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Other names

**Pearson**  
**Edexcel GCE**

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# Economics

**Advanced**

**Unit 3: Business Economics and Economic Efficiency**

Monday 20 June 2016 – Afternoon

**Time: 1 hour 30 minutes**

Paper Reference

**6EC03/01**

**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** 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.
- Check your answers if you have time at the end.

Turn over ►

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**PEARSON**





- 3 A firm faces the following cost and revenue schedule. (Spaces have been left for your working.)

Output per day	Total revenue (£)	Average revenue/ Marginal revenue (£)	Total cost (£)	Average cost (£)	Marginal cost (£)
0	0		12	–	–
1	10		22	22	10
2	20			14	
3	30			11	
4	40			10	
5	50			10	
6	60			13.5	

The firm is attempting to maximise profit. From this information it can be concluded that the firm is operating under conditions of

(1)

- A monopolistic competition in the short run and will operate at 4 units
- B monopolistic competition in the long run and will operate at 5 units
- C perfect competition making a supernormal profit at an output of 1 unit
- D perfect competition making a supernormal profit at an output of 3 units
- E perfect competition making normal profit at an output of 5 units

Answer

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Explanation

(3)

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**(Total for Question 3 = 4 marks)**



4 A firm facing a downward sloping demand curve changes its pricing policy from revenue maximising to profit maximising. Which of the following shows the effect on the equilibrium price and output?

(1)

- |   | Price     | Output |
|---|-----------|--------|
| A | rise      | rise   |
| B | rise      | fall   |
| C | unchanged | fall   |
| D | fall      | rise   |
| E | fall      | fall   |

Answer

Explanation (3)

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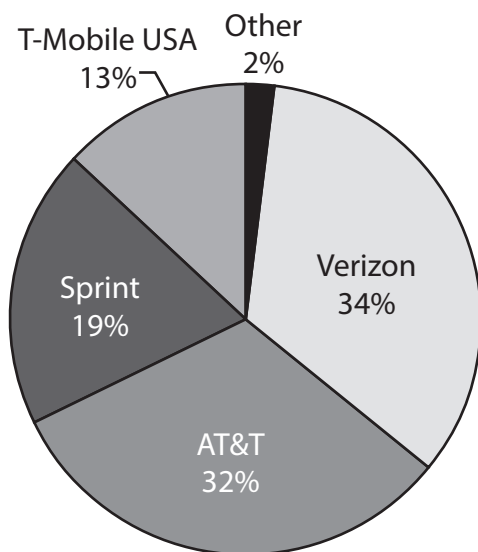
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**(Total for Question 4 = 4 marks)**



5 The diagram shows the market share of the cell [mobile] phone market in the USA.



In August 2014, after a failed attempt at a merger, a price war broke out between T-Mobile USA and Sprint. Under which market conditions are such price wars most likely to occur?

(1)

- A Monopolistic competition in the short run
- B Monopolistic competition in the long run
- C Markets where there is a low concentration ratio
- D A low degree of interdependence between firms
- E Oligopoly

Answer

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Explanation

(3)

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**(Total for Question 5 = 4 marks)**





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**QUESTION 7 BEGINS ON THE NEXT PAGE.**



- 7 The following table shows the number of new technology 'Tech Companies' based at East End Tech City, a technology cluster located in East London.

Year	Number of Tech Companies
2009	15
2010	85
2011	200
2012	5 000
2013	15 600

(Source: UHY Hacker Young, <http://www.uhy-uk.com/news-events/news/londons-silicon-roundabout-remains-top-area-uk-start-ups/>)

The data suggest that Tech Companies in East London are experiencing

(1)

- A external economies of scale
- B high commercial barriers to entry
- C financial diseconomies of scale
- D diminishing marginal returns
- E an increasing level of merger activity

Answer

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Explanation

(3)

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**QUESTION 9 BEGINS ON THE NEXT PAGE.**



**SECTION B**

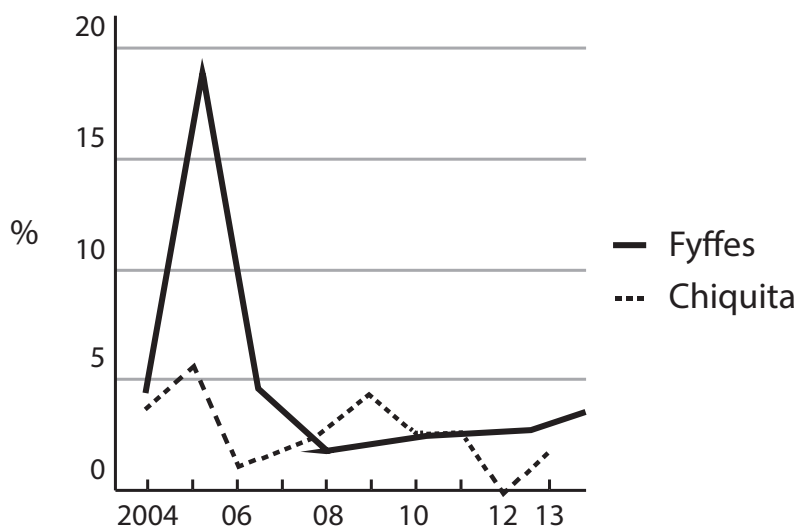
**Answer EITHER Question 9 OR Question 10.**

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

**You should spend 55 minutes on this section.**

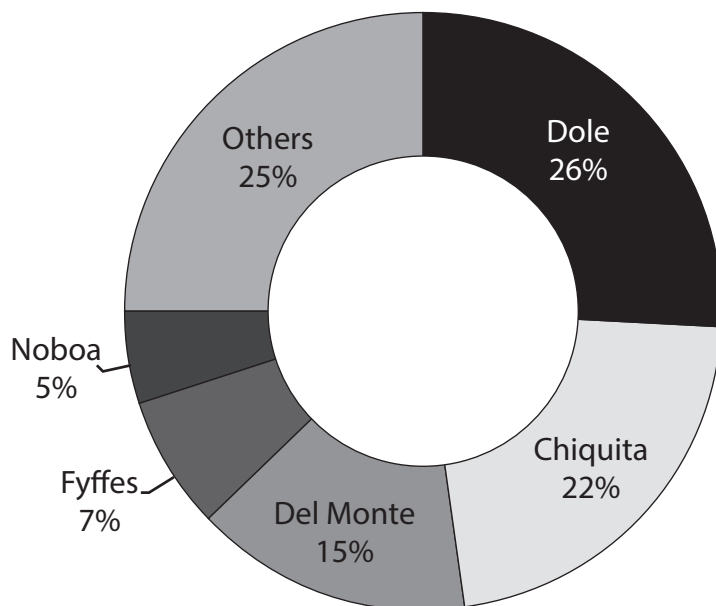
**9 Bananas**

**Figure 1 Fruit importers' profit margins, %**



(Source: <http://www.ft.com/cms/s/0/8537646e-a85b-11e3-8ce1-00144feab7de.html#axzz3SqjKq3q>)

**Figure 2 Global market share of banana distributors (excluding supermarkets)**



(Source: <http://www.businessweek.com/articles/2014-03-10/with-chiquita-fyffes-merger-dole-will-no-longer-be-top-banana>)

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**Extract 1 Supermarket pricing makes merger of Chiquita and Fyffes necessary**

Bananas have become the biggest fruit on the planet in terms of production volume, as consumers eat ever more of them. Global banana production has doubled since 1990 to 100 million tonnes a year. A deal to create the world's largest banana distributing company was arguably made necessary by the low fresh fruit prices to be found on the shelves of any supermarket. By planning a \$1 billion merger, Chiquita of the US and Dublin-based Fyffes are attempting to address a retail price squeeze that is reducing their already low profit margins. Their profit margins have been shrinking: Chiquita's from 3.5% in 2004 to 0% in 2012, and Fyffes' from just under 5% to 3.5% over the same period, say their annual reports.

5

A banana price war between large supermarkets, which often sell the fruit as a loss leader, has hit profit margins for distributors. Large retailers are also using their purchasing power to force producers and distributors to absorb cost increases, which have been made worse by poor weather and crop diseases. Supermarkets are also increasingly sourcing their bananas directly from producers, damaging distributors' revenues, said Alistair Smith, a campaigner for social and environmental issues relating to the supply of bananas. In the UK, such direct sourcing accounted for more than half of the bananas traded. Smith said "The current low prices are not sustainable for the industry. They are damaging the industry and the people who work in it. The industry has been suffering from overcapacity for the past few years, so a merger of the two major players should resolve some of the volatility in the market."

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Announcing the proposed merger, Ed Lonergan, Chiquita's Chief Executive, said: "We have always identified Fyffes as a fantastic partner. The tie up makes particular sense now as the banana market is the most competitive I have ever seen – there are so many players bringing bananas into every port in the world."

A merger is likely to give the combined company more negotiating power with suppliers, although the Fairtrade Foundation warns that the merger would only squeeze banana growers further. The merged company would have combined sales of \$4.6 billion. It would distribute about 160 million cases a year in total, compared with 117 million at Del Monte and 110 million at Dole.

25

Chiquita is the larger company, with annual revenues in excess of \$3 billion compared with \$1.5 billion at Fyffes. The merged company would have the scale to negotiate better deals with retailers. Chiquita and Fyffes hope to achieve \$40 million a year in pre-tax cost savings while gaining share in the melon, pineapple and packaged salads markets. Savings will come from logistics, for example putting more bananas on to fewer boats.

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The high profile of these brands makes it likely that regulators will scrutinise the proposed merger as the new company would have almost 30% of the European market.

(Source: adapted from <http://www.ft.com/cms/s/0/c8463dac-a86f-11e3-b50f-00144feab7de.html#axzz3BffD7L9c> March 10, 2014 and <http://www.ft.com/cms/s/0/43b73338-a825-11e3-a946-00144feab7de.html#axzz3BffD7L9c> and 'Bananas: the right split' in the Lex column 14 March 2014)

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- (a) With reference to Extract 1, explain **one** condition necessary for the existence of monopsony power. (4)
- (b) Evaluate the likely effects of supermarkets' monopsony power on banana **distributors**. (8)
- \*(c) Discuss the problems that the competition authorities might experience in attempting to regulate the merger of firms distributing bananas. (12)
- \*(d) Assess the benefits that might arise as a result of the proposed merger between Chiquita and Fyffes. Use an appropriate diagram in your answer. (16)





(b) Evaluate the likely effects of supermarkets' monopsony power on banana **distributors.**

(8)

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\* (c) Discuss the problems that the competition authorities might experience in attempting to regulate the merger of firms distributing bananas.

(12)

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\***(d)** Assess the benefits that might arise as a result of the proposed merger between Chiquita and Fyffes. Use an appropriate diagram in your answer.

**(16)**

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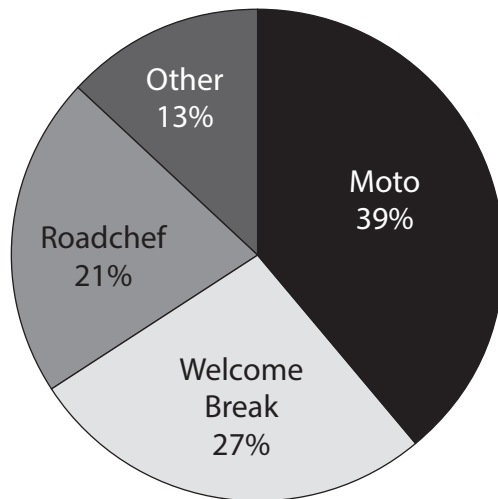
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**QUESTION 10 BEGINS ON THE NEXT PAGE.**



If you answer Question 10 put a cross in the box .

**10 Motorway Service Areas (MSAs) in the UK**

**Figure 1 Market share of MSA sites in the UK (103 sites)**



(Source: Mintel, Operator reports, 2010, [http://reports.mintel.com/display/540116/?\\_\\_cc=1](http://reports.mintel.com/display/540116/?__cc=1))

**Extract 1 Letter concerning monopoly pricing at Motorway Service Areas**

I am writing to bring to your attention the issue of petrol prices. Returning from Germany yesterday evening, I needed to buy petrol on the M25 and stopped at a service station, not wanting to add extra miles or risk getting lost by coming off the motorway. Normally the price is advertised in advance but in this particular case it wasn't. I was horrified to see that I was being charged £1.47 which as you'll know is more than 15 pence above the average rate across the country. I had no choice but to buy the petrol at this price. Everyone knows that petrol is more expensive at motorway services, but I am writing to ask you to consider putting a cap on the amount of profiteering by these firms selling petrol at inflated prices. In some European countries it is normal to see the price at a service station and the next two after that so you can make a choice as to where to stop and buy your petrol, but in this country it's a complete monopoly.

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Letter to the Highways Agency November 2012

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**Extract 2 Pricing at Motorway Service Areas**

It's no secret that Motorway Service Areas manage to provide the seemingly impossible combination of being both notoriously expensive and notoriously poor quality. This is usually attributed to the fact that they are seen to have a captive market and a monopoly on the motorway, often being the only easily accessible facilities for at least 15 miles, the minimum distance permitted between MSAs. However, the gap between MSAs often exceeds 50 miles. 5

Before we start complaining about the prices of services, we should first work out what we're comparing them to. While the obvious comparison would be a supermarket or high street shop, a more accurate one would be an airport or railway station – places which are also under fire for their high prices. If services were making as much money as some people think they are, there would be more operators and applications for new services. 10

(Source: adapted from [www.motorwayservicesonline.co.uk](http://www.motorwayservicesonline.co.uk))

**Extract 3 Pressure on for motorway services operators with vast debts**

How to get today's motorway users to spend money is a major problem that Roadchef and its rival operators Moto and Welcome Break have had to tackle. And with collectively hundreds of millions of pounds of debt on their balance sheets, the pressure is on.

In 2007, Welcome Break, Britain's second-biggest motorway services operator, was on the brink of exiting the industry as it desperately tried to rearrange its £376 million debt. Roadchef, its smaller rival, was also struggling. Like Welcome Break its credit rating had been downgraded and it was in danger of breaching its debt arrangements. Roadchef was bought by Israeli property company Delek Group. Welcome Break and Roadchef, along with Moto, still have vast debts, with servicing costs in the range of £15 million and £78 million a year. 5  
10

But why is there so much debt in these companies when motorists regard service stations as roadside goldmines for their owners because of 'captive' customers and high prices? One reason is the huge investment needed. Moto says its new service area at Wetherby, West Yorkshire, cost £24 million to build. There are also the high overheads caused by its many obligations. Service stations must be open 24 hours a day, 365 days a year. There is a legal requirement to provide free parking for at least two hours, toilets, hot food and drink. Yet they are still not allowed to market themselves as destinations in their own right, mainly because of fears that traffic building up on the slip roads could cause accidents on the motorways. And they are still not allowed to serve or sell alcohol, a high-margin product for retailers. 15  
20

Does it matter that the service stations are massively indebted? According to one commentator, 'The attractive thing about these companies is that they generate a huge amount of cash. If you can use that to service the debt and still make a profit, what does it matter that you are not going to pay the debt off?' 25

(Source: adapted from <http://www.thisismoney.co.uk/money/markets/article-2018000/Pressure-motorway-services-operators-saddled-vast-debts> Sarah Bridge July 2011)



- (a) With reference to the information provided, briefly explain why motorway services operators can charge high prices for petrol. (4)
- (b) Examine **two** possible reasons why a motorway services operator might exit the industry. (8)
- \* (c) Discuss the likely impact on the profitability of motorway services operators if they are forced to display the prices of petrol at other outlets further along the motorway (Extract 1). Use a cost and revenue diagram to support your answer. (12)
- \* (d) Moto, Welcome Break and Roadchef control more than 85% of the market for MSAs. Discuss the possible reasons why a few firms dominate this industry. (16)

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(b) Examine **two** possible reasons why a motorway services operator might exit the industry.

(8)

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\**(d)* Moto, Welcome Break and Roadchef control more than 85% of the market for MSAs. Discuss the possible reasons why a few firms dominate this industry.

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**(Total for Question 10 = 40 marks)**

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**TOTAL FOR SECTION B = 40 MARKS**  
**TOTAL FOR PAPER = 72 MARKS**



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