** the free market price will be too high.
- B** there will be over-production of the good of HJ.
- C** the free market output will be too high.
- D** there will be under-consumption of the good of HJ.

- 22 The diagram below shows how a firm's average costs change as it employs more of all its factors of production, including capital and labour.



As the firm increases its output from OH to OJ, the diagram illustrates

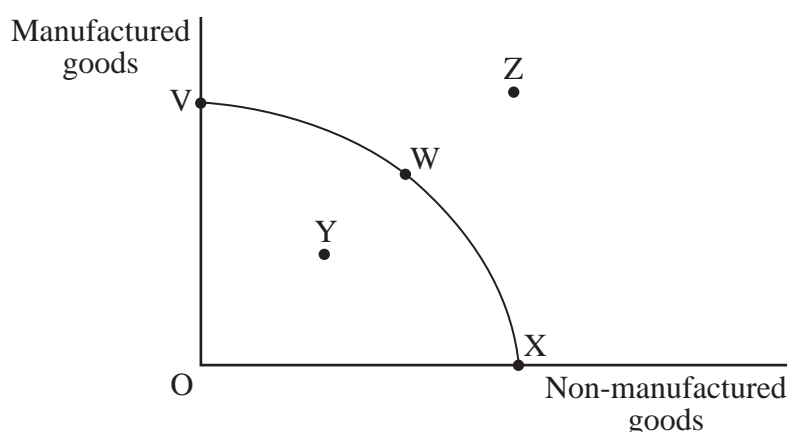
- A the benefits of monopoly power.
 - B the benefits of increased specialisation.
 - C diseconomies of scale.
 - D increased productive efficiency.
- 23 The table below gives information on the supply of, and demand for, potatoes over a range of market prices. The market is managed through a buffer-stock scheme.

Price £/kilo	Quantity demanded 000 kilos per week	Quantity supplied 000 kilos per week
6	6	3
9	4	4
12	3	5

If the manager of the buffer-stock scheme for potatoes decided to establish a minimum price of £12 per kilo, this would require that

- A the production of potatoes be subsidised.
- B a tax be imposed on consumers of potatoes.
- C potatoes be released from the buffer stock.
- D potatoes be purchased for the buffer stock.

24 The diagram below shows a country's production possibility curve.



Which one of the following combinations of manufactured and non-manufactured goods could currently be produced?

- A Only W and Y
- B Only V, W and X
- C Only V, W, X and Y
- D V, W, X, Y and Z

25 One reason why specialisation raises labour productivity is because

- A specialisation shifts the production possibility boundary to the left.
- B labour replaces capital to produce goods and services.
- C specialisation requires an economy to produce on its production possibility boundary.
- D the division of labour makes it cost-effective to provide workers with specialist equipment.

**QUESTION 25 IS THE LAST
QUESTION IN SECTION A**

**On your answer sheet
ignore rows 26 to 50**

TURN OVER FOR SECTION B

Turn over ►

SECTION B: DATA RESPONSE

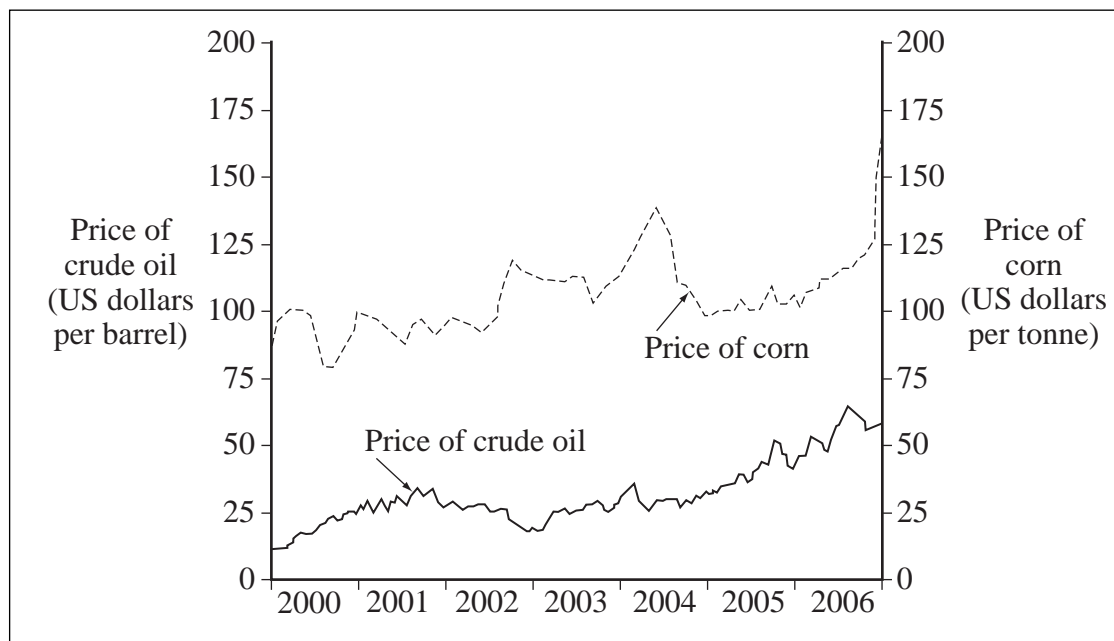
Answer **EITHER** Question 26 **OR** Question 27.
You are advised to spend at least 50 minutes on **Section B**.

EITHER

Total for this question: 50 marks

26 Study **Extracts A, B and C**, and then answer **all** parts of Question 26 which follows.

Extract A: Changes in the prices of crude oil and corn, 2000 - 2006



Extract B: Grain prices go the way of the oil price

In 2007, the prices of grains and crude oil hit ten-year highs. The rising price of oil stems partly from the fact that world oil supplies are running out. But why should grain prices continue to increase? Farmers should be able to meet increased demand for grains such as corn (maize) and wheat simply by growing more. Indeed, more grains are being grown, but demand has grown even faster.

Grains are used as food, both for people and for livestock. In countries such as China incomes are rising. As incomes rise, people eat more meat. This in turn leads to an increase in demand for grains that are used for animal feed. It is also worth noting that the income elasticity of demand for grains is probably positive.

A second reason for rising grain prices lies in increased demand for bio-fuels such as ethanol. Bio-fuels made from corn, wheat, and from other crops are substitutes for petrol and diesel fuel. Since 2000, demand for corn used to make ethanol has risen by over 300 per cent in the USA. Over 20 per cent of US corn is now used as the raw material for ethanol. Governments in forty other countries are promoting the use of bio-fuels to reduce dependency on oil imported from countries such as Iran and Venezuela.

Source: news reports

Extract C: Italians urged to go on pasta strike

Pasta is made from wheat. An increase in the price of wheat in recent months has forced pasta manufacturers to increase the prices they charge for pasta products such as spaghetti. Italian supermarkets may increase the price of pasta by 20 per cent by the end of 2007.	1
Pasta is a national dish in Italy, with each Italian eating on average 28kg of pasta every year. According to Furio Bragagnolo, vice president of the Italian Pasta Manufacturers' Association, a plate of pasta 'probably costs less than an apple'. However, the big Italian pasta manufacturers have been accused of using their monopoly power to force up the price of pasta.	5
Italian consumer associations have asked the Italian government to intervene in the pasta market to reduce the prices of goods such as spaghetti. The groups have also asked people to refrain from buying or eating pasta products for a day, in protest against the recent price increases.	10
Global warming and the growing use of wheat as a bio-fuel are blamed for the steep rise in pasta prices.	15

Source: news reports

Question 26

- 26** (a) Define the term 'income elasticity of demand' (**Extract B**, line 9). (5 marks)
- (b) Using **Extract A**, compare the changes in the prices of crude oil and corn over the period shown. (8 marks)
- (c) With the help of a demand and supply diagram and using the information in **Extract B**, explain why the prices of grains such as corn and wheat were rising in 2007. (12 marks)
- (d) 'Italian consumer associations have asked the Italian government to intervene in the pasta market to reduce the prices of goods such as spaghetti' (**Extract C**, lines 10-11).
Using the data and your economic knowledge, evaluate the economic case **for** and **against** the Italian government intervening in the pasta market to try to reduce pasta prices. (25 marks)

Turn over for the next question**Turn over ►**

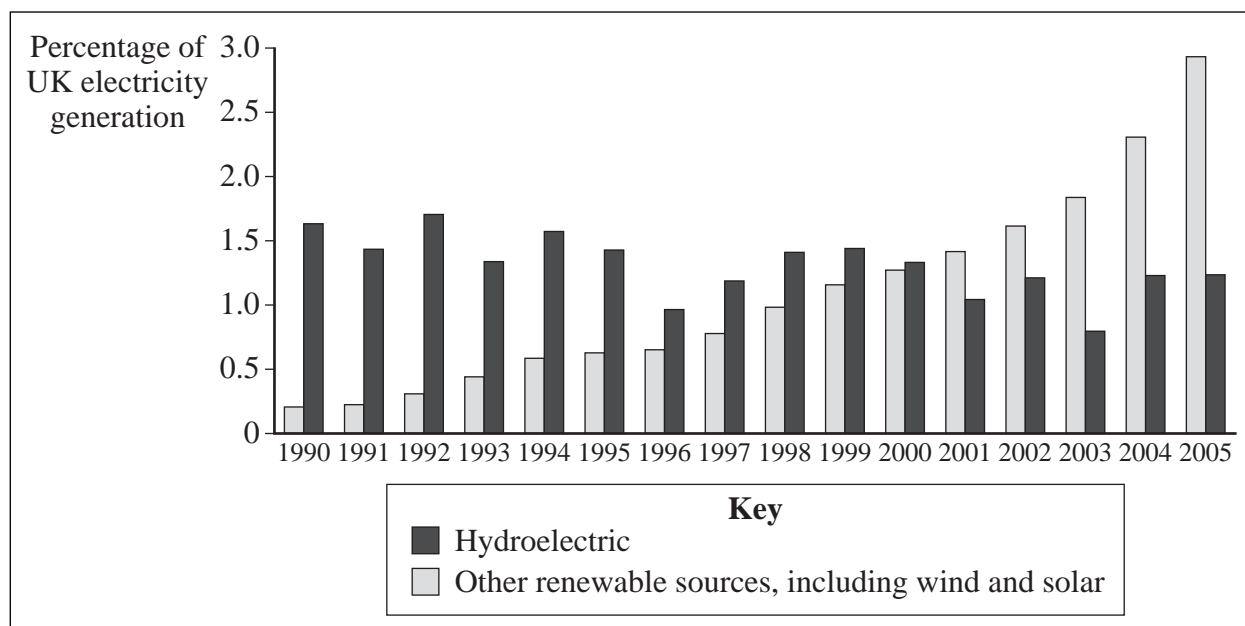
Do **not** answer Question 27 if you have answered Question 26.

OR

Total for this question: 50 marks

27 Study **Extracts D, E and F**, and then answer **all** parts of Question 27 which follows.

Extract D: Changes in electricity generation from renewable sources, as a percentage of total UK electricity generation, 1990-2005



Source: *Meeting the Energy Challenge*, Department for Business, Enterprise and Regulatory Reform, 2007

Extract E: Generating electricity from wind and solar power

Wind farms cost more to build than power stations of similar capacity that burn fossil fuels. However, once wind turbines have been built, generating electricity from wind energy does not require the purchase of fuel. The lack of future fuel costs will probably significantly outweigh the extra initial investment cost. Generating electricity from wind energy has become commercially viable. There is no need for the government to grant a subsidy, provided that fossil-fuel prices continue to remain high, and provided also that the 'wind potential' of a prospective turbine site is adequate.	1
Nevertheless, four problems have had to be overcome to make wind power attractive as a commercial venture which markets, rather than the government, can provide. The first is wind variability. The second is turbine size. The third is the cost of transmitting electricity from Scotland, where the best sites are located, to the main market in England. Lastly, there is the negative externality of 'eyesore' or visual pollution.	5
Solar power is another source of renewable energy. At present, electricity produced from solar power is at least two to three times as expensive as electricity produced from conventional sources. This means that solar power is not as yet a practical source of energy for power station companies.	10
	15

Source: news reports, 2007/8

Extract F: The UK should be investing much more in renewable energy

Britain has a huge potential for wind, wave and tidal power. These sources of renewable energy could meet all the United Kingdom's energy needs several times over. Because of this potential, the UK ought to be a world leader in the development and use of renewable energy. The country would benefit from sources of energy that use no fuel and never run out. Local production of renewable energy would also reduce the need to import oil from countries that may not always wish the UK well. The UK could also gain an economic advantage from being at the forefront of fast-growing new technologies.	1 5
But instead, the UK lies near the bottom of the EU league table for developing sources of renewable energy. Is this the fault of markets or the government? According to environmental pressure groups such as Greenpeace, the UK government has been a follower rather than a leader, held back by policy indecision and by its attraction to nuclear power.	10

Source: news reports, 2007/8

Question 27

- 27** (a) Define the term 'subsidy' (**Extract E**, line 6). (5 marks)
- (b) Using **Extract D**, compare the changes in electricity generation from hydroelectric and other renewable sources as proportions of total UK electricity generation over the period 1990 to 2005. (8 marks)
- (c) **Extract E** (line 12) states that wind turbines lead to the "negative externality of 'eyesore' or visual pollution".
- With the use of a diagram, explain how the building of wind turbines may affect house prices in the area in which the wind turbines are located. (12 marks)
- (d) Using the data and your economic knowledge, evaluate the economic case **for** and **against** leaving the provision of renewable energy to market forces. (25 marks)

END OF QUESTIONS

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