



General Certificate of Education  
Advanced Subsidiary Examination  
January 2011

## Economics

## ECON1

### Unit 1 Markets and Market Failure

Wednesday 12 January 2011 1.30 pm to 2.45 pm

**For this paper you must have:**

- an objective test answer sheet
  - a black ball-point pen
  - an AQA 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 AQA answer book.
- For **Section A**, do all rough work in this question paper, **not** on your objective test answer sheet.

**Section A (ECON1/1)**

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

**Section B (ECON1/2)**

- 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 ECON1/2.

**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**.

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**Section A: Objective Test**

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

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

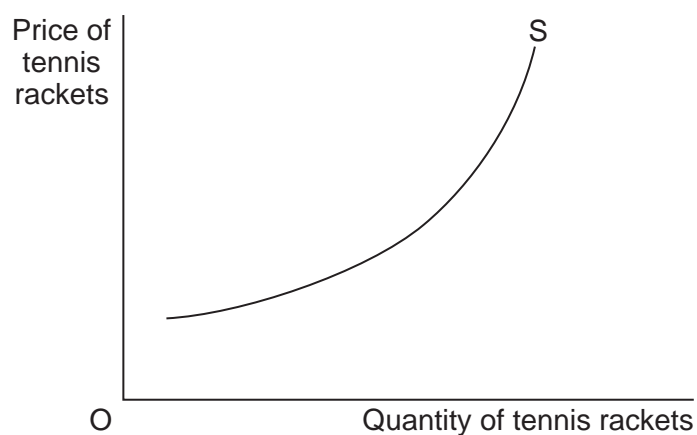
You are advised to spend no more than 25 minutes on **Section A**.

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.

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- 1 The fundamental economic problem facing all societies is
  - A what, how and for whom goods and services should be produced.
  - B the existence of unemployed resources.
  - C a significant divergence between social and private costs of production and consumption.
  - D inequalities in the distribution of income and wealth.
  
- 2 Which one of the following is an example of an economy of scale?
  - A A firm using its existing capacity more efficiently
  - B A company using its factory to produce more than one product
  - C A car firm increasing its range of models
  - D A firm employing specialist managers as its size increases
  
- 3 Which one of the following statements about a merit good is true?
  - A It may be provided by the free market but not in sufficient quantities.
  - B Once the good has been supplied to one consumer, there is no extra cost in supplying it to others.
  - C It is always provided free to consumers.
  - D It tends to be provided by the government because it is non-excludable.

- 4 The diagram below illustrates the industry supply curve for tennis rackets.



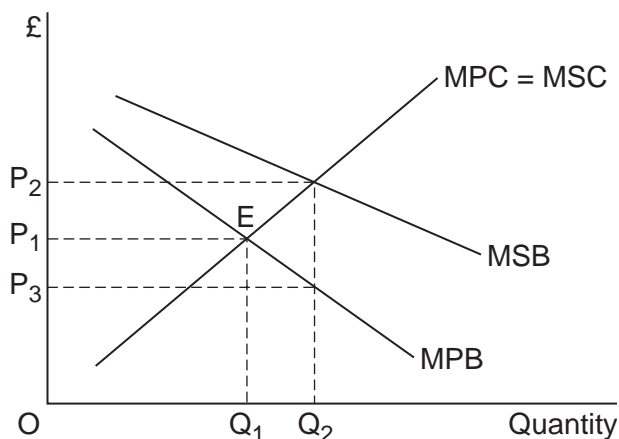
All other things being equal, the upward slope of the supply curve is due to

- A the existence of a monopoly in the industry.
  - B higher prices providing a profit incentive for firms to expand production.
  - C the elasticity of supply exceeding the elasticity of demand for tennis rackets.
  - D higher prices providing an incentive for firms to increase their productive efficiency.
- 5 The demand for capital goods such as plant and machinery is said to be an example of derived demand because it depends on
- A the productivity of capital goods.
  - B the quantity of consumer goods purchased.
  - C the price of capital goods.
  - D the amount of labour employed by a firm.

**Turn over for the next question**

**Turn over ►**

- 6 The diagram below shows the marginal private and social benefit (MPB and MSB) curves and the marginal private and social cost (MPC and MSC) curves for a merit good.



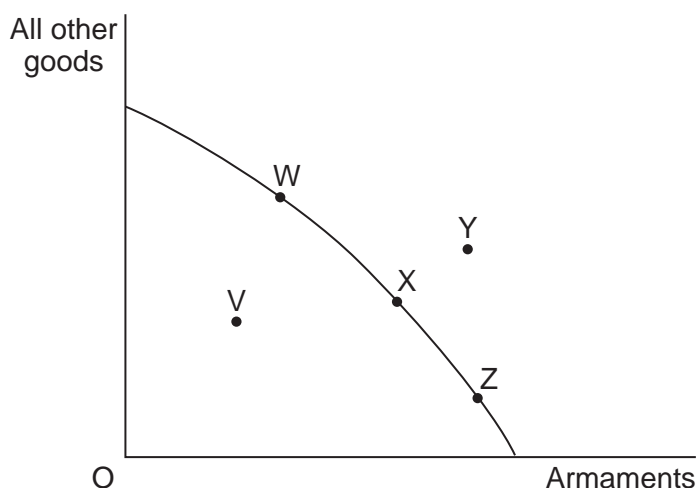
The initial market equilibrium is at point E. To avoid a misallocation of resources in the market, the government could

- A introduce a subsidy of  $P_3P_2$  per unit produced.
- B set a maximum price of  $P_1$  per unit sold.
- C raise price to  $P_2$  per unit sold.
- D set a minimum price of  $P_1$  per unit sold.
- 7 A free good has which one of the following characteristics?
- A It has no opportunity cost in supply.
- B It is generally supplied by the government because its consumption is considered to be socially desirable.
- C It has no externalities associated with its consumption or production.
- D It is in perfectly inelastic supply.
- 8 Which one of the following statements involves a value judgement?
- A The supply of beef is likely to be inelastic in the short run.
- B Economies of scale can lead to lower prices.
- C Inferior goods have a negative income elasticity of demand.
- D The government was wrong to increase spending on roads.

- 9 In August 2000, the World Health Organisation said that a 10% increase in cigarette prices worldwide would reduce consumption of cigarettes by 4% in high-income countries and by 8% in low-income countries.

The above statement suggests that

- A smokers in high-income countries are twice as addicted to cigarettes as those in low-income countries.
- B demand for cigarettes is price elastic in both low-income and high-income countries.
- C income elasticity of demand for cigarettes is higher in low-income countries than in high-income countries.
- D price elasticity of demand for cigarettes is negative in both high-income and low-income countries.
- 10 The diagram below shows the production possibility frontier for an economy.



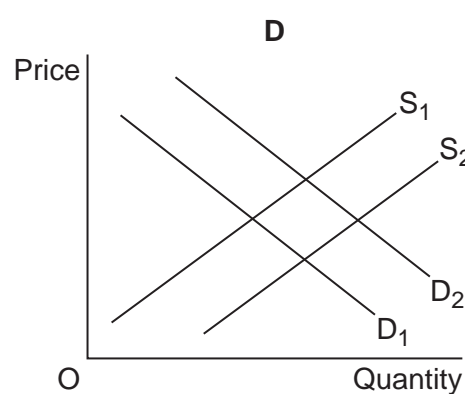
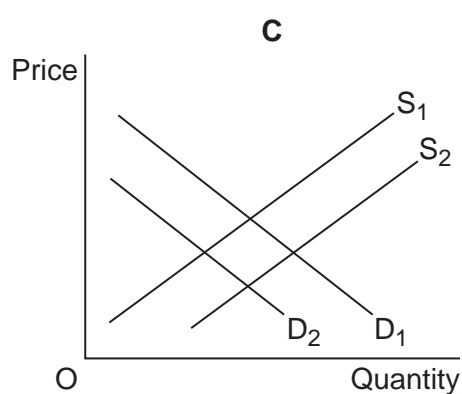
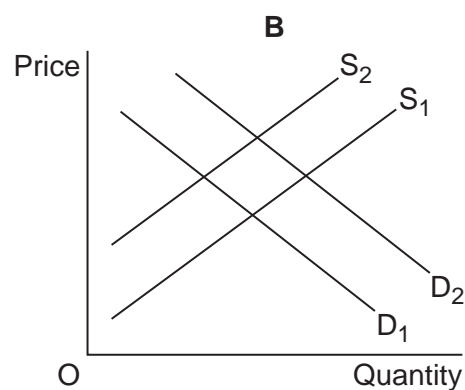
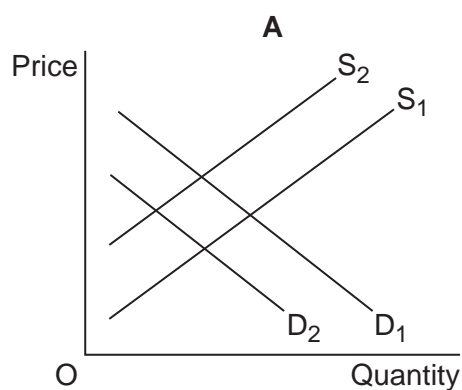
Which one of the following movements involves a trade-off between providing more armaments and providing more of all other goods?

- A V to W
- B V to X
- C X to Y
- D X to Z

Turn over ►

- 11 In the diagrams below,  $S_1$  and  $D_1$  show the original supply and demand curves for Good X, while  $S_2$  and  $D_2$  show shifts of these curves.

Which diagram, **A**, **B**, **C** or **D**, illustrates the effects of an increase in the price of a good that is complementary to Good X and an increase in labour productivity in the production of Good X?



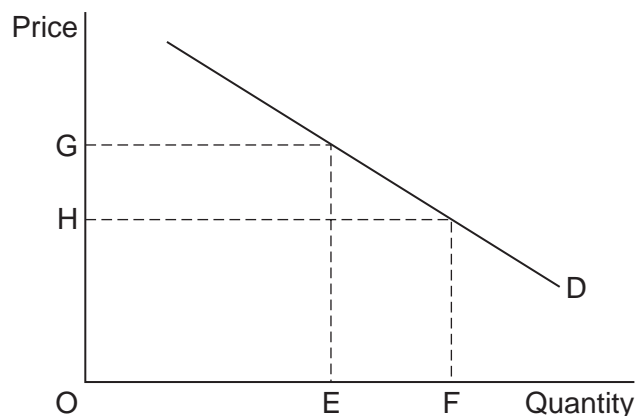
- 12 The table below shows the value of the price elasticity of demand facing each type of provider of passenger transport.

Train companies	Bus companies	Coach companies	Airlines
-1.4	-0.8	-0.7	-0.5

If the fares charged for the use of each of these forms of transport rose by the same percentage, which type of provider would see the greatest proportional increase in total sales revenue?

- A** Train companies  
**B** Bus companies  
**C** Coach companies  
**D** Airlines

- 13 The diagram below shows the demand curve facing a monopolist.

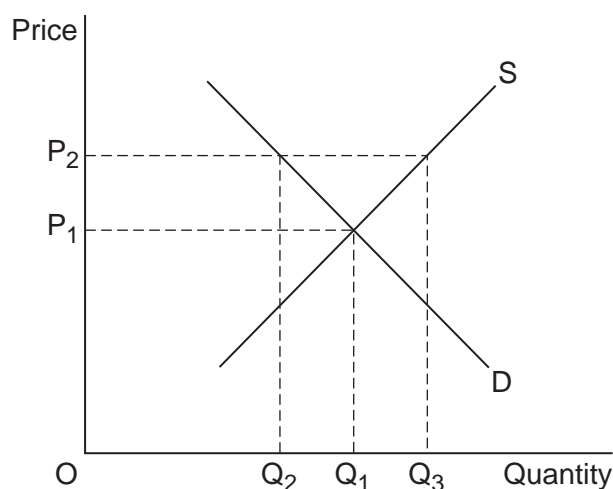


The monopolist prices its product at OG. If the monopolist is experiencing diseconomies of scale, breaking up the monopoly and introducing competition into the market is most likely to

- A change output from OF to OE.
  - B increase productive efficiency by EF.
  - C result in a fall in price from OG.
  - D lead to an increase in average costs of HG.
- 14 At current levels of output, the marginal social cost of making a good is greater than its marginal private cost. Also, the marginal social benefit of the good is greater than its marginal private benefit. As a result, there will probably be
- A a misallocation of resources.
  - B positive externalities in production.
  - C negative externalities in consumption.
  - D economies of scale.
- 15 A tradeable pollution permit
- A is needed to equalise positive and negative externalities in production.
  - B will be bought by a firm if its price is less than the social cost of the pollution it creates.
  - C is designed to reduce the negative externalities arising from pollution.
  - D can be used only by the firm to which it is issued.

Turn over ►

- 16 The diagram below shows the demand and supply curves for wheat in the European Union (EU).

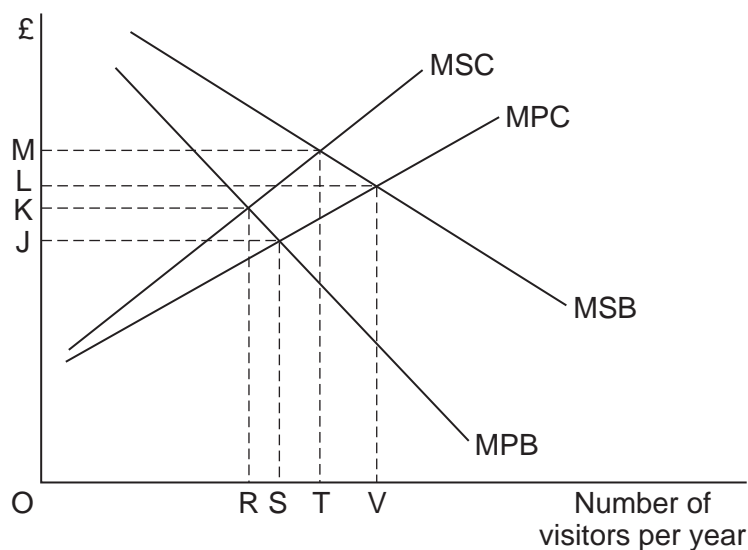


The free market price of wheat is  $OP_1$ . It has been agreed as part of the Common Agricultural Policy (CAP) to maintain a price of  $OP_2$  within the EU and to do so through intervention buying. In achieving a price of  $OP_2$ , the amount spent on intervention buying by the EU would be

- A  $OP_1 \times OQ_1$
- B  $OP_2 \times OQ_2$
- C  $OP_2 \times Q_2Q_3$
- D  $OP_2 \times OQ_3$
- 17 In July 2007, smoking in enclosed public places in England became illegal. Such a policy would inevitably lead to government failure if
- A the government's tax revenue from cigarette sales fell.
- B the economic benefits arising from the ban were outweighed by its costs.
- C some people continued to smoke cigarettes in their own homes.
- D jobs were lost in the tobacco industry.
- 18 Specialisation and the division of labour require
- A a means of exchanging goods and services.
- B that the economy is operating on its production possibility frontier.
- C an absence of negative externalities.
- D competitive markets.



- 19 The diagram below shows the marginal private and social benefits (MPB and MSB) and the marginal private and social costs (MPC and MSC) associated with opening up a remote area of outstanding natural beauty to the general public.



What is the optimum number of visitors per year that should use this attraction?

- A OR
- B OS
- C OT
- D OV
- 20 One reason why the free market fails to achieve an optimal allocation of scarce resources is because
- A public goods are provided free of charge to users.
- B positive externalities lead to overproduction of a good.
- C there is underproduction of goods with positive externalities.
- D individuals' incomes and wealth are not identical.
- 21 Labour productivity in an economy is likely to improve if there is
- A a reduction in the number of firms in an industry.
- B an improvement in allocative efficiency.
- C an increase in the quantity of capital per worker.
- D a reduction in negative externalities in production.

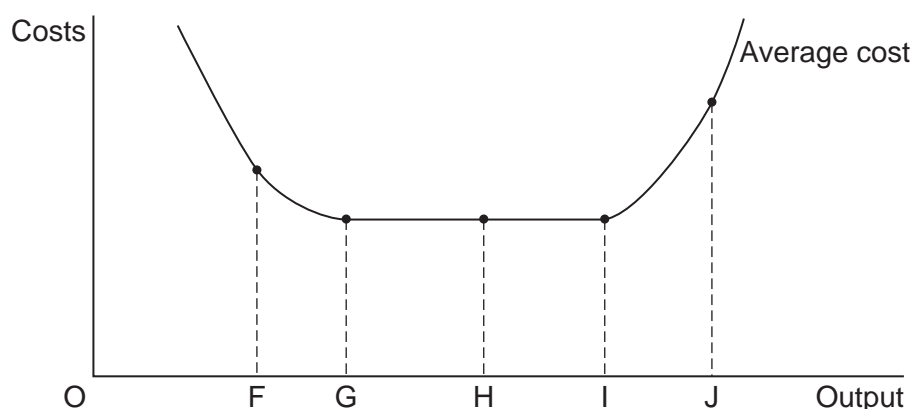
Turn over ►

- 22 The table below shows the shares of disposable income in an economy for five income groupings, as a percentage of the total, for the period 2004 to 2009.

Year	Lowest 20%	Next 20%	Middle 20%	Next 20%	Top 20%	Total (%)
2004	10	14	18	23	35	100
2005	9	13	16	23	39	100
2006	6	10	15	23	46	100
2007	7	11	16	23	43	100
2008	6	10	16	23	45	100
2009	6	10	16	23	45	100

From the data it can be concluded that

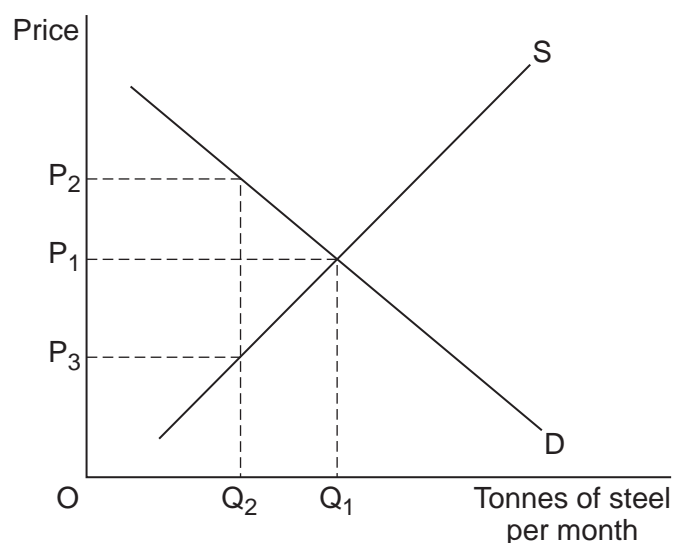
- A over the period shown all income groups, except the Top 40%, experienced a fall in their disposable income.
- B between 2007 and 2009 there was a small increase in inequalities of disposable income.
- C between 2004 and 2009 the rich became poorer and the poor became richer.
- D total disposable income remained constant over the entire period shown.
- 23 The diagram below shows the average cost curve for a business.



The business moves from being productively inefficient to being productively efficient when output changes from

- A G to H.
- B J to G.
- C I to H.
- D F to J.

24 The diagram below shows the market for steel in the UK.



The government recognises that steel production creates negative externalities in the form of carbon dioxide emissions that are associated with global warming. To comply with international treaties, the government agrees to limit the production of steel, reducing the industry output from  $OQ_1$  to  $OQ_2$  per month. To achieve this end, the government could

- A offer a subsidy to the steel industry equal to  $P_2P_1$  per tonne of steel produced.
  - B set and enforce a maximum price of  $OP_2$  per tonne of steel.
  - C set and enforce a minimum price of  $OP_3$  per tonne of steel.
  - D introduce an indirect tax of  $P_2P_3$  per tonne of steel produced.
- 25 A pure public good (or service) is always
- A provided by the government for all consumers.
  - B provided free of charge for all consumers.
  - C available for consumption by others when consumed by an additional person.
  - D heavily subsidised by the government.

**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**

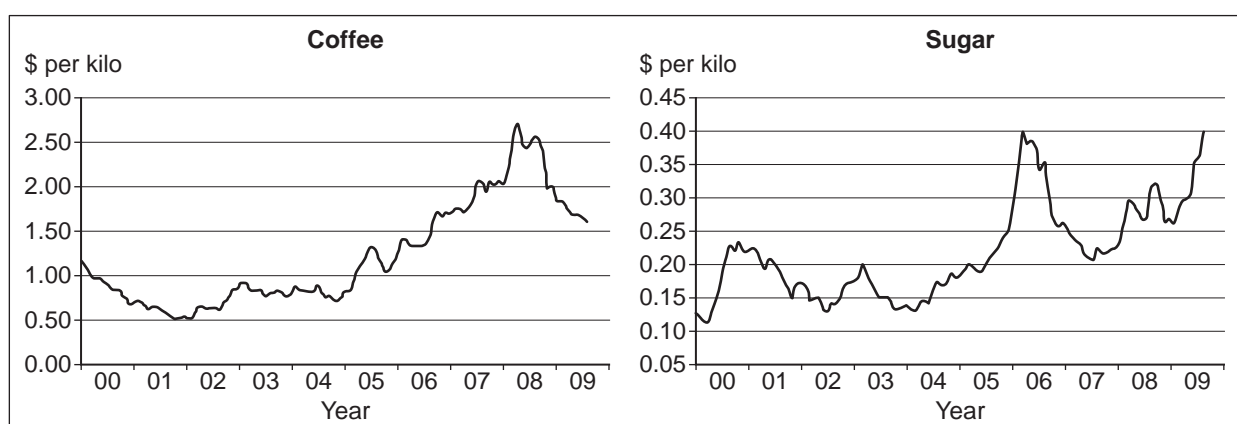
**Total for this question: 50 marks**

### Question 26

#### UNSTABLE PRIMARY PRODUCT PRICES

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

#### Extract A: World prices of coffee and sugar, \$US per kilo, January 2000 to July 2009



Source: official statistics

#### Extract B: The coffee and sugar markets

- |  |    |
|--|----|
| Early in 2008, the prices of both coffee and sugar increased sharply because of poor crop harvests and strong demand.  | 1  |
| In Colombia in South America, supply constraints caused the equilibrium price of coffee to rise to a 12-year high. The Colombian crop was damaged by heavy rainfall, which also washed away some of the roads which were used to transport the beans to coffee markets.  | 5  |
| In 2009, sugar prices in New York and London rose by 52 per cent to their highest in almost three years. Speculators anticipated that India, the world's largest consumer of sugar, would require substantial sugar imports to compensate for the failure of the domestic sugar crop.  | 10 |
| Significant changes in Indian sugar output are a critical factor in determining the world price of sugar. At the beginning of 2009, traders forecast that India's sugar output would fall by about 40 per cent to 15 million tonnes during the growing season, well below the country's consumption of about 23 million tonnes a year. |    |

Source: news reports, 2009

**Extract C: The rise and fall of buffer stock schemes for primary products**

The governments of poor countries tend not to worry when the world prices of the primary products they sell to other countries rise dramatically. However, when prices fall, governments are more likely to be concerned. Until recently, governments sometimes tried to deal with falling prices by purchasing buffer stocks. 1

However, buffer stock schemes have generally failed to stabilise world commodity prices or producers' incomes. Very often the schemes fail because stocks of commodities such as foodstuffs and metals are more frequently bought than sold. As a result, the cost of purchasing an ever-increasing buffer stock becomes unsustainable. Few buffer stock schemes now survive. 5

The schemes that failed typically involved commodities whose prices were disturbed by long-lasting shocks. Supply shocks included a sequence of bumper harvests, while demand shocks often resulted from a shift of demand away from a commodity such as tin to plastic and glass substitutes. 10

Source: news reports, 2009

- 0 1** Define the term 'equilibrium price' (**Extract B**, line 3). (5 marks)
- 0 2** Using **Extract A**, identify **two** significant points of comparison between changes in the world price of coffee and changes in the world price of sugar over the period shown. (8 marks)
- 0 3** With the help of an appropriate diagram and the information in **Extract B**, explain why the world price of sugar changed in 2009. (12 marks)
- 0 4** Evaluate the case **for** and **against** using a buffer stock scheme to stabilise the price of a commodity such as sugar or tin. (25 marks)

**Turn over for the next question**

**Turn over ►**

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

OR

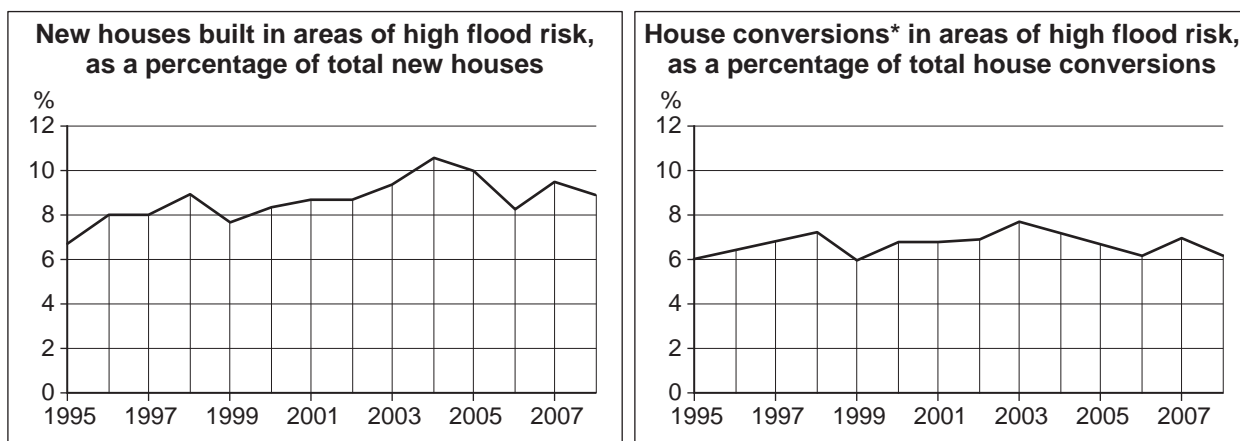
Total for this question: 50 marks

### Question 27

#### FLOODING AND FLOOD DEFENCES

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

**Extract D: New houses and house conversions in areas of high flood risk, as a % of the total for each category of housing, UK, 1995 to 2008**



\* Note: a house conversion is a building previously used for another purpose, such as a factory or a warehouse, which has been converted into housing use.

Source: official statistics, 2009

#### Extract E: Flooding

Flooding sometimes results from market failure. One example is the negative externality caused by farmers and forestry companies. They cut down trees in hills surrounding flood plains (the low-lying land next to rivers). This increases the risk of floods, which are suffered as negative externalities by some of the households living on flood plains. Trees help to intercept and absorb rainwater so, by cutting them down, the risk of flooding increases. 1  
5

The increased risk of flooding results partly from global warming, but other factors are also involved. One has been government. Successive governments have allowed construction companies to build houses on flood plains. If the houses had not been built, fewer people would have suffered the negative externality. 10

Source: news reports, 2009

**Extract F: Flood defences**

A flood defence provides a collective barrier for everyone it protects against the damage that flooding can cause. Some economists say that flood defence is an example of a public good.	1
However, spending on new flood defences and on maintaining the large number of existing, though inadequate, defences has to be paid for by somebody. So, who should pay?	5
Should the households who suffer from flooding be the only ones who pay? Should people who never suffer from flooding also have to pay? Should it be the businesses that insure houses that are at risk from flooding who pay? Recent research by the Environment Agency showed that two in five households at risk did not know whether their insurance would cover them in a flood.	10
Should it be the government, and thus ultimately tax payers, who pay? Should it be farmers and forestry companies? Or should it be house-building companies? The government says that developers building homes should pay part of the money needed for flood defences.	15

Source: news reports, 2009

- 0 5** Define the term 'market failure' (**Extract E**, line 1) (5 marks)
- 0 6** Using **Extract D**, identify **two** significant points of comparison between the changes in the two types of house building over the period shown. (8 marks)
- 0 7** With the help of an appropriate diagram and the information in **Extract E**, explain why the negative externalities caused by the cutting down of trees may lead to market failure. (12 marks)
- 0 8** **Extract F** (lines 4–5) suggests that public goods such as flood defences have to be paid for by somebody.
- Evaluate the view that the provision and maintenance of flood defences should be paid for solely by the government. (25 marks)

**END OF QUESTIONS**

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