You do not need any other materials.

Edexcel GCE

Economics

Advanced

Unit 3: Business Economics and Economic Efficiency

Tuesday 22 January 2013 – Morning

Time: 1 hour 30 minutes

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 72.
• 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.
• Keep an eye on the time.
• 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. ArcelorMittal is the world’s biggest steelmaker. It uses a large quantity of coal in its production process. In October 2011 it made a bid to acquire Macarthur Coal in Australia. The proposed takeover bid was likely to have been motivated by a desire to achieve the benefits of

A. horizontal integration
B. increased contestability
C. decreased concentration
D. backwards vertical integration
E. forwards vertical integration

Answer: _______

Explanation: ____________________________________________________________

(Total for Question 1 = 4 marks)
Sally’s farm grows and sells potatoes and she aims to maximise profit. She believes that the market price of potatoes will not be affected by changes in her farm’s output. She will

A sell as much as she can produce in the long run
B become a monopolist, because she can supply the whole market
C produce at the level of output where marginal cost equals price in the short run
D produce at the level of output where average cost equals price in the short run
E produce at the level of output where average fixed costs equals marginal revenue

Answer

Explanation

(Total for Question 2 = 4 marks)
3 Which of the following characteristics is shared by a monopolist and a firm operating under conditions of monopolistic competition?

(1)

A Low or no barriers to entry to the industry
B Productive efficiency in the long run
C Some degree of price setting power
D Supernormal profits in the long run
E Allocative efficiency in the long run

Answer

Explanation

(Total for Question 3 = 4 marks)
The diagram shows the supply, demand and marginal revenue schedules for parking spaces in a local government car park.

What single price will ensure that the local government maximises total revenue?

A  Zero
B  0J
C  0K
D  0F
E  0W

Answer  

(1)
Explanation

(Total for Question 4 = 4 marks)
Which of the following is the best example of price discrimination?

A  A bus company charges less than a train company for a single ticket from Oxford to London

B  An airline charges less for economy seats than for business seats

C  A café charges less for a cup of tea than a cup of coffee

D  A nightclub charges women less than men for admission

E  A university charges higher fees for Chemistry than for History undergraduate degrees

Answer

Explanation

(Total for Question 5 = 4 marks)
In October 2011 Boeing’s 787 Dreamliner aircraft entered commercial operation. The firm announced that its fixed costs of development had been much higher than expected. Assuming the firm is profit maximising, what impact is an increase in fixed costs likely to have on output, price and profit?

<table>
<thead>
<tr>
<th>Output</th>
<th>Price</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>No change</td>
<td>No change</td>
</tr>
<tr>
<td>B</td>
<td>No change</td>
<td>No change</td>
</tr>
<tr>
<td>C</td>
<td>No change</td>
<td>Rise</td>
</tr>
<tr>
<td>D</td>
<td>Fall</td>
<td>Rise</td>
</tr>
<tr>
<td>E</td>
<td>Fall</td>
<td>Rise</td>
</tr>
</tbody>
</table>

Answer

Explanation
A firm cuts the price of its product. As a result, total revenue falls and marginal cost rises. Over this range of output, it can be inferred that

A  the price elasticity of demand is relatively elastic and there are diseconomies of scale

B  the price elasticity of demand is relatively inelastic and there are diminishing returns to a variable factor of production

C  the price elasticity of demand is unitary and there are diseconomies of scale

D  the firm's marginal profit would increase

E  the firm is making a loss

Answer  

Explanation

(Total for Question 7 = 4 marks)
Carphone Warehouse, a phone retailer, and TalkTalk, a broadband provider, were previously jointly owned. In March 2010 they separated into two companies and were listed individually on the stock exchange. A potential benefit of this demerger is that:

A. Carphone Warehouse can reduce long run average costs
B. Carphone Warehouse can gain technical economies of scale
C. TalkTalk gains an exclusive retail outlet
D. Consumers benefit from a decrease in contestability
E. There will be an increase in external economies of scale

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 24.

You should spend 55 minutes on this section.

9 Government intervention in markets

Number of UK Private Finance Initiative (PFI) projects per year

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>70</td>
</tr>
<tr>
<td>1995</td>
<td>60</td>
</tr>
<tr>
<td>2000</td>
<td>50</td>
</tr>
<tr>
<td>2005</td>
<td>40</td>
</tr>
<tr>
<td>2010</td>
<td>30</td>
</tr>
</tbody>
</table>

Value of UK Private Finance Initiative (PFI) projects per year

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital value (£billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>70</td>
</tr>
<tr>
<td>1995</td>
<td>60</td>
</tr>
<tr>
<td>2000</td>
<td>50</td>
</tr>
<tr>
<td>2005</td>
<td>40</td>
</tr>
<tr>
<td>2010</td>
<td>30</td>
</tr>
</tbody>
</table>

Figure 1

Extract 1 The private finance initiative is divisive

The private finance initiative (PFI) introduced in the UK in 1992 has delivered 700 major items of British infrastructure and services, raising £70 billion of capital for major projects such as new hospitals, schools, prisons and new roads. These services are being provided now, to be paid for by taxpayers in the future. In the PFI model, the private sector takes the risk – that is, it is intended that the PFI firm pays fines or the losses if the project is delivered late or over budget, or fails to perform once up and running. There is some proof that PFI works: for example, the Olympic Delivery Authority completed construction of the venues for the 2012 Games under budget. However, if the costs of the project go above the contracted amount, the private sector pays the difference. For example, McAlpine lost £100 million on the Dudley hospital project in the West Midlands.

Some economists are asking whether PFI is proving value for money. Private sector borrowing costs more than government borrowing. These higher interest rates add to the capital cost of PFI projects. Payment for these PFI projects – including their running and maintenance – will cost taxpayers £240 billion up to 2050. London’s Jubilee line underground extension went way over budget and the tax payer had to meet much of the cost because of the collapse of contractor Metronet. FireControl, a PFI to replace England’s 46 emergency call centres with nine regional sites, had technical problems. This meant the scheme was cancelled and £342 million of taxpayers’ money is committed to paying rent on eight empty sites that will never be used. Once a PFI contract is signed, it is almost impossible to get out of it except at enormous expense.

Other forms of government intervention in markets, for example deregulation in postal services and price capping in the water industry, might be more effective than PFI at promoting competition and economic efficiency.

(Sources: adapted from © The Financial Times Ltd, Nicholas Timmins, 7 August 2011 and © Guardian News and Media Ltd, Jamie Doward, 12 June 2011)
Extract 2 Healthcare suffers under PFI

Andrew Lansley, the government’s Health Secretary, said he has been contacted by 22 health service trusts which claim their “clinical and financial stability” is being undermined by the costs of their PFI contracts. This includes National Health Service (NHS) trusts in London, such as South London Healthcare, Barking, and others including Oxford Radcliffe, Plymouth and North Bristol trusts. Between them the trusts run more than 60 hospitals which care for 12 million patients.

The total cost of the PFI schemes is often far more than the value of the assets. In one example, a hospital in Bromley, south east London, will cost the NHS £1.2 billion, more than 10 times what it is worth. As a result, Mr Lansley says, the 22 trusts “cannot afford” to pay for their schemes, which in total are worth more than £5.4 billion. The annual payments have risen sharply because PFI costs are linked to inflation. There are increasing demands on the health service while NHS budgets are strictly controlled.

Hospitals are having to make substantial cuts to pay the PFI costs. There is evidence that waiting lists for non-urgent operations have begun to rise as hospitals delay treatment to save money, and patient care has suffered. The NHS is abandoning its £12.7 billion computerised patient record and booking scheme project, the National Programme for IT.

Companies who run PFI schemes earn profit margins of up to 71% on the projects, in what some economists call an uncontestable market, once the contract is agreed. Now there is growing pressure from MPs and ministers to return some of their “supernormal profits” and renegotiate their PFI contracts.

(Source: adapted from © The Telegraph Media Limited Robert Winnett, 21 Sep 2011)

(a) Using examples from the data, explain what is meant by the private finance initiative (PFI), (Extract 1, line 1).

(b) Discuss how PFI operators can earn supernormal profits (Extract 2, line 22). Use a monopoly diagram to support your answer.

*(c) In the light of the information provided, assess the likely benefits of PFI schemes to consumers.

*(d) Apart from PFI, discuss ways in which government intervention might promote economic efficiency in markets.
(a) Using examples from the data, explain what is meant by the *private finance initiative (PFI)*, (Extract 1, line 1).
(b) Discuss how PFI operators can earn *supernormal profits* (Extract 2, line 22). Use a monopoly diagram to support your answer.

(8)
*(c) In the light of the information provided, assess the likely benefits of PFI schemes to consumers.*

(12)
*(d) Apart from PFI, discuss ways in which government intervention might promote economic efficiency in markets.*
10 Brand loyalty in contrasting industries

Extract 1 Know your customers

Long before focus groups, marketing surveys or loyalty programmes, businesses knew their customers because they saw them face to face. The corner shop owner knew who liked a particular brand of jam and kept it in stock for them. He knew when people tended to come in and kept his shop open to accommodate them. Stuart Aitken, the chief executive of Dunnhumby, a leading force in the growing field of data analysis, says he keeps this vision in mind as he uses the latest technology to provide companies with insights about their customers. “This is back to basics,” he says. “What we’re seeing is that businesses have driven down costs, they’ve got economies of scale, but they’ve forgotten who their customer is. What we do is allow businesses to reconnect with their customers, to become the corner store on a large scale.”

As data management becomes more sophisticated and gives clearer pictures of customer behaviour, it is increasingly useful for business decision-making. The pioneers have reaped tremendous rewards. Tesco depended so heavily on the customer profiles delivered by Dunnhumby that it ended up buying the company. Dunnhumby used the data collected by Tesco’s Clubcard programme to build detailed customer profiles. It now has detailed knowledge of 80% of its 15 million customers. Dunnhumby’s work is widely credited with helping Tesco open a wide lead over its UK supermarket rivals.

(Source: adapted from © The Financial Times Ltd, Philip Delves Broughton, 7 March 2011)
Extract 2 The hairdressing industry

70% of a hairdresser’s customers can be described as fully loyal – customers who will continue to go to a particular stylist, even if there are cheaper or more convenient alternatives available. Research at the University of Melbourne in 2010 found that women are loyal to a particular stylist and, when a stylist leaves a salon, the customers are also likely to go elsewhere, creating problems for the business. The research suggests that devising loyalty programmes, cutting prices or offering short-term financial inducements to customers may consequently be a waste of time. Customer loyalty is directly related to retaining employees says the research, something which is within the control of the service manager or owner. “Keep hold of your good staff and you are far more likely to prevent the customers you can’t afford to lose from moving on,” says Professor Lester Johnson.

(Source: adapted from © The Financial Times Ltd, Linda Anderson, 12 February 2010)

Figure 1 Four-firm concentration ratios in selected industries, 2011

<table>
<thead>
<tr>
<th>Industry</th>
<th>Four-firm Concentration Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td>76.1%</td>
</tr>
<tr>
<td>Hairdressers*</td>
<td>Less than 5%</td>
</tr>
</tbody>
</table>

*excluding franchise
(Source: © The Press Association, Reproduced with Kind Permission)

(a) Using evidence from Extract 1, explain one reason for the takeover of Dunnhumby by Tesco.

(b) In the light of the information provided in the first paragraph of Extract 2, assess the likely profitability of a firm in the hairdressing industry. Use diagrammatic analysis to support your answer.

(c) With reference to an industry of your choice, examine strategies firms might use to increase consumer loyalty. Use game theory to support your answer.

(d) Assess the reasons why a few large firms dominate the food retailing industry but not the hairdressing industry.
(a) Using evidence from Extract 1, explain one reason for the takeover of Dunnhumby by Tesco.
(b) In the light of the information provided in the first paragraph of Extract 2, assess the likely profitability of a firm in the hairdressing industry. Use diagrammatic analysis to support your answer.

(8)
*(c) With reference to an industry of your choice, examine strategies firms might use to increase consumer loyalty. Use game theory to support your answer.*

(12)
*(d) Assess the reasons why a few large firms dominate the food retailing industry but not the hairdressing industry.*

(16)