

General Certificate of Education Advanced Subsidiary Examination January 2010

Economics

ECON1

Unit 1 Markets and Market Failure

Wednesday 13 January 2010 1.30 pm to 2.45 pm

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 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.

M/Jan10/ECON1 ECON1

SECTION A: OBJECTIVE TEST

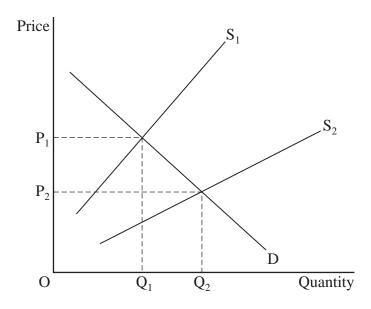
Answer all questions in Section A.

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 Which one of the following is a positive economic statement?
 - A Resources are best allocated via the market mechanism.
 - **B** Government spending on health care should be increased.
 - C An increase in interest rates will reduce house prices.
 - **D** Pollution is the most serious of all economic problems.
- 2 Two products are in joint supply when
 - **A** a fall in the output of one product is accompanied by a decrease in the output of the other product.
 - **B** an increase in the demand for one product reduces the supply of the other product.
 - C a rise in the quantity supplied of one product reduces the supply of the other product.
 - **D** a fall in the price of one product reduces the cost of supplying the other product.
- 3 Government failure always occurs when
 - **A** government intervention leads to a net welfare loss compared to the free market solution.
 - **B** social costs in a market are greater than social benefits.
 - C the government fails to intervene in the market.
 - **D** externalities exist in a market.

- 4 The marketing department of a company manufacturing and selling washing machines has found that its product has a price elasticity of demand equal to -0.75. This suggests that if the company raises the price of washing machines
 - **A** the quantity demanded will fall by 75%.
 - **B** the amount consumers spend on the product will increase.
 - C the quantity demanded will increase by 75%.
 - **D** the amount consumers spend on the product will fall.
- 5 The diagram below shows the market for a certain good.



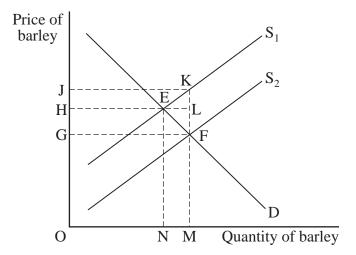
The rightward shift of the supply curve from S₁ to S₂ could be caused by

- **A** an increase in the demand for the good.
- **B** the creation of a monopoly by the firms in the industry supplying the good.
- C a reduction in the rate of Value Added Tax (VAT) applied to the good.
- **D** a decrease in the cost of the raw materials used in the production of a substitute good.
- 6 A market is defined as being in equilibrium when
 - **A** there is maximum output at minimum cost.
 - **B** prices are at their lowest possible level.
 - C there is no tendency for the market price to change.
 - **D** consumer satisfaction is maximised.

⁷ 'According to the Environment Secretary, the country has to "face up to the need to make some difficult choices" on reducing its growing mountain of waste. Household waste is growing at about 3% a year, creating a need for a doubling of waste disposal capacity by 2020. But landfill and incineration are unpopular, while the introduction of recycling and composting has been hampered by a lack of demand for recycled materials.'

It can be inferred from the data that

- **A** the opportunity cost of landfill is incineration.
- **B** greater composting of waste would reduce the annual rate of growth of waste.
- C the private cost of waste disposal is greater than the social cost.
- **D** prices for recycled materials are low.
- **8** The diagram below shows the effects of a subsidy shifting the supply curve for barley from S_1 to S_2 .



Total government spending on the subsidy is shown by the area

- A NELM.
- **B** GJKF.
- C GHLF.
- **D** GHEF.

9 The abolition of betting tax led to an estimated 37% increase in sales during the last quarter at Stanley's, a chain of betting shops. Betting tax was an indirect tax on each bet placed by customers.

Source: news reports, January 2002

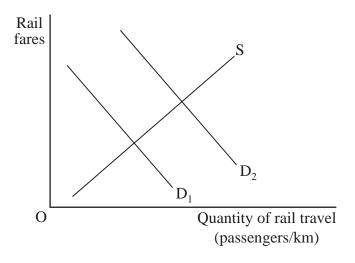
The abolition of betting tax can be shown by the

- **A** supply curve of bets shifting to the left.
- **B** supply curve of bets shifting to the right.
- C demand curve for bets shifting to the left.
- **D** demand curve for bets shifting to the right.
- A government grants producers a subsidy for a product. Which one of the following is likely to result in the largest increase in its sales?
 - A Supply is price elastic
 - **B** Supply is price inelastic
 - C Demand is price inelastic
 - **D** Demand is price elastic
- 11 For monopoly to persist over time in a market, it is most likely that
 - **A** the good produced is a necessity.
 - **B** the firm is charging high prices.
 - **C** there are barriers to entry.
 - **D** the firm is productively efficient.

Turn over for the next question

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12 The diagram below shows the demand for, and supply of, rail services.



The shift of the curve from D_1 to D_2 is most likely to result from

- **A** a decision by government to impose a tax on workplace car-parking.
- **B** a reduction in the tax imposed on the price of a litre of petrol.
- C a planned expansion of the government's railway-track building programme.
- **D** a government decision to increase subsidies for rail travel.
- 13 An economic good is one which
 - **A** has an opportunity cost in production.
 - **B** does not use up resources.
 - C is supplied competitively.
 - **D** makes a profit.
- 14 When money is used as a medium of exchange
 - **A** barter or swapping of goods is likely to become more common.
 - **B** trade is likely to increase.
 - C the relative prices of goods never change.
 - **D** specialisation and the division of labour are made more difficult.

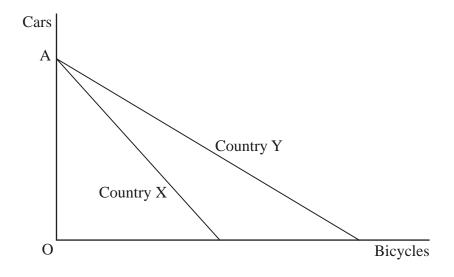
- 15 Which one of the following is most likely to lead to greater labour productivity in an industry?
 - **A** An increase in market demand
 - **B** A fall in wages
 - C An increase in the number of firms in the industry
 - **D** An increase in capital investment
- 16 The table below shows the distribution of total income in an economy in 2002 and 2008.

	Quintile groups of households					
Year	Bottom fifth	Next fifth	Middle fifth	Next fifth	Top fifth	
	%	%	%	%	%	
2002	10	14	18	23	35	
2008	7	11	17	24	41	

From the table it may be concluded that, over the period in question,

- **A** there was an improvement in resource allocation.
- **B** the distribution of income became more unequal.
- C there was a decline in the productivity of low-income households.
- **D** the distribution of wealth became more unequal.
- 17 Assuming the price elasticity of demand for a product is zero, any tax placed on the product will
 - **A** leave the position of the supply curve unchanged.
 - **B** be paid entirely by the producer.
 - **C** shift the demand curve to the left.
 - **D** raise the price of the product by the full amount of the tax.

18 The diagram below shows the production possibility boundaries for Countries X and Y.



The opportunity cost of cars in terms of bicycles

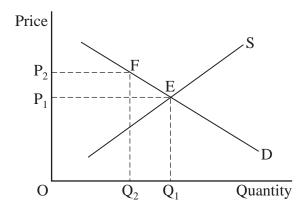
- **A** is greater for Country X than for Country Y.
- **B** is greater for Country Y than for Country X.
- C increases as more cars are produced.
- **D** increases as more bicycles are produced.

19 Market failure arises when

- **A** prices rise in response to excess demand.
- **B** positive externalities exist in consumption.
- C firms make zero profits.
- **D** costs increase as firms expand production.

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The diagram below illustrates the market for a good which has been the subject of government intervention. As a result, the market equilibrium has moved from point E to point F.

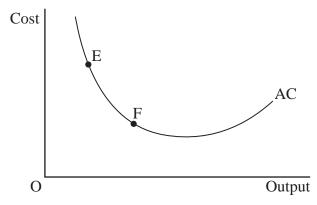


Which one of the following is most likely to be true?

The good is

- A a demerit good which has been taxed.
- **B** an agricultural good subject to a maximum price of OP₂.
- C a public good which is in short supply and has been rationed by the government.
- **D** an essential good which has been subsidised.
- 21 Cross elasticity of demand is defined as the
 - A responsiveness of the price of one good to a change in demand for another.
 - **B** responsiveness of demand for one good to a change in demand for another.
 - C responsiveness of demand for one good to a change in the price of another.
 - **D** responsiveness of the price of one good to a change in the price of another.
- Merit goods are likely to be under-provided in a free market economy because their
 - **A** private benefits exceed their social benefits.
 - **B** social benefits exceed their social costs.
 - C private costs exceed their private benefits.
 - **D** social benefits exceed their private benefits.

23 The diagram below shows the average cost (AC) curve of a firm.



The firm initially operates at point E. When the firm increases its size, it operates at point F. The change in the firm's average cost as it increases its output illustrates that the firm

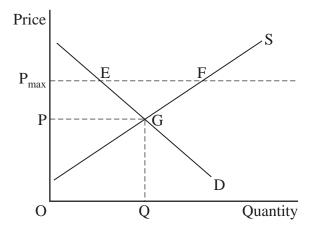
- A experiences more competition in its market.
- **B** is productively efficient.
- C benefits from economies of scale.
- **D** is profitable.

Which one of the following, A, B, C or D, distinguishes merit goods from public goods?

	Merit goods	Public goods	
A	Provided by governments	Provided by companies	
В	Provided at a cost	Provided at no cost	
C	Limited in supply	Have an infinite supply	
D	Consumption reduces availability	Consumption does not reduce availability	

A government decides to impose a maximum price of P_{max}.

25 The diagram below shows the supply of, and demand for, wheat with market equilibrium at G.



The most likely outcome would be

- **A** an excess supply of wheat of EF.
- **B** a shortage of wheat of EF.
- C the equilibrium price OP being maintained.
- **D** a reduction in price from P_{max} to P.

QUESTION 25 IS THE LAST QUESTION IN SECTION A

On your answer sheet ignore rows 26 to 50

TURN OVER FOR SECTION B

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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 MARKETS FOR AGRICULTURAL PRODUCTS

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

Extract A: Shares of world orange juice production

	Florida	Brazil	Rest of the world
Time period			
1970 – 1979	60.0%	26.2%	13.8%
1980 – 1989	36.6%	48.4%	15.0%
1990 – 1999	35.5%	50.0%	14.5%
2005	28.8%	55.0%	16.2%

Source: official statistics, 2006

Extract B: The price of orange juice

For people living in high-income countries, orange juice is a normal good. In 2006, the price of orange juice increased to its highest level for fourteen years. Speculators anticipated that supply would remain low throughout the year after hurricanes and dry weather had reduced the quantity of oranges harvested by the world's leading orange-producing regions.

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The price increased by nearly a third between January and May 2006 following predictions of a heavy hurricane season in Florida. The US Department of Agriculture predicted that Florida would produce 153 million fewer boxes of orange juice in 2006, a fifth less than had earlier been predicted. Florida is one of the two largest orange-producing regions in the world, second only to Brazil, where production also fell in 2006.

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Tropicana, the world's biggest orange juice seller, passed on some of the increased cost of production to customers, raising the price of orange juice by 7 per cent. A spokesman for the company said, "The profits on orange juice are so thin, we have had to raise prices."

The global consumption of orange juice increased by 6.8 per cent in 2006, which also contributed to the rising price of the commodity.

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Source: news reports, 2007

Extract C: Causes of recent food price increases

There are many reasons for the recent rapid rise in the price of food. Global demand for food products has been rising at 3.3% a year. Changes in diet in developing countries, population growth and the switching of agricultural land to the production of biofuel crops have all been contributing factors.

Supply constraints have also been important. Many experts believe that the fall in agricultural production that has resulted from bad weather and droughts is no accident. Rather, the underlying cause of falling production has been global warming.

What is undoubtedly true is that crop yields, which until recently rose rapidly, are now growing by less than demand. More chemical fertiliser has to be used to try to keep up yields, but fertiliser prices have risen rapidly, causing farmers to economise in their use.

Food hoarding has been another factor at work. People have bought more food than they need. They feared that supplies would run out and that food prices would then rise dramatically. In response to hoarding, various Asian governments restricted exports of agricultural goods in order to safeguard supplies for their own people.

In the United States, stores responded to the hoarding of foods such as rice by restricting the amount that customers could buy. However, there is no surer way of creating a buying panic than declaring a shortage. In such circumstances, prices can be driven well above their true long-term value.

Some say that higher prices are necessary to encourage people to economise and to be less wasteful. This reflects the rationing function of prices. However, others say that higher prices lead to much greater inequality between the world's rich and poor. Are rising food prices the result of markets working well, or do they reflect market failure? Should governments intervene? If so, how? And will this necessarily solve the problem?

Source: news reports, 2007/8

Question 26

26 (a) Define the term 'normal good' (**Extract B**, line 1).

(5 marks)

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- (b) Using **Extract A**, identify **two** significant points of comparison between the world market shares of orange juice producers over the period shown. (8 marks)
- (c) With the help of a demand and supply diagram, explain why the price of orange juice rose in 2006. (12 marks)
- (d) Using the data and your economic knowledge, evaluate the economic case **for** and **against** allowing market forces to determine food prices, without any intervention by governments.

 (25 marks)

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

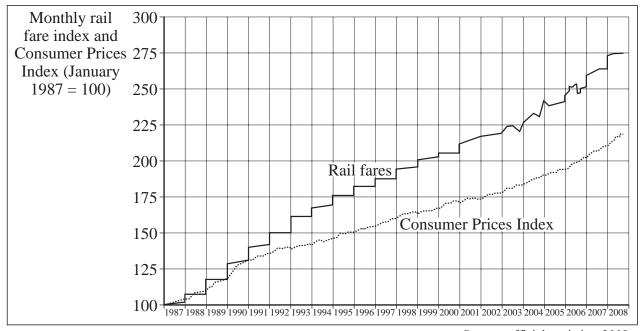
OR

Total for this question: 50 marks

27 THE PRICE OF RAIL TRAVEL

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

Extract D: Changes in average UK rail fares and in the average price of consumer goods and services



Source: official statistics, 2008

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Note: The Consumer Prices Index (CPI) measures the average price of consumer goods and services.

Extract E: UK rail fares in 2009

Rail passengers face fare rises in the new year. Unregulated and regulated fares are to increase by, on average, 6% and 7% respectively from 2 January 2009. Train companies said the extra revenue of £800m would be spent on improving rail services. The *Association of Train Operating Companies*' (ATOC) chief executive, Michael Roberts, said passengers would benefit from this improvement, while taxpayers would receive better value.

The Government's policy is to increase fares above the general rise in prices and to reduce the contribution from taxation. The changes are in line with Government policy to reduce railway subsidies by 40% between 2006–07 and 2013–14.

Anthony Smith, chief executive of watchdog *Passenger Focus*, said: "We cannot simply go on dumping costs onto the passenger in this way." One opponent of the fare increases said: "Passengers are putting up with crisis levels of overcrowding as well as rising fares, with the most packed trains running at over 170% capacity."

Source: news reports, 2008

Extract F: The relative prices of road and rail travel in cities

Rail fares, relative to prices facing road users, are too high. Road users in cities pay substantially less than the costs they create. The greater the congestion, the truer this is. Wherever there is congestion, the marginal social cost of road use will be greater than the actual cost to the individual road user. This is because the cost to the motorist of using the road includes only vehicle costs and time. The motorist does not have to take into account the costs imposed on other road users, and on pedestrians. As a result, too many people travel by road.

On the other hand, if rail fares are set to cover costs, they end up being overpriced compared to the prices that motorists pay for use of the roads. Resource misallocation results. Too few people travel by rail.

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One way of getting prices right would be to raise the price of urban road use until both public and private road transport covered their true cost. However, raising the cost of using roads to a level where marginal social costs are covered is likely to be politically difficult. In this case, it might be better to get the relative prices right by the opposite course of action: by subsidising rail fares.

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Source: academic research

Question 27

27 (a) Define the term 'social cost' (Extract F, line 3).

(5 marks)

- (b) Using **Extract D**, identify **two** significant points of comparison between changes in average UK rail fares and changes in the average price of consumer goods and services over the period shown.

 (8 marks)
- (c) With the help of an appropriate diagram, explain why 'too many people travel by road' (Extract F, lines 6–7). (12 marks)
- (d) Using the data and your economic knowledge, evaluate the economic case **for** and **against** governments subsidising rail fares. (25 marks)

END OF QUESTIONS

There are no questions printed on this page

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