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

Monday 11 May 2015 – Morning
Time: 1 hour 30 minutes

You do not need any other materials.

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 questions in Section A and one question in 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 as 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.
- Check your answers if you have time at the end.
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. Output of capital goods

The diagram shows a production possibility frontier for an economy which is currently operating at point X. Which one of the following is true?

A. The opportunity cost of producing 90 units of consumer goods is 20 capital goods
B. Moving to point Y will decrease the rate of economic growth compared to point X
C. The opportunity cost of increasing the output of capital goods is constant
D. Moving to point Z will increase current living standards

Answer [ ]
Explanation

(Total for Question 1 = 4 marks)
The graph shows the price of gold per Troy Ounce between October 2012 and August 2013. Which one of the following is a possible reason for the trend shown over the period?

A  An increase in demand for gold jewellery in India and China
B  The sale of gold reserves by several European Central banks including Cyprus and Germany
C  An increase in the cost of machinery used in South African gold mining
D  Speculative buying of gold following expectations of rising inflation

Answer  

(Source: http://www.indexmundi.com/commodities/?commodity=gold&months=60)
Explanation
You may use a demand and supply diagram in your answer.

(Total for Question 2 = 4 marks)
The diagram shows the market for DVDs. A decrease in demand from $D_1$ to $D_2$ will cause a fall in

A  producer surplus to $P_2 J Y$
B  consumer surplus to $L X P_1$
C  producer surplus to $P_2 Y K$
D  consumer surplus to $0 P_2 Y Q_2$

Answer  


Explanation

(Total for Question 3 = 4 marks)
4. A jewellery retailer reduces the price of designer bracelets from £200 to £180 each. As a result, quantity demanded rises from 20 to 25 per month. The best estimate of price elasticity of demand for this jeweller’s designer bracelets is

\[
\begin{align*}
&\text{A} \quad -2.5 \\
&\text{B} \quad -1.25 \\
&\text{C} \quad +0.4 \\
&\text{D} \quad +2.5
\end{align*}
\]

**Answer**

- [ ]

**Explanation**

(Total for Question 4 = 4 marks)
The Institute for Fiscal Studies reported that between 2007 and 2012, average real incomes fell by 7.5% for families with young children. Over the same period it found that these families reduced their expenditure on fruit and vegetables but increased it on processed foods which contain high levels of fat and sugar.

Other things being equal, this information suggests that

A the change in quantity of fruit and vegetables demanded in response to a change in price of processed foods is negative
B fruit and vegetables are normal goods and processed foods are inferior goods
C the price of fruit and vegetables has risen more slowly than the price of processed foods
D fruit and vegetables are inferior goods and processed foods are normal goods

Answer

Explanation

(Total for Question 5 = 4 marks)
The diagram shows the effect of a government subsidy to producers of solar power. The total government expenditure on the subsidy will be

A \( 0P_2WQ_1 \)
B \( P_2P_e Zw \)
C \( P_1VZP_e \)
D \( P_1VWP_2 \)

Answer
Explanation

(Total for Question 6 = 4 marks)
7 In September 2013, clothing workers in Bangladesh demanded an increase in the industry minimum wage from $38 to $100 a month. Such an increase in the minimum wage is likely to

(1)

A affect the level of employment among clothing workers
B decrease the supply of labour in the clothing industry
C increase the demand for labour in the clothing industry
D decrease the price of clothing in shops

Answer

Explanation
You may use a supply and demand diagram in your answer.

(Total for Question 7 = 4 marks)
8 Market failure may arise in an economy when

A train fares rise in response to an excess demand for rail travel
B government taxes on petrol reduce the number of motor vehicle journeys
C external benefits from bus travel are ignored by the price mechanism
D loss making taxi firms exit the market

Answer

Explanation
You may use a supply and demand diagram in your answer.
SECTION B

Answer EITHER Question 9 OR Question 10

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

Question 10 starts on page 28.

You should spend 55 minutes on this section.

9 The UK Housing Market

Figure 1 Annual percentage increase in share prices of the seven largest house builders (to November 2013)

<table>
<thead>
<tr>
<th>Company</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkeley Group</td>
<td>29.6</td>
</tr>
<tr>
<td>Bovis Homes</td>
<td>33.8</td>
</tr>
<tr>
<td>Bellway</td>
<td>43.5</td>
</tr>
<tr>
<td>Redrow</td>
<td>58.4</td>
</tr>
<tr>
<td>Taylor-Wimpey</td>
<td>59.5</td>
</tr>
<tr>
<td>Barratt Developments</td>
<td>60.1</td>
</tr>
<tr>
<td>Persimmon</td>
<td>63.3</td>
</tr>
</tbody>
</table>

(Source: Financial Times, 1 November 2013)
Figure 2 Average house prices, annual earnings and unemployment rates by selected regions in UK, 2013

<table>
<thead>
<tr>
<th>Region</th>
<th>Average house price</th>
<th>Average annual earnings</th>
<th>Unemployment rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>£149 000</td>
<td>£25 584</td>
<td>10.4</td>
</tr>
<tr>
<td>Yorks and Humber</td>
<td>£167 000</td>
<td>£25 572</td>
<td>8.9</td>
</tr>
<tr>
<td>North West</td>
<td>£166 000</td>
<td>£26 416</td>
<td>8.3</td>
</tr>
<tr>
<td>West Midlands</td>
<td>£188 000</td>
<td>£26 936</td>
<td>9.8</td>
</tr>
<tr>
<td>East of England</td>
<td>£257 000</td>
<td>£31 096</td>
<td>6.7</td>
</tr>
<tr>
<td>South East</td>
<td>£304 000</td>
<td>£35 552</td>
<td>5.8</td>
</tr>
<tr>
<td>London</td>
<td>£437 000</td>
<td>£39 312</td>
<td>8.3</td>
</tr>
<tr>
<td>UK</td>
<td>£247 000</td>
<td>£29 536</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Extract 1 Rising house prices

Average house prices in the UK reached their highest level ever at £247 000 in August 2013, exceeding the previous peak in January 2008. In the 12 months to August 2013 UK house prices rose by 3.8%. However, many regional variations were recorded with the highest increase in London. The rise of 8.7% in London prices was largely a result of increased purchases from foreign buyers.

The rise in house prices follows a sustained period of low interest rates for borrowers as well as the success of the government’s ‘Help to Buy’ scheme. This scheme enables buyers of new-build homes to borrow up to 95% of the house value. In October 2013, it was extended to include borrowing on all types of properties up to the value of £600 000. Banks are more willing to lend as the government guarantees up to 15% of the house loan as an insurance policy in case of borrowers being unable to repay.

(Source: adapted from ‘Home-buying at its highest for five years’, Juliet Samuel, The Times, 11 October 2013)

Extract 2 Supply constraints in house building

Capacity constraints have affected house building over recent months according to a Bank of England report, providing evidence of growing demand and rising prices in the sector. Skills shortages have appeared after many building workers left the industry during the recession. Delivery time for bricks and other construction materials have also increased, forcing firms to look to imports. Brick-making firms are reluctant to invest in new kilns without the assurance of a continuous supply of reasonably priced energy.

However, the Home Builders Federation pointed out that suppliers have responded to short term pressures through increased training schemes and also gave examples of brick makers re-opening plants.

(Source: adapted from ‘House builders provide blot on improved landscape’, Patrick Hosking and Kathryn Hopkins, The Times, 24 October, 2013)

Extract 3 Buildings are key to tackling carbon emissions

Any serious attempt to tackle climate change must deal with the problem of poorly insulated buildings. More than 40% of carbon emissions in developed countries come from heating, cooling and providing power to homes and offices. Cutting emissions from UK buildings by just 25% would have the same impact as taking every car off the road.

Carbon emissions can be significantly reduced through better insulation, more efficient heating boilers and triple glazing of windows for new build and existing homes. The initial costs of implementing energy efficiency schemes are high. However, reductions in gas and electricity bills mean that energy efficiency work can pay for itself in as little as five years.

(Source: adapted from ‘Buildings are key to tackling emissions’, David Fickling, Financial Times, 25 November 2009)
(a) With reference to Extract 1, explain **two** likely reasons why UK house prices increased in the 12 months to August 2013.  

(6)

(b) With reference to Figure 1, explain the likely impact of rising house prices on the share prices of major house builders.  

(4)

(c) With reference to Extract 2 and your own knowledge, discuss whether the supply of **new** housing is likely to be price elastic or price inelastic.  

(10)

*(d)* With reference to the first paragraph of Extract 1, the data in Figure 2 and your own knowledge, discuss the likely reasons for house price differences between London and **one** other region.  

(14)

*(e)* With reference to Extract 3 and your own knowledge, examine the case for reducing carbon emissions from new-build homes.  

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(14)
If you answer Question 10 put a cross in the box □.

10 The London Crossrail project

Figure 1 The London Crossrail route

![Diagram of the London Crossrail route](source: Google images)

Extract 1 London Crossrail is Europe’s largest infrastructure project

A government-funded East-West rail link across London, known as Crossrail, is due to open in 2018. It involves building 73 miles of railway line to link Reading in the west to Shenfield in the east. It includes 38 railway stations and 26 miles of tunnels under London. London’s rail capacity is set to increase by 10% and overcrowding on the existing transport routes should reduce.

Crossrail is being built to cope with London’s growing population and to support further economic development of the capital city. An estimated 200 million passenger journeys per year will be made on Crossrail. Each train will be 200 metres long and capable of carrying 1 500 passengers. The project has coincided with the tendency for companies to move back into central London, reversing a 20 year trend.

Rail travel times are set to come down, for example, Heathrow Airport to the City of London will fall from 55 minutes to 32 minutes. The project will also bring a further 1.5 million people within a 45 minute commute to the major employment centres in London. There is now a discussion about building Crossrail 2 to improve links between north and south London.

(Source: http://www.crossrail.co.uk/benefits/)
Extract 2 Employment at London Crossrail

Over 9 000 people are directly employed on the project across 40 construction sites. Another 41 000 jobs have been created indirectly outside London, including the supply of thousands of tonnes of steel from Northern England and construction equipment from the Midlands.

However, at the start of construction in 2009, Crossrail required some 1 200 specialist workers with underground tunnelling skills but were only able to recruit 700 and these had an average age of 55 years. In response to the labour shortage, Crossrail set up a £15 million Tunnelling Academy to train the remaining specialist workers required for the project. This may prove useful for possible future transport infrastructure projects such as the controversial High Speed 2 rail line (HS2) between London and the north.

Terry Morgan, the boss of Crossrail, warned that Britain’s construction skills base will be put at risk without a steady flow of large-scale infrastructure projects. Government spending on infrastructure projects fell by 50% in the first quarter of 2013, creating uncertainty over future employment for specialist construction workers and investment by firms.

(Source: adapted from ‘Crossrail chief warns infrastructure schemes vital to skills base’; James Pickford, Financial Times, 24 June 2013)

Extract 3 London Crossrail is unfair to taxpayers

Central and local government taxpayers are paying for most of the £14.8 billion cost of the Crossrail project. However, most taxpayers will receive little benefit from the rise in domestic and commercial property values. Only those properties near the stations will experience an increase in value as a result of Crossrail. House prices near the stations have already risen by 20% more than the average, and commercial values along the route are set to rise by at least 10%. The project could lead to an increase in regional inequality.

(Source: adapted from http://www.transport-network.co.uk/Taxpayers-lose-out-on-millions-due-to-Crossrails-crude-funding-structure/9645#.UqOAJxZFAdU)
(a) With reference to the titles of Extract 1 and Extract 3, distinguish between positive and normative statements.

(b) With reference to Extract 2, analyse the likely impact of training programmes such as the Tunnelling Academy on the occupational mobility of labour.

(c) With reference to Extract 1, assess the likely impact of the Crossrail project on the geographical mobility of labour.

*(d) ‘An estimated 200 million passenger journeys per year will be made on Crossrail’ (Extract 1, lines 7 and 8). Discuss the factors which might influence the level of passenger demand for Crossrail services.

*(e) Assess whether large-scale projects, such as Crossrail, might result in government failure.
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