Edexcel GCE

Economics

Advanced Subsidiary
Unit 1: Competitive Markets: How they work and why they fail

Wednesday 13 January 2010 – Afternoon
Time: 1 hour 30 minutes

You do not need any other materials.

Total Marks

Instructions

• Use black ink or ball-point pen.
• Fill in the boxes at the top of this page with your name, centre number and candidate number.
• Answer all the questions in Section A and one question from Section B.
• Answer the questions in the spaces provided – there may be more space than you need.

Information

• The total mark for this paper is 80.
• The marks for each question are shown in brackets – use this as a guide to how much time to spend on each question.
• Questions labelled with an asterisk (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.
• Calculators may be used.

Advice

• Read each question carefully before you start to answer it.
• Keep an eye on the time.
• Check your answers if you have time at the end.

Turn over
Section A: Answer all the questions in this section
You should spend 35 minutes on this section. Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

1 One reason for the existence of mixed economies is that

A the profit motive is always undesirable
B the free market economy always allocates resources efficiently
C competition between firms ensures consumer welfare is maximised
D the free market economy may lead to market failure.

Answer

Explanation

(Total for Question 1 = 4 marks)
A country has two economic sectors, agriculture and manufacturing. Its production possibilities are shown in the table. (You may use the last column in answering the question.)

It can be deduced that

A there is a constant opportunity cost as output changes

B the opportunity cost of producing manufactured goods decreases, the greater the output of manufactured goods

C the opportunity cost of producing agricultural goods increases, the greater the output of agricultural goods

D it is possible to achieve 60 million units of agricultural goods and 60 million units of manufactured goods simultaneously, given the existing technology and full employment of resources in the economy.

Answer

Explanation

(Total for Question 2 = 4 marks)
The table shows estimated price elasticities of demand for air travel for business and leisure customers of 'Air Canada', an airline company. It may be deduced from the data in the table that

A. demand is more price elastic for business travellers than leisure travellers

B. an increase in price for business travellers and a decrease in price for leisure travellers will increase total revenue

C. air travel is an inferior good

D. The cross elasticity of demand for business air travel with regard to a change in price of leisure air travel is negative.

Answer

Explanation

(Total for Question 3 = 4 marks)
The diagrams show the market for newly-built housing and the labour market for bricklayers. New housing is a normal good. The initial price of housing is $0P$ and the initial wage rate for bricklayers is $0W$. (You may annotate the diagrams in answering the question.)

A decrease in real incomes is likely to cause

A. an increase in the price of new housing and an increase in the wage rate for bricklayers
B. a decrease in the price of new housing and a decrease in the wage rate for bricklayers
C. an increase in the price of new housing and a decrease in the wage rate for bricklayers
D. a decrease in the price of new housing and an increase in the wage rate for bricklayers.

Answer

Explanation

(Total for Question 4 = 4 marks)
Which of the following forms of government intervention could correct market failure?

A  Rationing of public goods
B  Taxation of goods which yield high external benefits
C  Banning the consumption of luxury goods
D  Granting of subsidies to goods which yield high external benefits.

Answer

Explanation

(Total for Question 5 = 4 marks)
The diagram shows the European Union (EU) barley market, where a minimum price scheme operates. The EU guarantees to purchase any surplus output at the minimum price. Initially the minimum price is at 0P₁ and the EU purchases Q₁, Q₂ of barley. If the minimum price is increased to 0P₂, which of the following is correct?

(1) 
A  Producer surplus decreases
B  Excess demand for barley increases
C  EU spending on the minimum price scheme for barley increases
D  Output of barley decreases.

Answer

Explanation

(Total for Question 6 = 4 marks)
The cross elasticity of demand for tea is likely to be

A  negative following a change in the price of milk
B  positive following an increase in income since tea is an inferior good
C  negative following a change in the price of coffee
D  positive following a decrease in income since tea is a normal good.

Answer

Explanation

(Total for Question 7 = 4 marks)
Which of the following is likely to be the most effective measure for increasing the geographical mobility of labour?

A  A subsidy to firms that relocate to areas of high unemployment
B  An increase in the Job Seeker’s Allowance for the unemployed
C  An increase in the stamp duty tax on buying a house
D  Increased government provision of information on job vacancies in different areas of the UK.

Answer

Explanation

(Total for Question 8 = 4 marks)

TOTAL FOR SECTION A: 32 MARKS
Section B: Answer either Question 9 or Question 10.

If you answer Question 9 put a cross in this box ☐ .

Question 10 starts on page 22.

You should spend 55 minutes on this section.

9 Oil prices

Figure 1: The fluctuating price of oil, 2004–2009

(Source: http://markets.ft.com/tearsheets/performance.asp?s=GB@IB.1)

Extract 1 Soaring oil prices

Oil prices increased by more than 400 per cent between the start of 2004 and July 2008, from $25 to $139 a barrel, largely caused by rapid economic growth in China and speculative buying by traders intent on making quick profits. The major oil exporters were unable to respond by increasing production, due to a prolonged period of under-investment in refining capacity.

The high oil prices have led to an increase in oil exploration and investment in other regions. Many small oil fields in the North Sea that were once too small, too deep or too dangerous to explore are now being developed, but this could take many years to come on stream. Brazil and Azerbaijan have also invested heavily to raise future production.

(Source: adapted from ‘Explorers find new fields to conquer’, Dominic O'Connell, Sunday Times, 8th June 2008.)
Extract 2  The impact of rising fuel prices on the airline industry

There are fears that rising oil prices will worsen the global recession. Many industries are suffering, especially airlines. Hardly a week goes by without an airline company going bankrupt due to uncertainty over the costs of fuel and falling passenger demand. Douglas McNeill, of Blue Oar investments, believes that more than fifty European airlines are under threat as the industry faces its worst ever trading environment.

However, Willie Walsh, chief executive of BA, said “It’s a positive thing if some of these airlines go out of business as it will take capacity out of the market. Look at Alitalia – it should not be allowed to continue in business. It is propped up by state subsidies from the Italian government”.

Airlines are finding it difficult to raise fares when passenger demand is falling. Similarly, it is hard to cut costs in a safety conscious industry.

(Source: ‘Final call for more than fifty airlines’, David Robertson, Rachel Sylvester and Alice Thomson, The Times, 2nd August, 2008.)

Extract 3  The price of petrol

UK petrol prices increased by more than 33 per cent between the start of 2004 and July 2008, from 86 pence to 115 pence per litre – the highest in the European Union. This was due to the rising price of oil (from which petrol is derived) and higher taxes on petrol.

The surge in fuel prices led to growing protests across the UK as road haulage companies and motorists complained that the tax on petrol was too high. Many small transport firms faced ruin. The Freight Transport Association, a pressure group for road haulage firms, urged the government to cut taxes on road fuel. In response, the government has cancelled a planned tax increase of 2 pence per litre.

However, since July 2008 falling oil prices has taken some pressure off the government. Petrol prices have come back down to 89 pence per litre.

(Source: www.petrolprices.com 2009)
(Source: European Automobile Manufacturers Association 2008.)

(a) (i)  With reference to Figure 1 and Extract 1, explain why oil prices increased rapidly between the start of 2004 and July 2008. Use a demand and supply diagram in your answer.  

(a) (ii) With reference to Extract 1, discuss how the price elasticity of supply of oil might differ in the short run and long run.  

(b) With reference to Extract 2  
   (i)  examine the likely economic effects on airlines of rising oil prices.  
   *(ii) assess the likely economic effects of subsidies being given to Alitalia by the Italian government.  

(c) Giving examples from the consumption of oil, explain what is meant by the term external costs.  

*(d) Evaluate the likely economic effects of an increase in the tax on petrol in the UK.
(a) (i) With reference to Figure 1 and Extract 1, explain why oil prices increased rapidly between the start of 2004 and July 2008. Use a demand and supply diagram in your answer.

(6)
(a) (ii) With reference to Extract 1, discuss how the price elasticity of supply of oil might differ in the short run and long run.
(b) With reference to Extract 2

(i) examine the likely economic effects on airlines of rising oil prices. (8)
*(ii) assess the likely economic effects of subsidies being given to Alitalia by the Italian government.*
(c) Giving examples from the consumption of oil, explain what is meant by the term external costs.

(6)
*(d) Evaluate the likely economic effects of an increase in the tax on petrol in the UK. (12)*
10 Road congestion and road pricing in Great Britain

Figure 1: Road transport statistics

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of licensed private cars (millions)</td>
<td>21.2</td>
<td>23.9</td>
<td>26.5</td>
</tr>
<tr>
<td>Private cars vehicle traffic (billion vehicle km travelled)</td>
<td>359.9</td>
<td>382.8</td>
<td>402.4</td>
</tr>
<tr>
<td>Public roads in use (km)</td>
<td>387,000</td>
<td>391,000</td>
<td>398,000</td>
</tr>
</tbody>
</table>

Figure 2: The cost of travel by motor vehicle, rail and bus

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motoring (cars)</td>
<td>100</td>
<td>114.8</td>
<td>119.0</td>
</tr>
<tr>
<td>Bus fares</td>
<td>100</td>
<td>120.2</td>
<td>146.6</td>
</tr>
<tr>
<td>Rail fares</td>
<td>100</td>
<td>116.6</td>
<td>136.3</td>
</tr>
<tr>
<td>Retail Price Index</td>
<td>100</td>
<td>111.5</td>
<td>129.7</td>
</tr>
</tbody>
</table>

Figure 3: Household income and bus travel

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average gross weekly household income (£ current prices)</td>
<td>£397</td>
<td>£541</td>
<td>£615</td>
</tr>
<tr>
<td>Bus travel (billion vehicle km travelled)</td>
<td>5.0</td>
<td>5.2</td>
<td>5.4</td>
</tr>
</tbody>
</table>

(Source of Figures 1–3: Annual Abstract of Statistics 2008.)
Extract 1  Case for a national road pricing scheme

A national road pricing scheme could reduce congestion on Britain’s roads by fifty per cent according to a government report on ‘The future of Britain’s transport system’ published today. The Chair of the report, Sir Rod Eddington, said charging motorists could reduce carbon emissions and save the economy up to £28 billion in wasted time delays by 2025.

It recommended that motorists pay more at peak times and in congested areas, up to £1.30 per mile. The funds raised could then be re-invested into improving the nation’s road and rail network, particularly in heavily congested areas.

A national scheme would operate by installing satellite boxes in each car, with varying rates set at a ‘per mile’ basis for all roads depending on congestion and time of day.

Sir Rod Eddington commented: “I am in no doubt that by setting prices to reflect both the congestion and environmental costs of travel, the transport system can be used more efficiently; it will support UK competitiveness and will contribute to reduced emissions. I believe there is no attractive alternative to road pricing. Without a widespread scheme by 2015, Britain will require very significantly more road transport infrastructure”.


Extract 2  Case against road pricing

The government has postponed plans for a national road pricing scheme following an online petition with 1.8 million signatures objecting to it. The Minister for Transport, Ruth Kelly, stated that such a scheme raised concerns over privacy and fairness. Road pricing would affect motorists in different ways according to their income. There is also a huge cost involved and some uncertainty over the effectiveness of implementing a nationwide road pricing programme. Currently, more than a million motorists evade paying road tax.

Instead, the government favours car-sharing lanes, a tax on workplace parking and converting hard shoulders on motorways into extra lanes. According to the Department for Transport, converting hard shoulders into motorway lanes costs just £6 million per kilometre compared to £25 million per kilometre for widening schemes. A recent pilot scheme which used the hard shoulder on the M42 motorway proved to be successful.

Road pricing has not been completely abandoned. The government intends to introduce smaller schemes for selected lanes on motorways by 2015.

(a) With reference to the data, explain two likely reasons for the change in the number of licensed private cars between 1996 and 2006.

(b) With reference to Figure 1 and other information, examine the likely effectiveness of building more roads as a means of reducing road congestion.

*(c) Evaluate the case for a national road pricing scheme to reduce road congestion.

(d) With reference to lines 8–9 of Extract 2, assess one alternative measure the government might undertake to reduce road congestion.

(e) Using the data in Figure 3, analyse whether bus travel is a normal or an inferior good.

*(f) Evaluate the likely benefits of an increased subsidy for bus and rail travel. Use an appropriate diagram to support your answer.
(a) With reference to the data, explain two likely reasons for the change in the number of licensed private cars between 1996 and 2006.
(b) With reference to Figure 1 and other information, examine the likely effectiveness of building more roads as a means of reducing road congestion. (6)
*(c) Evaluate the case for a national road pricing scheme to reduce road congestion. (12)*
(d) With reference to lines 8–9 of Extract 2, assess one alternative measure the government might undertake to reduce road congestion.

(8)
(e) Using the data in Figure 3, analyse whether bus travel is a normal or an inferior good.

(6)
*(f) Evaluate the likely benefits of an increased subsidy for bus and rail travel. Use an appropriate diagram to support your answer. *(10)